Chapter 5
Legal Aspects of Digital Ethics in the Age of Artificial Intelligence

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ABSTRACT

This chapter explores the legal dimensions of digital ethics amidst the proliferation of artificial intelligence technologies. It explores the evolution of legal frameworks governing digital technologies and their adaptation to address emerging ethical dilemmas in artificial intelligence. Focusing on the European Union's Artificial Intelligence Act and OECD's Principles on Artificial Intelligence, it assesses their implications for global AI governance and effectiveness in addressing ethical concerns. The intersection of data protection laws and artificial intelligence ethics is analyzed, emphasizing their role in safeguarding human rights. The chapter also examines legal challenges and solutions in ensuring the ethical use of AI, particularly regarding liability and accountability issues. By identifying emerging challenges and advocating for collaborative governance approaches, it outlines pathways to enhance legal frameworks in addressing evolving ethical concerns.

INTRODUCTION

Legal frameworks are essential in addressing the myriad ethical dilemmas that arise with the development and deployment of artificial intelligence (AI) and other digital technologies. As these technologies increasingly permeate various aspects of society, they bring about complex ethical challenges related to privacy, bias,

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accountability, and transparency. Robust legal frameworks provide the necessary structure to ensure that these technologies are developed and used in ways that are ethical, fair and respectful of human rights.

The problems of ethics in the application of AI are particularly complex and multifaceted (Bankins & Formosa, 2023). Recently, criminals utilized AI-based voice technology to impersonate a chief executive's voice and successfully demand a fraudulent transfer of $243,000 (Stupp, 2019). AI voice impersonation for fraud is just one concern. Another significant issue is the rise of deepfake technology, which uses machine learning to superimpose and synthesize existing images and videos onto new ones. This technology can be used to create pornographic content with superimposed human faces or fabricate videos of political leaders to incite violence and panic. Additionally, deepfakes may be employed during election cycles to influence and bias the voters (Libby, 2019).

One of the primary ethical concerns in AI and digital technologies is privacy and data protection. AI systems often rely on large amounts of data, which can include personal and sensitive information. Without proper legal safeguards, this data can be misused, leading to privacy violations and potential harm to individuals. Regulations like the General Data Protection Regulation (GDPR) in the European Union establish strict guidelines for data collection, processing, and storage, ensuring that individuals have control over their personal information (Tanaka, 2019). These legal requirements mandate that organizations implement appropriate security measures and obtain explicit consent from individuals before processing their data, thereby protecting privacy and mitigating the risk of data breaches. The GDPR also talks about concepts such as Data Protection by Design and by Default, assigning organizations accountability to integrate privacy safeguards into their procedures (Bygrave, 2017).

Bias and fairness in AI are also critical ethical issues that legal frameworks help to address. AI systems can inadvertently perpetuate and even exacerbate existing biases if they are trained on biased data sets (Nassar & Kamal, 2021). This can lead to unfair treatment and discrimination in areas such as hiring, lending, and law enforcement. Legal frameworks can mandate the implementation of fairness assessments and bias mitigation techniques in AI development. For instance, the proposed EU Artificial Intelligence Act requires that high-risk AI systems undergo rigorous testing for biases and are designed to ensure non-discrimination and fairness. Such regulations compel organizations to take proactive steps in identifying and correcting biases, thereby promoting equitable outcomes.

Accountability and transparency are fundamental to ethical AI deployment. When AI systems make decisions that significantly impact individuals' lives, it is crucial to have mechanisms in place to ensure accountability (Pan, 2024). Legal frameworks can establish clear lines of responsibility, making it possible to hold