

Artificial General Intelligence (AGI) and Its Implications for Contract Law

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ABSTRACT

The development of artificial intelligence technology has presented AGI as an exciting future potential. In contract law, AGI can change the landscape of agreements and contract execution. The existence of AGI will raise various legal challenges and questions, such as whether AGI can be a legal party to a contract, whether AGI can execute contracts effectively, and how legal responsibility AGI is in contract execution. This study aims to analyze and identify the legal implications that may arise with the existence of AGI in the context of contract law. In this regard, the research will try to understand how AGI can influence existing principles of contract law. To address these issues, the research adopts normative research methods by collecting and analyzing relevant legal sources, including legal literature, regulations, and court rulings related to contract law. The results of this study show that the presence of AGI has the potential to change important aspects of contract law. Some of the implications identified include questions about AGI's legal status as a legal subject, AGI's legal liability in the performance of contracts, aspects of the validity and interpretation of contracts involving AGI, and legal protection for parties entering transactions with AGI. This research provides a crucial initial understanding in dealing with legal challenges that may arise due to the existence of AGI in the context of contract law.

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1. INTRODUCTION

The development of artificial intelligence technology has reached a point that attracts the attention of many circles, both in the academic and industrial worlds. One crucial development in this field is the emergence of Artificial General Intelligence (AGI). AGI refers to artificial intelligence that can perform intellectual tasks on par with humans in various areas [1]. The potential emergence of AGI carries significant implications in multiple aspects of human life, including in contract law.

Contract law is one of the crucial pillars in the legal system that governs relationships and transactions between parties involved in agreements [2]. Contract law has evolved with changing times and technological advancements, but the development of AGI brings new challenges that have never been faced before. AGI can potentially change the landscape of contracts and their execution, thus raising questions and legal issues that need further study.

Although AGI is still in the development and implementation stages that have not yet fully materialized [3], it is crucial to understand the legal implications that may arise if AGI becomes a significant part of future contract transactions. However, there is a significant research gap in the legal literature related to AGI and its implications for contract law. Some research has been conducted in the context of technology

law and artificial intelligence [4], but particular focus on AGI and contract law has been limited. In existing research, the focus is more on AGI's implications in intellectual property law, privacy, human rights, business, and ethics [5][6][7][8][9].

In contrast, the specific impacts of contract law have not been comprehensively researched. Therefore, there is an urgent need to fill this research gap with more in-depth research into the implications of AGI on contract law. Thus, this study aims to overcome the research gap by analyzing and identifying the legal implications that may arise due to the presence of AGI in the context of contract law.

This study has significant novelty in studying the implications of AGI on contract law. While there has been previous research on artificial intelligence and its implications for the law, this research focuses on AGIs with intellectual abilities on par with humans. With highly sophisticated intelligence, AGI can potentially change existing principles of contract law. The novelty of this research also lies in the research approach used. This research adopts normative research methods, which involve the analysis of relevant legal documents, including legal literature, regulations, and court rulings related to contract law. This approach provides a solid foundation for analyzing the implications of AGI on contract law, drawing on existing legal frameworks.

This study aims to bridge the research gap in the legal literature by investigating the potential impact of AGI on contract law. By shedding light on this unexplored area, the research contributes to a deeper understanding of the legal challenges and opportunities that may emerge as AGI technology progresses. Additionally, the adoption of normative research methods ensures a robust and comprehensive examination of the implications of AGI on contract law, thereby facilitating informed policy-making and legal decision-making in an era of rapid technological advancement.

2. RESEARCH METHOD

The research is normative legal research with a qualitative approach using secondary data [10]. The data from reference literature consists of books, journal articles, and research results related to the present topic. Through the literature study, the analysis technique was conducted through in-depth analysis and presented in a descriptive-structured manner [11].

3. RESULTS AND ANALYSIS

3.1. Analysis of the Implications of AGI on Contract

The implications of AGI on contract formation are one of the important aspects to consider in the face of advances in artificial intelligence. In this analysis, we will explore some of the implications that may arise when AGI is involved in the contract formation process.

1. Legal Status of AGI as a Contract Subject

The first question is whether AGI should be considered a legitimate legal subject in forming contracts. Contracts generally involve interactions between human beings who have rational abilities and free will [12]. However, with the presence of AGI, who have a level of intelligence equivalent to humans [13], it is necessary to consider whether AGI can be considered a legitimate party in forming contracts.

