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LEGAL RESPONSE TO DEEPFAKE AND DIGITAL MEDIA MANIPULATION: LAW ENFORCEMENT AND LEGISLATION IN INDONESIA

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Abstract

The development of digital technology has created new challenges for Indonesia's legal system, especially with the rise of deepfakes and digital media manipulation. This technology allows realistic alteration of a person's image, voice, or actions, which can be misused to harm individuals and society. This study aims to analyze how Indonesia's legal framework responds to digital crimes involving deepfakes and whether current laws provide adequate protection. Using a literature review method, the research examines relevant regulations, academic works, and legal studies on digital law. The findings indicate that existing laws, including the Electronic Information and Transactions Law (UU ITE) and the Personal Data Protection Law, are not yet specific or comprehensive in regulating AI-based manipulation. Therefore, adaptive legal reforms and stronger public awareness of digital ethics are essential. The study concludes that effective law enforcement against deepfakes in Indonesia requires not only legal improvements but also the cultivation of moral responsibility and digital literacy in society.

Keywords: Digital Law, Deepfake, Media Manipulation, Law Enforcement.

INTRODUCTION

The development of digital technology has brought about significant changes in various aspects of modern human life. One of the major outcomes of this progress is the emergence of *deepfake* technology, an artificial intelligence (AI)-based system capable of manipulating voices, images, and videos to appear highly realistic. With such capability, individuals can create fabricated content that is difficult to distinguish from reality. In Indonesia, the use of deepfake technology has grown rapidly alongside increased access to digital applications and devices. This condition presents new challenges in maintaining the authenticity of information and the integrity of digital spaces, while also demanding serious attention from both society and the government to address the risks of misuse (Pitaloka Cerens Amanda Gea, 2025).

The deepfake phenomenon not only affects the technological sphere but also carries complex social, moral, and legal implications. Digital media manipulation can be used to spread hoaxes, defame individuals, commit extortion, or even provoke social conflict. In the context of Indonesian society still vulnerable to disinformation deepfakes pose a particularly dangerous threat, as they can visually and emotionally deceive the public. Such situations may undermine public trust in the media, government institutions, and even the legal system. Therefore, addressing deepfake issues requires clear regulation, firm legal mechanisms, and a strong sense of ethical awareness among technology users (Kusnadi et al, 2025).

In the modern era, the meaning of information authenticity has undergone a fundamental shift. In the past, the validity of news was established through official sources and manual verification; today, technology can generate convincing false realities. This shift creates legal and moral dilemmas, as the boundary between freedom of expression and technological abuse becomes increasingly blurred. In Indonesia, the emergence of manipulated videos involving public figures highlights the low level of digital literacy among citizens and the inadequacy of the legal system in responding to such phenomena. Consequently, public confidence in the truthfulness of information is weakened, and the misuse of deepfake technology becomes more difficult to control.

From a legal standpoint, Indonesia already has several regulatory frameworks, such as Law No. 11 of 2008 concerning Electronic Information and Transactions (UU

ITE) and its derivative regulations. However, these legal instruments do not specifically address the issue of deepfakes or AI-based manipulation. As a result, law enforcement officials often face difficulties in determining criminal elements and collecting valid evidence against perpetrators. This legal gap creates a gray area in the enforcement of digital law. Hence, there is a pressing need for regulatory reform and adaptive legal approaches that keep pace with technological development to ensure justice and protect society (SY Muhammad Faturrachman, 2025).

Previous studies have discussed issues such as hoaxes, disinformation, and privacy violations in cyberspace. However, research that specifically examines the deepfake phenomenon within the Indonesian legal context remains limited. Many existing works emphasize social and psychological impacts without thoroughly addressing legislative and law enforcement aspects. This limitation indicates a research gap that needs to be bridged so that the understanding of deepfake does not stop at moral and technological dimensions but also includes the legal domain that safeguards citizens' rights in digital spaces.

A philosophical examination of the deepfake phenomenon is also crucial to understanding the fundamental values embedded in the concepts of truth, justice, and moral responsibility in the digital era. Through the lens of legal philosophy, this research explores how ethical values and social norms interact with technological advancement. Such a study does not merely assess the rightness or wrongness of an action but also reflects on how humans should behave ethically when using technologies capable of deceiving reality. This analysis serves as a bridge between positive law and public morality amid rapid digital transformation (Wibowo, 2025).

This study occupies an important position in understanding Indonesia's legal response to the deepfake phenomenon and digital media manipulation. Its primary focus lies in analyzing law enforcement practices and the need for new legislation aligned with AI-based technological development. The ultimate goal is to provide a comprehensive understanding of the national legal system's readiness to face digital-era challenges while offering policy recommendations to strengthen legal protection and ethical awareness within society. Accordingly, this research aims to contribute academically to the development of a just and adaptive digital legal framework in Indonesia.

