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Artificial Intelligence and Civil Liability

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ABSTRACT

The challenges associated with civil liability in the context of artificial intelligence (AI) systems are explored in this abstract. As AI systems become more complex and autonomous, it becomes increasingly difficult to attribute liability for harm caused by these systems. Nonetheless, some jurisdictions have developed frameworks for liability allocation, whereas others prioritize ethical design and development practices that prioritize safety and accountability. The IEEE Global Initiative on Ethics of Autonomous and Intelligence Systems has established AI development principles. The abstract emphasizes the need for legal and ethical frameworks that elucidate responsibility for AI-related harm, thereby promoting the development and deployment of AI technologies in a safe and responsible manner.

Keywords: Artificial Intelligence, Civil Liability, Liability Allocation, Autonomous, Ethics, Responsibility, Harm, Intelligence Systems

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1. BACKGROUND TO THE STUDY

Artificial intelligence (AI) is advancing rapidly and is being incorporated into a variety of industries, including healthcare, transportation, and finance. As AI systems become more complex and autonomous, however, concerns about their civil liability for causing harm arise.AI systems can make decisions that were not expressly programmed, making it difficult to assign fault when something goes wrong. Involving multiple stakeholders, such as developers, owners, and users, further complicates liability issues.

In response to these obstacles, some jurisdictions have devised frameworks for assigning liability in cases involving artificial intelligence. For instance, the General Data Protection Regulation (GDPR) of the European Union contains provisions that permit individuals to seek compensation for damages caused by AI systems. Similarly, there has been a drive in the United States for laws that establish clear lines of responsibility for AI-related harm, with some states enacting laws that hold developers and owners liable for damages caused by their AI systems.

2. RELATED LITERATURE

The concept of ethics is even more contested and ambiguous than that of artificial intelligence. It denotes concerns of right or wrong, good, or bad, in everyday English. This everyday comprehension of ethics is argued to be the basis for explicit reasoning and academic reflection, which are the subject of philosophical ethics. The role of philosophical ethical theory is to answer the question of why a particular action can be viewed as good or evil, or which processes would enable answering such a question (Stahl et al., 2021).

The majority of AI ethics discussions focus on particular ethical issues. Typically, these are problematic characteristics or consequences of the technology that the authors identify. Several of these, including security, privacy, and access, have a lengthy history in the ethics of technology or ethics of computing, such as privacy, security, and access(Restrepo Amariles & Baquero, 2023). Some of them appear to be notably related to the algorithms that power AI, such as problems with algorithmic biases, and many of them are related to the compilation and manipulation of large data sets that are necessary for the majority of current AI techniques. Some ethical issues are specific to certain application areas, such as finance or autonomous vehicles, whereas others are viewed as broadly applicable to all areas of artificial intelligence (Nowik, 2021). Artificial Intelligence (AI) systems have the potential to enhance societal well-being and increase productivity in numerous sectors, including healthcare, transportation, and consumer goods (Kārkliņš, 2020). AI systems enable novel problem-solving strategies, generating the potential for improved decision-making. In the event that errors occur in AI-powered systems, these errors may be less predictable to humans. The latter may have less control over the operation of AI, especially if (semi-)autonomous systems are employed (Buiten et al., 2023).

Fig.1: Civil Liability Regime for AI (Hayes, 2020) b

Fig 1: Civil Liability Regime for AI (S&D Juri, 2020))

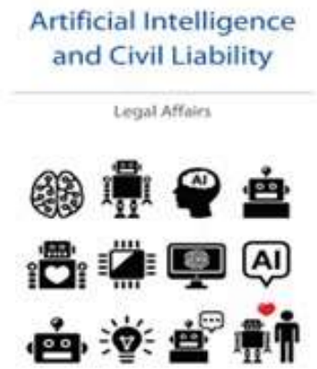

Figure 3. Artificial Intelligence and Civil Liability (PE 621.926 - July 2020)

