

ACTIONS AND DECISIONS IN AI-CONTROLLED SYSTEMS: CIVIL LAW ASPECTS

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Abstract: This article examines the legal regulation of actions and decisions in artificial intelligence (AI) controlled systems. It analyzes AI systems' autonomous decision-making processes, legal implications, and liability issues. The article provides recommendations for determining and regulating AI systems' status within civil law. Based on research results, practical recommendations have been developed regarding establishing AI systems' legal status, creating liability mechanisms, and improving control systems. Directions for improving national legislation have been identified based on international experience.

Keywords: artificial intelligence, civil law, decision-making, legal liability, autonomous systems, legal status, ethics, international law.

Introduction

The rapid development of artificial intelligence technologies and their integration into various spheres of society is creating new types of legal relationships. The autonomous decision-making and actions performed by AI-controlled systems necessitate a review of traditional civil law norms. This process raises issues such as defining AI systems' actions and decisions, determining their legal consequences, and resolving liability matters. As Turner (2019) notes, "AI technologies are demanding a fundamental review of our legal system". Modern AI systems not only operate based on predetermined algorithms but also possess the ability to enhance their experience through machine learning and adapt to new situations. This complicates the prediction and control of their actions and decisions. The increasing level of autonomy in AI systems requires new approaches to determining their legal status and resolving liability issues.

Methodology

A. Literature Review Existing scientific literature, articles, and legal documents on the topic were studied. Through this method, various theoretical approaches and practical experiences in legally regulating AI-controlled systems' actions and decisions were identified. Kingston's (2018) research was particularly significant in this regard. The literature review focused on AI systems' legal status, liability issues, and control mechanisms. Additionally, international conventions, national legislation, and judicial practice materials were studied.

B. Comparative Legal Analysis The experience of different countries in legally regulating AI systems was compared. This method identified the most effective approaches and practices. In particular, the experiences of the European Union, USA, and Asian countries were thoroughly studied. The comparative analysis revealed various models of AI systems' legal regulation, their advantages, and disadvantages. Furthermore, opportunities for international cooperation and experience exchange were explored.

C. Systematic Analysis The role and significance of AI-controlled systems in the civil law system were comprehensively studied. This method identified the legal implications of AI systems' actions and decisions. Systematic analysis enabled a comprehensive study of AI systems' interactions with civil law subjects, their rights and obligations, liability issues, and control mechanisms.

Results

A. Determining AI Systems' Legal Status The issue of determining AI systems' legal status is one of the most pressing problems in modern jurisprudence. On one hand, AI systems are increasingly capable of making independent decisions and performing actions. Kingston (2018) links AI systems' liability to their autonomous decision-making capability . On the other hand, they remain systems created and programmed by humans. This raises complex questions in determining AI systems' legal status. Vladeck (2014) proposes the idea of making AI systems themselves liable . The European Parliament's 2017 resolution proposed introducing the concept of electronic personhood and granting robots certain legal status. This approach envisions giving AI systems limited legal subjectivity .

B. Liability for AI Systems' Actions and Decisions The issue of liability for AI systems' actions and decisions is one of the most complex in civil law. As Abbott (2020) notes, "AI systems' liability is directly related to their degree of autonomy" . Several approaches exist in this matter: first, making the AI system itself liable and implementing a special insurance system; second, establishing direct liability of manufacturers; third, establishing user liability. Wallach and Allen (2021) propose linking AI systems' liability to ethical norms . Dignum (2019) connects AI systems' liability to the transparency of their decision-making mechanisms .

C. AI System Control Mechanisms AI system control mechanisms require special attention. Scherer (2016) emphasizes the need to develop control mechanisms in technical, legal, and social directions . Technical control includes continuous monitoring of AI systems' software, implementing security protocols, and recording decision-making processes. Legal control involves developing regulatory documents governing AI systems' activities, implementing licensing systems, and establishing mandatory audit requirements. Social control includes organizing public monitoring, ensuring civil society institutions' participation, and increasing transparency .

Discussion

A. Modern Approaches to Establishing AI Systems' Legal Status Considering modern trends and international experience is crucial in establishing

AI systems' legal status. Chesterman (2020) identifies three main approaches . The first approach considers AI systems within the framework of traditional legal subjects. The second approach grants special legal status. The third approach is a hybrid model, granting AI systems limited legal subjectivity and implementing special regulatory mechanisms .

B. International Experience and National Legislation Studying international experience in AI systems' legal regulation is essential. Casey (2019) analyzes the European Union's experience in regulating AI systems . The US experience is primarily based on a risk-based approach. The experience of Asian countries, particularly China, South Korea, and Singapore, demonstrates the strong role of state control. Deeks (2018) emphasizes the need to develop unified international standards for AI system regulation .

C. Future Prospects and Recommendations Future prospects for AI systems' legal regulation require consideration of several important issues. The following recommendations are proposed:

- Establish limited legal subjectivity for AI systems
- Implement mixed liability systems
- Develop insurance mechanisms
- Strengthen technical, legal, and social control
- Enhance international cooperation

Conclusion

Legal regulation of actions and decisions in AI-controlled systems requires a complex approach. The research results led to several conclusions regarding establishing AI systems' legal status, creating liability mechanisms, and improving control systems. First, granting limited legal subjectivity to AI systems and establishing a special legal regime is advisable. Second, implementing a mixed system for liability and developing insurance mechanisms is necessary. Third, control mechanisms need to be developed in technical, legal, and social directions.

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