If AGI is considered a legitimate contract subject, then it means AGI can have the capacity to make, negotiate, and bind contracts. However, the implication is that AGI must also be held liable for breach of contract or non-compliance with agreed obligations. The legal approach that can be used is to treat AGI as an independent legal entity separate from its creator or owner. This allows AGI to have contractual rights and obligations separate from the humans who created them. However, further legal questions need to be answered regarding AGI's legal responsibilities and how legal consequences should be dealt with if AGI commits a breach of contract.

In their writings, Zhifeng Wen & Deyi Tong assert that artificial intelligence (AI) is not qualified to be a legal subject with legal rights completely like humans. However, suppose artificial intelligence can fulfill the fundamental interests of human beings as legal subjects in the long run. In that case, it is still possible to formulate artificial intelligence as a derivative legal subject. In this context, granting certain legal status to artificial intelligence can be considered to protect the interests of humans involved in interaction with such artificial intelligence [14].

Correspondingly, John Linarelli argues that the emergence of *Artificial General Intelligence* (AGI) may require changes in contract law to allow AGI to function as a contracting party. This depends on whether the AGI has sufficient cognitive abilities to interact with humans and meets the requirements of contract formation and execution. If AGI can effectively participate in the contract process, there may need to be legal adjustments to accommodate AGI's legal roles and responsibilities as a contracting party. However, this will involve complex considerations regarding the ethical, security, and legal ramifications associated with AGI's involvement in contractual activities [15].

AI may play an important role in facilitating contractual agreements, but AI is not currently considered a subject or party to a contract. Instead, AI helps contract formation electronically, specifically in the form of smart contracts created and conducted online. These contracts are created through blockchain technology that encodes agreements, assigning rights and obligations to the party, making the contract human, not AI. However, AI is not a party to the contract and, therefore, cannot hold contractual rights or responsibilities [16].

2. AGI's Ability to Negotiate Contracts

The next implication is AGI's ability to negotiate contracts effectively [17]. Contracts involve a negotiation process between the parties involved and require a good understanding of the terms of the contract, the risks involved, and the legal implications that may arise [18].

In the context of AGI, the question arises about whether AGI could negotiate with the same level of effectiveness as humans. Does AGI have adequate knowledge and understanding of the legal implications of the contract it will make? If not, how can AGI's negotiation capabilities be improved or managed? A possible solution is to involve humans in the contract negotiation process with AGI. Humans can act as mediators or legal advisors assisting AGI in understanding contract terms, the risks involved, and relevant legal implications [19]. By human intervention, it can ensure that the contracts made by AGI meet the necessary legal standards [20].

3. AGI's Legal Responsibility in Contract

AGI's legal liability in forming contracts is also an important implication to note [15]. If AGI is considered a legal party to the formation of a contract, then AGI shall also be liable for breach of contract or non-compliance with agreed obligations. However, questions arise about how AGI's legal liability should be handled in breach of contract cases. Can AGI be considered a breach of contract and subject to sanctions or recovery of losses? If so, how can sanctions or recovery of losses be applied to AGIs that may not have assets or resources to meet their contractual obligations?

A possible legal approach is introducing an insurance or guarantee mechanism involving the owner or creator of the AGI [21]. In this case, the owner or creator of the AGI is responsible for any breach of contract committed by the AGI they own or create. This mechanism allows parties harmed by AGI to obtain adequate recovery of losses.

4. Legal Protection for Contracting Parties with AGI

The final implication is legal protection for parties who transact or contract with AGI. Parties involved in contracts with AGI may be at risk of legal challenges they have never faced before. Adequate legal safeguards must ensure these parties are not harmed or exploited in transactions with AGI. Legal protection may include aspects such as privacy, data confidentiality, intellectual property protection, and AGI's legal liability in the performance of contracts [9]. Appropriate regulations must be developed to ensure that parties entering transactions with AGI have adequate legal protection and fair access to legal mechanisms that can be used in cases of breach or dispute [22].