It is essential to recognize that information technologies, including AI activities, are extremely dynamic and continuously evolving. Due to the rapid obsolescence of scientific literature addressing pertinent issues, such dynamism and singularity are responsible for the majority of problems (Čerka et al., 2015). It should be noted that, despite the expanding popularity and application of AI, there are no laws that define and regulate their operation. In the interim, the general principles of law and legislation regulating the operation of IT should be applied regardless of the specifics of AI (Alekseev et al., 2021). Given the diverse risks and implications of AI, public organizations should further develop an interdisciplinary approach and AI culture in order to address AI-related risks and stakeholder interests comprehensively and precisely in various fields (Xue & Pang, 2022). Consequently, it is also necessary to involve key stakeholders in the AI transformation process to mitigate risks that would not otherwise be addressed (Wirtz et al., 2022).

3. FINDINGS

Rules of civil law, particularly those pertaining to liability for damage resulting from someone else's negligence or risk (strict liability), had been established prior to the appearance of artificial intelligence and largely prior to its significant recent development. An analysis of legal solutions relating to the consequences of artificial intelligence's actions and the possibility of attributing liability for damage to it requires recognizing that artificial intelligence, for the purposes of this study, refers to the capacity of an information technology system to correctly interpret data, to learn from this data, and to apply the knowledge thus acquired to perform specific tasks. From the perspective of the analysis reviewed in this article, it is irrelevant whether this IT system is merely analytic, inspired by a human or humanoid, or placed in a device or object and for what purpose. Consequently, issues pertaining to liability for damage caused by artificial intelligence refer to artificial intelligence located in devices.

4. CONCLUSION

Promoting ethical design and development practices that prioritize safety and accountability is an additional method for addressing liability concerns in AI. The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems has formulated a set of principles for the responsible development and deployment of AI systems, including the prioritization of human welfare, transparency, and accountability. In general, the issue of civil liability in the context of artificial intelligence is complex and evolving. However, by promoting ethical practices and developing legal frameworks that clarify responsibility for AI-related harm, it may be possible to mitigate the risks posed by these swiftly developing technologies.

5. RECOMMENDATION

Artificial Intelligence (AI) is becoming increasingly pervasive in our daily existence, from self-driving cars to financial analysis. However, as AI becomes more complex and autonomous, it poses important questions around civil liability. Here are some suggestions for dealing with this issue:

Governments should establish explicit legal frameworks that define liability for artificial intelligence systems. This could involve enacting new laws or revising existing ones to guarantee their applicability in the context of artificial intelligence.

Guidelines should be established for the development and deployment of artificial intelligence systems to ensure that they are designed and operated to mitigate the risk of harm to individuals and society. Encourage developers and administrators of AI systems to be transparent about how their systems operate, including how decisions are made, what data is used, and what safeguards are in place to prevent errors and biases.

Collaboration between AI developers, legal experts, and regulators is necessary to ensure that legal frameworks and guidelines for AI liability are effective and practical. ***Education and awareness-raising campaigns*** can assist in ensuring that individuals and organizations are aware of the risks and potential liabilities associated with AI systems. This may involve developer and operator training as well as public awareness campaigns. **Establish insurance and risk management frameworks:** Insurance and risk management frameworks should be established to provide financial protection for individuals and organizations susceptible to AI-related incidents.

Overall, a commitment to safety, transparency, and accountability should govern the development and deployment of AI systems. By establishing explicit legal frameworks, guidelines, and collaboration mechanisms, we can ensure that AI is developed and used in a manner that minimizes societal harm and maximizes societal benefits.

Future Works

The greater the prevalence of AI in society, the greater the likelihood of various violations of the law. Consequently, the development of AI and its ever-increasing practical application necessitate modifications to legal regulation, such as the need to restructure the legal system. If Artificial Intelligence develops as anticipated, i.e. a robot with human-like intelligence, sentiments, and emotions, then laws would need to be revised to accommodate robots in society. It implies that legislators must examine the current legal framework and adapt it to the evolving requirements of society.

Therefore future research works should delve into the areas AI governance, regulations and laws to help build AI related products and services that will fit into existing societal norms, values and the rule of law.

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