METHOD

This research focuses on how the Indonesian legal system responds to the phenomenon of deepfake and digital media manipulation through law enforcement and legislative approaches. The focus is directed toward two main aspects: first, how law enforcement authorities handle cases involving deepfake; and second, to what extent existing regulations can accommodate developments in AI-based digital technology. The study aims to describe the current state of law enforcement in Indonesia and analyze the legal gaps that arise due to the absence of specific regulations addressing this phenomenon in detail (Juliardi Budi et al, 2023).

The type of research employed is descriptive qualitative, as the study does not seek to test hypotheses but rather to provide an in-depth understanding of an evolving legal phenomenon. The qualitative approach allows the researcher to explore the meanings and social contexts of deepfake as a modern legal issue related to ethics, responsibility, and justice. Through this method, the research seeks to portray Indonesia's legal condition in facing digital technological advancements, emphasizing the interpretation and contextual understanding of relevant legal sources.

The data for this research are entirely obtained from literature studies, including legal documents, previous research findings, academic journals, books, and official news reports discussing deepfake and digital media manipulation. The literature sources were selected purposively based on their relevance to the research theme, particularly those concerning cyber law, legislative policy, and digital ethics issues in Indonesia. In addition, the study examines legal policies and regulations such as the Electronic Information and Transactions Law (UU ITE), the Draft Criminal Code (RKUHP), and derivative regulations related to information technology to assess the effectiveness of current laws in addressing the deepfake phenomenon.

Data processing was carried out through reading, note-taking, and categorizing information from various collected literature sources. Similar data were grouped according to themes such as legal, social, and technological aspects and organized systematically to facilitate interpretation. Each piece of data was then re-examined to ensure accuracy, relevance, and consistency with the research focus. This process was conducted carefully to ensure that the research results accurately reflect actual conditions and address the research objectives with logical and in-depth arguments.

The data analysis technique used in this study is qualitative content analysis. Each source of literature was analyzed to identify patterns, concepts, and relationships among ideas relevant to Indonesia's legal response to deepfake. This analysis involved interpreting legal and social data contextually, and the findings were then presented in a narrative form that explains the relationship between digital phenomena and the development of national law. Through this analysis, the study aims to produce a comprehensive understanding of how Indonesian law can adapt to the increasingly complex challenges of digital media manipulation in the modern era (Widiarty Wiwik Sri, 2024).

RESULTS AND DISCUSSION

RESULTS

1. The Legal Reality of Indonesia in Confronting the Deepfake Phenomenon

The rapid development of digital technology has introduced various innovations that bring significant benefits while also creating new challenges in the legal sphere. One emerging issue that has drawn attention is *deepfake* an artificial intelligence (AI)-based technology capable of altering or manipulating voices, images, and videos with striking realism. In Indonesia, the impact of deepfake has become increasingly evident through various cases involving the dissemination of falsified content that disrupts public order. This phenomenon demonstrates that the Indonesian legal system is still striving to adapt to the fast-paced and uncontrollable evolution of technology (Wahyudi, 2025).

Within the national legal context, Indonesia currently lacks specific regulations governing the use and misuse of deepfake technology. Law enforcement authorities still rely primarily on Law No. 11 of 2008 concerning Electronic Information and Transactions (UU ITE) as the main legal basis for handling related cases. The provisions of this law are generally used to prosecute perpetrators of hoaxes, defamation, or privacy violations. However, deepfake cases are not always easily classified under these articles, as the technology involves visual fabrication rather than mere dissemination of false information. This illustrates a gap between technological advancement and the capacity of the law to effectively respond to it (Basah, 2025).

The main challenge faced by law enforcement lies in the aspect of evidence. In deepfake-related cases, proof involves not only the disseminated content but also the technological process behind its creation. To establish criminal intent, investigators

must prove that the content was deliberately produced with malicious intent and caused actual harm. Unfortunately, this process is difficult due to the frequent use of fake identities and encryption technologies that hinder digital tracing. As a result, many cases of media manipulation end without legal certainty, leaving victims deprived of justice and protection.

Beyond positive law, the social reality also shows that Indonesian society lacks sufficient digital awareness. Many social media users fail to understand the dangers of deepfake dissemination and often share manipulated content without verifying its authenticity. This low level of digital literacy exacerbates the problem, as it makes the public easily influenced by seemingly convincing fake content. In this context, law enforcement faces a dual challenge: not only to punish offenders but also to educate the public to use digital technology more wisely and responsibly (Maan, Maria Karunia Putri et al, 2025).

On the other hand, the government through institutions such as the Ministry of Communication and Information Technology (Kominfo) has made efforts to monitor the spread of manipulative content. However, these measures remain reactive, meaning they are typically taken only after a violation occurs and social harm has been caused. There is still no effective preventive mechanism to detect deepfake content before it reaches the public. While Kominfo's efforts to block problematic content are important, such actions remain insufficient without a strong legal foundation and adequate technical capacity. This situation reveals that Indonesia's digital legal infrastructure still requires substantial improvement.