The implications of AGI on contract formation are complex topics and require careful thought. In this analysis, we have identified several important implications, including AGI's legal status as a subject matter of the contract, AGI's ability to negotiate contracts, AGI's legal liability, and legal protection for parties contracting with AGI. A legal framework and adequate protection mechanisms are needed to address these implications. Proper regulation and human involvement in the contracting process with AGI can help mitigate risks and ensure fairness in such transactions. In addition, paradigm shifts in contract law also need to be considered to accommodate technological developments and artificial intelligence. Therefore, the collaboration between legal experts, technologists, and relevant stakeholders is essential in developing a legal framework appropriate to AGI's development.

The implications identified above are crucial for contract law because AGI represents a paradigm shift in the way contracts are formed and executed. AGI's ability to interact and negotiate independently challenges the traditional understanding of contractual relations, necessitating a legal framework that addresses these novel aspects. Failure to address these implications adequately could lead to legal uncertainty, unfair outcomes, and potential disputes in contract transactions involving AGI.

Moreover, the complexity and novelty of AGI technology require collaborative efforts among legal experts, technologists, and stakeholders to develop an appropriate legal framework. By justifying and exploring these implications, the research aims to facilitate informed policy-making and decision-making processes that strike a balance between encouraging innovation and safeguarding the interests of individuals and businesses in contract law interactions with AGI. Ultimately, this research seeks to ensure that contract law remains effective, fair, and responsive to the challenges posed by AGI's advancement in the ever-evolving landscape of technology and artificial intelligence.

3.2. Challenges Of Using AGI in Contracts

1. Contract Execution by AGI

The execution and execution of contracts by AGI (Artificial General Intelligence) poses complex challenges and requires a clear legal framework [23]. AGI is an entity that has intellectual abilities that approach or exceed human capabilities in various tasks [24]. In this context, AGI can potentially execute the actions and physical performance necessary to execute a contract.

However, there are some questions and concerns that arise related to the execution of contracts by AGI. First, how to ensure that AGI will execute the contract effectively and in accordance with the agreed terms? The presence of an AGI presents the risk that although the AGI may be capable of carrying out technically necessary tasks, it is still possible that the results do not meet expectations or contractual requirements. Second, AGI's legal responsibilities are a major concern. If AGI fails to fulfill its contractual obligations, can AGI be considered a breach of contract and subject to sanctions or recovery of losses? This question is related to aspects of trust and accountability in a legal context. Parties entering a contract with AGI must be able to ensure that there are clear legal consequences if AGI fails to fulfill its obligations.

In the face of these challenges, it is important to have an appropriate legal framework to govern AGI's obligations and responsibilities in the performance of contracts. This legal framework must consider several aspects. First is the need to define clear performance standards for AGI in contracts. The contract should explicitly mention the requirements and expectations that the AGI must meet, as well as establish measurable metrics and parameters to assess the performance of the contract. Second, trust and assurance issues must be addressed. Parties involved in a contract with AGI must ensure the existence of guarantees or mechanisms that allow recovery of losses if AGI does not fulfill its obligations. This can include insurance or guarantee funds intended to protect parties harmed by a breach of contract by AGI.

Third, AGI's legal liability must be clearly defined. If AGI fails to fulfill its contractual obligations, appropriate legal consequences shall be applied. This may involve legal sanctions, recovery, or other forms of legal liability that may be imposed on AGI or the party responsible for the operation and control of AGI. In addition, the need for a clear legal framework also relates to security and privacy aspects [25]. AGIs with access to critical data and information in the context of contracts must be strictly regulated to protect the interests and privacy of the parties involved [26]. In developing the legal framework for contract execution by AGI, it is necessary to involve collaboration between legal experts, technologists, and other relevant stakeholders. It is important to ensure that the resulting regulations accommodate the changes and complexities brought about by advances in AGI technology.

2. Validity and Interpretation of Contracts Involving AGI

The validity and interpretation of contracts involving AGI (Artificial General Intelligence) is an important issue in the legal context [27]. In this case, several considerations need to be considered. First, the validity of the contract made by AGI needs to be considered. A contract's validity relates to an entity's legal ability to enter a contract and become a subject of law [28]. In the case of AGI, the question arises whether the contract entered by AGI can be considered valid and legally binding.

An important consideration is the legal status of AGI as a legal subject. In some jurisdictions, non-human entities such as corporations may be considered legal subjects and could enter contracts. In the context of AGI, similar considerations need to be given. Should AGI be considered a separate legal subject from its creator or owner? Or is the AGI merely an instrument or representation of a human legal subject acting on its behalf?

