

Regulatory Vacuum in Indonesian Law on AI Model Training: Legal Responsibility for Copyright Infringement in Kadrey Vs. Meta

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Submission

2025-July-15

Review

2025-Aug-12

Accepted

2025-Sept-18

Published

2025-Oct-22

Abstract

The development of artificial intelligence (AI), particularly big data-based generative models, has created new challenges in copyright protection. This research examines the regulatory gap in Indonesian law regarding the use of copyrighted works as training data in AI model training, focusing on normative analysis and a case study of Kadrey Vs. Meta Platforms Inc. The research method used in this article is normative law, conducted by examining the legal norms contained in laws and regulations. The results of this study demonstrate that the widespread use of unauthorized creative works has the potential to violate the economic and moral rights of creators, while also opening up debate regarding the application of the principle of fair use in the context of modern AI. In Indonesia, the unclear definition of creator, the status of AI-generated works, and the lack of regulations regarding dataset transparency and permission mechanisms exacerbate the existing legal vacuum. This research concludes that Indonesia needs comprehensive legal reform to regulate the use of copyrighted works in AI training. Thus, regulatory updates are urgently needed to ensure that technological advancements do not diminish legal protection for creators and the national intellectual property ecosystem.

Keywords: AI Model Training, Artificial Intelligence, Copyright, Legal Vacuum, Kadrey Vs. Meta.

How to Cite: Rheyne Reva Rachman, and Aurora Jillena Meliala. "Regulatory Vacuum in Indonesian Law on AI Model Training: Legal Responsibility for Copyright Infringement in Kadrey Vs. Meta" *Jurnal Ilmiah Dunia Hukum*, 10 no. 1 (2025): 408-426. DOI: 10.35973/jidh.v10i1.6724.

1. Introduction

Rapid advances in information and communication technology over the past few decades have brought significant changes to the field of intellectual property. Digital transformation has enabled broader access to various forms of digital content, while simultaneously presenting new challenges and opportunities for the protection of intellectual property rights.¹ The development of Artificial Intelligence (AI) over the past two decades has also led to profound changes

¹ Erick Alfredo Sianipar, and Putri Aisyah, "Perlindungan Hak Kekayaan Intelektual dalam Era Digital: Tantangan dan Solusi Hukum," *Judge: Jurnal Hukum* 3, no. 02 (2022): 64. See too, Darwance, and Marsudi Triatmodjo, "Penggunaan Artificial Intelligence Berdasarkan Hukum Hak Kekayaan Intelektual: Pengaturan di Indonesia dan Tantangannya Secara Global," *Jurnal Magister Hukum Udayana (Udayana Master Law Journal)* 14, no. 3 (2025): 669.

across many aspects of human life. Amid this rapid technological progress, a number of legal issues have emerged that have not yet been fully accommodated within Indonesia's regulatory framework. One of the most prominent and widely debated issues concerns the training of AI models that involves the use of copyright-protected data such as texts, images, music, and other creative works without the authorization of rights holders or creators.²

The phenomenon of artificial intelligence development involves copyright issues and is becoming increasingly relevant and urgent to examine, particularly in the case of Kadrey Vs. Meta that has come to the surface.³ In this matter, several authors, including Richard Kadrey, sued the technology company Meta Platforms Inc. for alleged copyright infringement due to the use of their works as training data in the development process of generative AI models, such as LLaMA (Large Language Model Meta AI), without obtaining explicit permission or providing fair compensation to the creators of those works. In 2023, Richard Kadrey, a renowned fiction writer from the United States, filed a lawsuit against Meta Platforms, Inc. for the unauthorized use of his copyright-protected written works. Meta, which is the parent company of platforms like Facebook and Instagram, is alleged to have utilized Kadrey's works as training data for the development of their Artificial Intelligence (AI) technology. The works used include several novels and other writings that have been published by Kadrey.