From the perspective of law enforcement agencies, technical capacity for detecting and analyzing deepfakes is also limited. The digital forensic technologies needed to identify signs of video manipulation are not yet widely available to Indonesian legal institutions. Yet, such capabilities are essential for evidentiary processes in court. The reliance on easily manipulated digital evidence often makes it difficult for investigators to verify data authenticity. This condition underscores that law enforcement requires not only normative instruments but also strong technological support to function effectively in the digital era (Seveney et al, 2025).

The deepfake phenomenon also raises important ethical and legal dilemmas. This technology creates tension between freedom of expression and the protection of individual rights. In some cases, deepfakes are used for entertainment or parody, but the same technology can also be weaponized to damage reputations or spread

falsehoods. Therefore, the law must be able to distinguish between creative use and technological abuse. Without clear ethical guidelines, law enforcement risks becoming entangled in a gray area where fair judgment is difficult to achieve.

Considering these realities, it can be concluded that Indonesia's legal framework in addressing deepfake remains in a stage of adaptation. Existing regulations are not yet responsive to technological advancements, while both public digital literacy and the technical capacity of law enforcement remain limited. A more comprehensive approach is required one that emphasizes not only punishment but also prevention and public education. In doing so, the law can function not merely as a repressive instrument but as an ethical guide capable of fostering a just, secure, and responsible digital society amid continuous technological progress.

2. Weaknesses in Regulation and Challenges of Digital Law Enforcement

The Indonesian legal system continues to face significant challenges in responding to the emergence of deepfake and other forms of digital manipulation. Existing regulations, particularly Law No. 11 of 2008 concerning Electronic Information and Transactions (the ITE Law), do not specifically address the use of artificial intelligence (AI)-based technologies. As a result, many deepfake-related cases are difficult to categorize under clear legal violations. Law enforcement often relies on the broad interpretation of general provisions such as those concerning the dissemination of false information, defamation, or privacy violations which in practice fail to capture the technical complexity of AI-based manipulation (Utara, 2025).

This regulatory weakness poses serious problems in legal practice. In deepfake cases, proving the perpetrator's culpability requires clear legal parameters, from intent to the resulting harm. However, due to the absence of explicit legal provisions governing such acts, law enforcement officers face difficulties in determining the appropriate articles to apply. This situation leads to legal uncertainty and creates loopholes that allow offenders to evade criminal liability. When the law fails to keep pace with technological developments, society becomes increasingly vulnerable to sophisticated forms of digital abuse that are difficult to detect or prevent.

Beyond legal gaps, challenges also arise from technical and human resource limitations. Digital law enforcement requires specialized expertise in digital forensics, data analysis, and the ability to understand AI-driven technologies. In Indonesia, however, the training and facilities necessary to develop such skills remain limited.

Many law enforcement officers still lack sufficient understanding of the AI algorithms used to create deepfakes. Consequently, investigations often proceed slowly, and digital evidence can be difficult to authenticate. These limitations cause the legal process to lag behind the rapid evolution of technology.

Another challenge stems from the low level of digital literacy among the Indonesian public. Many social media users are unaware that the content they share may be the result of digital manipulation. The inability to distinguish between authentic and fabricated content allows deepfakes to spread quickly and widely. From a legal standpoint, this complicates enforcement efforts because viral content often circulates across multiple platforms before it can be removed. Therefore, law enforcement cannot operate effectively without parallel efforts to raise public awareness about digital ethics and online safety (Darmawan et al, 2025).

At the institutional level, coordination among agencies handling deepfake cases remains suboptimal. The Ministry of Communication and Information Technology (Kominfo), the police, and cybersecurity bodies often work independently, without an integrated mechanism. Yet, digital crimes are inherently cross-sectoral and require strong inter-agency collaboration for effective and timely responses. The absence of a centralized coordination body dedicated to deepfake-related issues often results in slow and inefficient legal proceedings. This illustrates that digital law challenges are not only rooted in substantive regulation but also in institutional effectiveness in addressing cybercrime.

In addition, significant barriers exist in the technological aspect of evidence gathering. Deepfakes are generated using algorithms capable of producing hyper-realistic visuals and audio, making them difficult to distinguish from authentic content. Under such conditions, digital forensic analysis demands advanced software tools and technical expertise. Unfortunately, most Indonesian law enforcement institutions still rely on conventional investigative methods. This technological lag causes the law to move slower than the pace of digital innovation. Without robust evidentiary support, the law risks losing its authority as an instrument of justice (Budiman, 2025).