Depending on jurisdiction and applicable legal interpretation, different legal approaches may be applied in this context. Special regulations may be needed to accommodate the legal status of AGI and the validity of contracts involving AGI. Furthermore, the interpretation of contracts involving AGI is also an important concern. In the context of AGI, contracts may become more complex and involve complex language and context. AGI could understand and analyze information further; however, proper interpretation of contracts remains important.

How can the law address these challenges and ensure a fair and consistent interpretation of AGI contracts? One approach that can be adopted is adopting an interpretive approach that considers AGI's technological context and characteristics. In this regard, the law may develop specific interpretive guidelines or principles that consider the characteristics and capabilities of the AGI. This may involve considering the potential for a more complex understanding of language and context by the AGI and relating it to the intentions of the parties involved in the contract. It is important to ensure that the contract's interpretation reflects the parties' intended aims and objectives, albeit in a more complex context with the presence of the AGI.

In addition, using algorithms or other methods to help with contract interpretation can also be an option to consider [29]. Algorithms can assist in language and context analysis to clarify the meaning and intention of contracts [30]. However, the implementation and use of this algorithm need to be regulated within

the appropriate legal framework. Regarding contract validity and interpretation issues involving AGI, collaboration between legal experts, technologists, and other relevant stakeholders will be important. An appropriate legal framework is required to ensure that contracts involving AGI are legally recognized and can be interpreted correctly in accordance with the intentions and requirements of the parties involved.

3. Paradigm Shift in Contract Law

The presence of AGI (Artificial General Intelligence) can potentially change the paradigm in contract law. Traditional contracts assume that the parties involved are human beings with sufficient rationality and knowledge. However, with AGIs with intellectual abilities that approach or exceed humans, these assumptions must be updated, and contract law must adapt to technological and artificial intelligence advances.

In the face of this paradigm shift, several considerations must be considered in developing contract law relevant to AGI. First, fundamental principles of contract law need to be preserved. Although AGI can be any party to a contract, principles such as mutually beneficial agreements, freedom of contract, and fair enforcement of contracts remain relevant and important. The parties involved in the AGI contract must still be protected against unfair or exploitative agreements. Second, the need for the adjustment of contract law to technological advances. Contract law must accommodate the uniqueness and complexity brought by AGI. This may include changes in contract language and terminology, as well as adjustments in considering the risks and responsibilities associated with using AGI in the performance of a contract.

In addition, contract law also needs to consider aspects of trust and understanding involving AGI. AGIs can have the ability to understand and analyze information at a higher level, but contract interpretation still requires proper context and intention. Therefore, developing an interpretive approach that considers the capabilities and characteristics of AGI can be necessary to ensure a fair and consistent interpretation of contracts. Furthermore, ethical considerations and responsibilities are important in contract law with AGI. The question of who is responsible if AGI fails to fulfill its obligations or causes losses must be addressed. There needs to be clarity on the legal liability of the AGI itself and the liability of the human being who acts as the AGI's owner, controller, or user in the context of the contract.

The paradigm shift in contract law with the presence of AGIs also raises questions about enforcement. How can the law ensure that the performance of contracts with AGI can be effectively monitored and enforced? Can alternative mechanisms such as arbitration or mediation be more suitable for handling disputes involving AGI? In conclusion, the presence of AGI necessitated an adjustment in the paradigm of contract law. Fundamental principles of contract law must be maintained while considering adjustments to advances in technology and artificial intelligence. Protection of fair agreements, adjustment of language and interpretation, ethical considerations and responsibilities, and effective enforcement are some of the aspects that need to be considered in developing contract law relevant to AGI. Cross-disciplinary and stakeholder collaboration will be essential in confronting these changes and ensuring that contract law remains relevant, fair, and effective in the AGI era.

4. CONCLUSION

Artificial General Intelligence (AGI) has significant implications for contract law. Some implications include questions about AGI's legal status as a contract subject, AGI's ability to negotiate contracts, AGI's legal liability, and legal protection for parties contracting with AGI. A paradigm shift in contract law is also needed to accommodate advances in technology and artificial intelligence. Developing a clear and adaptive legal framework that considers these aspects, involving collaboration between legal experts, technologists, and relevant stakeholders, is important. In conclusion, legal protection, validity, and interpretation of contracts, as well as paradigm shifts in contract law, must be considered in dealing with the existence of AGI in the context of contract law.

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