In his lawsuit, Kadrey claims that Meta's actions violate the copyright of his works, which should only be used with the permission of the copyright holder. Although the data used does not produce physical copies of those works, training AI with that data is considered a reproduction that infringes on his exclusive rights. In response, Meta is likely to argue that the use of the works falls within the scope of the fair use doctrine, which allows limited use of copyrighted works for certain purposes such as research or technology development.⁴

This case is crucial because it sparks legal debates on how copyright laws can be applied in the context of using copyrighted data for advanced technologies like artificial intelligence. Additionally, this lawsuit may influence future copyright

² Raihani Latifatunnisa, Ahmad M. Ramli, and Ranti Fauza Mayana, "Pemanfaatan musik buatan AI melalui deepfake: Implikasi terhadap UU Hak Cipta Indonesia," *JIPRO – Jurnal Ilmu Propertis dan Royalti* 2, no. 3 (2024): 244.

³ Muhammad Zidan Karimullah, Ria Wierma Putri, and Rohaini Rohaini, "Hak Cipta atas Hasil Tulisan Kecerdasan Artifisial: Tinjauan Etika Kekayaan Intelektual dan Status Kepemilikannya," *AKADEMIK: Jurnal Mahasiswa Humanis* 5, no. 2 (2025): 1080.

⁴ Chanhou Lou, "Develop-Fair Use for Artificial Intelligence: A Sino-US Copyright Law Comparison Based on the Ultraman, Bartz v. Anthropic, and Kadrey v. Meta Cases," *arXiv preprint arXiv*, (2025).

legal regulations, particularly related to the use of big data in AI model training.⁵ The Kadrey Vs. Meta case not only causes controversy in the legal realm of the United States but also creates global legal awareness where humans realize the importance of fair, clear, and perspective regulations for AI training that involves copyrighted works.

Indonesia itself actually does not yet have adequate legal instruments to comprehensively regulate this issue up to now. The existing regulations, such as Law Number 28 of 2014 on Copyright, Law Number 11 of 2008 on Electronic Information and Transactions along with its amendments, as well as other implementing regulations, are still general in nature and have not explicitly regulated how the use of copyrighted works in the context of artificial intelligence training should be treated from a legal perspective.⁶ This legal vacuum is the main source of potential conflicts in the future, especially considering the very rapid development of AI and the increasingly intensive use of this technology by humans in creative processes and the digital content industry.⁷

The absence of this regulation cannot be viewed as a trivial matter. In the context of unstoppable globalization and digitalization, the legal vacuum not only creates legal uncertainty but also opens up space for large-scale and systemic copyright infringements.⁸ Even without clear regulations, such practices have the potential to be considered *de facto* legitimate, although *de jure* they may not align with principles of justice or the spirit of intellectual property protection guaranteed by the constitution as well as international conventions that have been ratified by Indonesia. Furthermore, in conditions of such a legal vacuum, the potential for systematic and structured copyright infringements is very high, while legal protection for the aggrieved parties becomes very weak and reactive

⁵ Syaiful Khoiri Harahap, Ismayani Ismayani, and Maulidiansyah Tuah Sibarani, "Legal transformation in the digital age: analysis of legal changes to artificial intelligence regulations in Indonesia," *Focus Hukum UPMI* 1, no. 1 (2022): 12. See too, I. Gusti Ayu Agung Intan Liantari, and Dewa Ayu Dian Sawitri, "Pengaturan Hak Cipta Terhadap Karya Cipta Yang Dihasilkan Oleh Artificial Intelligence," *Kertha Negara: Jurnal Ilmu Hukum* 13, no. 1 (2025): 1410.

⁶ Undang-Undang Republik Indonesia Nomor 28 Tahun 2014 tentang Hak Cipta. See too, Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik, beserta perubahannya, 2008; Dewan Perwakilan Rakyat Republik Indonesia, Naskah Akademik Rancangan Undang-Undang tentang Hak Cipta, 2025.

⁷ Umami Maskanah, "Artificial Intelligence in Civil Justice: Comparative Legal Analysis and Practical Frameworks for Indonesia," *Jambura Law Review* 7, no. 1 (2025): 234.

⁸ Yonathan Ariel Alexander Tambunan, and Dewa Ayu Dian Sawitri, "Implikasi kekosongan hukum terhadap kecerdasan buatan sebagai pelanggaran kekayaan intelektual terhadap karya digital," *Kertha Wicara: Jurnal Ilmu Hukum* 15, no. 4 (2025): 195. See too, Hukumonline, "Masih Ada Kekosongan Hukum, Komdigi Susun Peta Jalan AI," *Hukumonline*, August 13, 2025. Retrieved in October 12, 2025 from <https://www.hukumonline.com/berita/>.

rather than preventive.⁹ AI is no longer merely an automation support tool but has evolved into an artificial cognitive entity capable of learning, analyzing, and even creating activities that were previously considered exclusive to humans.