The weaknesses in regulation and the challenges of digital law enforcement highlight the urgent need for comprehensive legal reform in Indonesia. The law must evolve in tandem with technological progress to maintain its relevance. Such reform should not only involve updating existing regulations but also strengthening the capacity of law enforcement officers, enhancing inter-agency collaboration, and

promoting sustained public education. Through a structured and holistic approach, the legal system can serve as an effective instrument to protect society from the misuse of deepfake technology and ensure that digital transformation proceeds within the bounds of ethics, accountability, and justice.

3. The Direction of Legislative Reform and Strengthening Digital Ethics in Indonesia

The rapid development of digital technology requires the state to adapt its legal system to remain relevant to contemporary challenges. In Indonesia, the phenomenon of deepfakes and digital media manipulation shows that the existing legal framework has not yet provided effective legal protection. Therefore, the direction of legislative reform must focus on drafting regulations that specifically address artificial intelligence (AI) technologies and their impact on the spread of false information. Such reforms are essential so that the law becomes not only reactive but also proactive in anticipating potential technology misuse (Haefani, 2025).

The first step to take is to strengthen the synchronization among existing laws, such as the Electronic Information and Transactions Law (UU ITE), the Copyright Law, and the Personal Data Protection Law. These three laws still contain loopholes that allow deepfake perpetrators to escape legal sanctions. For instance, the UU ITE emphasizes the distribution of content without consent rather than the process of digital manipulation itself. Hence, legislative reforms should include digital fabrication as a separate criminal offense to respond to new realities emerging in cyberspace (Meliana Yang, 2025).

In addition to legal substance reform, the law enforcement system must also be strengthened in terms of personnel capacity. The biggest challenge in handling deepfake cases lies not only in proving guilt but also in investigators' technical ability to identify the authenticity of digital data. Therefore, enhancing the competence of law enforcement officers through digital forensic training is urgently needed. Legal officers must have a deep understanding of algorithms, metadata, and artificial intelligence technology to properly assess digital evidence.

DISCUSSION

On the other hand, legislative reform must also address the aspect of digital ethics in society. Law cannot stand alone without the moral awareness of technology users. The public needs to understand ethical boundaries when using artificial

intelligence, especially in producing and sharing digital content. Digital ethics education can be integrated into school curricula or national media literacy programs so that legal awareness develops alongside technological competence.

The implementation of strong digital ethics will also reinforce the legitimacy of the law. When people understand that digital manipulation can damage reputations and public trust, compliance with the law will emerge not out of fear of punishment but from moral consciousness. In this context, law and ethics complement each other: law provides normative boundaries, while ethics fosters personal responsibility for digital actions (Prayoga, 2025).

Legislative reform in Indonesia should also involve public participation and input from technology experts. This process must be conducted collaboratively to ensure that the resulting regulations remain up-to-date. The government, academia, and the digital industry need to work together to formulate balanced policies that protect individual rights while preserving freedom of expression. Thus, new regulations will not become tools of restriction but guidelines for creating a healthy and safe digital space.

Finally, the direction of legal reform in the digital era should not only focus on preventing cybercrime but also on fostering an ethical digital culture. The state must act not merely as a regulator but as a facilitator in building a legally aware and digitally responsible society. By strengthening the synergy between regulation, law enforcement, and digital ethics, Indonesia can shape a safer, fairer, and more dignified cyber environment for all its citizens.

CONCLUSION

The research findings indicate that the phenomenon of deepfakes in Indonesia has created serious challenges for the national legal system. Existing regulations, such as the Electronic Information and Transactions Law (UU ITE) and the Personal Data Protection Law, remain limited in addressing crimes based on artificial intelligence. This limitation has resulted in suboptimal law enforcement against perpetrators of digital manipulation. The study found that weak regulations and low levels of digital literacy among the public worsen the situation, as people often struggle to distinguish between authentic and digitally engineered content. Therefore, there is an urgent need for more specific legal reforms and enhanced digital forensic skills among law enforcement officers.

The contribution of this research lies in emphasizing the importance of legislative reform and the integration of digital ethics as part of the legal system in the technological era. This article not only highlights normative aspects but also offers an interdisciplinary perspective that connects law, technology, and public morality. Thus, this research contributes to enriching the discourse on digital law in Indonesia and provides a conceptual foundation for policymakers in formulating adaptive regulations in response to technological developments. The study also reinforces the view that effective law enforcement requires collaboration among the state, society, and the digital industry.

The limitation of this research lies in its literature-based approach, which has not yet included empirical data on the implementation of laws in actual deepfake cases in Indonesia. Future research is recommended to use qualitative methods or case studies involving law enforcement officials, technology experts, and victims of digital manipulation as informants. Such an approach will enrich the understanding of the effectiveness of regulations and law enforcement practices in the field. Therefore, future studies are expected to provide a more comprehensive contribution to the development of a robust and equitable digital legal system in Indonesia.

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