Analysis of legal responsibility for copyright infringement in AI model training becomes very crucial to undertake.¹⁰ This is not only useful for providing legal clarity to technology industry players and creators but also will encourage the formation of regulations or laws that are responsive to the dynamics of contemporary technology today. With the *Kadrey Vs. Meta* case as the main study, an examination of how the Indonesian legal system faces or even ignores this problem will provide a clearer picture regarding the urgency of formulating new legal norms, or at least progressive legal interpretations, to fill that void.

The task of law is no longer merely maintaining social order through conventional norms, but also must be able to anticipate and respond to changes of the times quickly and accurately. Law that is unable to keep up with technological changes will only become a normative fossil that loses its function as a social engineering tool. It is precisely here that the importance of critical and progressive thinking from legal academics to continue pushing for the birth of new norms that not only answer today's problems, but also anticipate future challenges.

This study examines the regulatory gap in Indonesian law regarding the use of copyrighted works as training data in AI model training, focusing on normative analysis and a case study of *Kadrey Vs. Meta Platforms Inc.* Based on this background, this study focuses on answering the following research questions:

RQ1: What is the legal responsibility for the use of copyrighted works in AI model training under the copyright legal regime?

RQ2: How does the regulatory gap in Indonesia affect the effectiveness of copyright legal protection for the use of copyrighted works in AI training and utilization?

2. Research Method

The research method employed in this article is normative legal research, which is conducted by examining legal norms contained in statutory regulations, legal

⁹ Rahardjo, Satjipto, *Hukum dan Perubahan Sosial*, (Yogyakarta: Genta Publishing, 2009), 45.

¹⁰ Upit Elya Rohimi, "Artificial Intelligence and Cybersecurity Regulation in Indonesia: Towards an Adaptive Legal Framework," *Indonesian Cyber Law Review* 2, no. 1 (2025): 32.

principles, jurisprudence, as well as relevant doctrines and scholarly literature. The normative legal research method was chosen because the problems studied focused on the analysis of legal norms, legal principles, and legal vacuums related to the use of copyrighted works in artificial intelligence model training. In this context, the focus of the research is directed toward a normative analysis of legal responsibility for copyright infringement in the training of Artificial Intelligence (AI) models, particularly through a case study of *Kadrey Vs. Meta Platforms, Inc.*, while also examining the implications of the regulatory vacuum within Indonesia's legal framework. This research is not merely descriptive but also analytical, as it provides both an overview and a critical analysis of the absence of positive legal norms that explicitly regulate the use of copyright-protected data in AI training, as well as assessing the urgency of establishing regulatory frameworks that are adaptive to the rapid development of digital technology.

The legal sources used in this study include primary and secondary legal sources. Primary legal sources include relevant laws and regulations, such as Law Number 28 of 2014 concerning Copyright, Law Number 11 of 2008 concerning Electronic Information and Transactions and its amendments, as well as international legal instruments such as the Berne Convention, the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement, and the World Intellectual Property Organization (WIPO) Copyright Treaty. Meanwhile, secondary legal sources include doctrine, academic literature, scientific journal articles, as well as jurisprudential studies and theoretical thinking regarding the relationship between law, technology, and artificial intelligence.

3. Research Results and Discussion

3.1. Legal Responsibility of AI Developers for Copyright Infringement in AI Model Training: The Case of *Kadrey Vs. Meta Platforms, Inc.*

The *Kadrey Vs. Meta* case provides a clear illustration of how the development of generative artificial intelligence can conflict with the fundamental principles of copyright protection. In this dispute, Meta was alleged to have obtained hundreds of literary works by various authors from illegal book-sharing websites such as LibGen and Z-Library and incorporated them into the training dataset of the LLaMA model without obtaining permission or providing any form of compensation to the copyright holders. Although the court ultimately found that Meta was not liable for certain claims primarily because the plaintiffs were unable to demonstrate concrete economic harm, such as the model's ability to reproduce substantial excerpts of their works the

decision nonetheless reveals significant shortcomings in the existing legal framework. The judge explicitly acknowledged that, in principle, the use of copyright-protected works for AI training may constitute copyright infringement; however, the outcome of the case was largely determined by evidentiary limitations. This situation indicates the existence of a regulatory vacuum, particularly given that harm resulting from AI use is often indirect, occurs over a prolonged period, and is difficult to verify quantitatively.¹¹

When analyzed from the perspective of international law, Meta's actions may be classified as contrary to the principles agreed upon by member states in the global protection of copyright.¹² The training of AI models, which in essence constitutes large-scale digital copying, has the potential to diminish the economic value of a work, particularly when such models are used to support commercial services. The fact that Meta neither sought authorization nor provided compensation to the authors, as reflected in the Kadrey lawsuit, indicates that such actions conflict with the minimum standards of copyright protection under the Berne Convention. Accordingly, technical justifications or claims that the use was merely internal cannot serve as valid defenses, given that the outcomes of AI training directly contribute to the company's economic gains.

The doctrine of code is law, as introduced by Lawrence Lessig, demonstrates that digital architecture including algorithms and AI training mechanisms functions as a factual regulator that often operates more rapidly than positive law.¹³ Code enables the automated absorption and reproduction of data without human assessment, thereby rendering such practices "technically legal," even though they may conflict with the moral and economic rights of creators. This perspective is particularly relevant in the context of the Kadrey Vs. Meta case, as the use of copyright-protected works occurred entirely through opaque code-based architectures, while creators lacked access to

¹¹ Kadrey v. Meta Platforms, Inc., No. 3:2023cv03417, "Order denying the plaintiffs' motion for partial summary judgment and granting Meta's cross-motion for partial summary judgment," *Justia U. S. Law* June 25, 2025. Retrieved in October 13, 2025 from <https://law.justia.com/cases/federal/district-courts/california/candce/3%3A2023cv03417/415175/598/>.

¹² Yenni Batubara, and Husni Ismail, "Perlindungan Hukum Pemanfaatan System Artificial Intelligence Berdasarkan Undang-Undang Nomor 28 Tahun 2014," *Jurnal AL-MAQASID: Jurnal Ilmu Kesyariahan dan Keperdataan* 10, no. 1 (2024): 148.

¹³ Ni Kadek Listya Anggarini, Bagus Gede Ari Rama, Putu Eva Ditayani Antari, and Komang Satria Wibawa Putra, "Tinjauan Yuridis Terhadap Kebutuhan Pembaharuan Regulasi Hak Cipta Di Indonesia Dalam Menghadapi Perkembangan Karya Cipta Berbasis Artificial Intelligence (AI)," *Consensus: Jurnal Ilmu Hukum* 4, no. 1 (2025): 91. See too, Ahmad Arifin, Ajmal Nazirul Mubiin, Bagus Adek Setiyanto, and Ikhwan Aulia Fatahillah, "Analisis Yuridis Hak Cipta Kepada User Atas Karya Hasil Generative Artificial Intelligence di Indonesia," *At-Tanwir Law Review* 5, no. 2 (2025): 421.

information regarding whether their works were used as training data. Consequently, this doctrine explains how regulatory vacuums allow code to assume the role of law, thereby widening the imbalance between AI developers and copyright holders.

At this juncture, international legal instruments become particularly relevant, as the issue of using copyrighted works in AI training cannot be left unresolved without a clear normative foundation. In principle, states are already bound by various agreements that establish limitations on how works may be reproduced, reused, or adapted, including when such processes occur in digital environments. These instruments provide baseline standards that have long been used to assess whether a particular use remains within the scope of lawful exploitation or has crossed the threshold into conduct that harms the interests of creators. By referring to these provisions, it becomes possible to evaluate whether Meta's actions may be justified as a form of permissible use or, conversely, whether they conflict with the protection of exclusive rights guaranteed under international law. Accordingly, an examination of the Berne Convention, the TRIPS Agreement, and the WIPO Copyright Treaty becomes essential to understanding how these global standards address practices such as those undertaken by Meta and their implications for data usage in AI model training.

The Berne Convention, particularly Article 9(2), establishes limitations on the right of reproduction on the condition that such use does not conflict with the normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the rights holder.¹⁴ In this context, the training of AI models using copyrighted works without authorization may be regarded as a form of digital reproduction. If such use affects the market potential of the works concerned, it may therefore be considered an infringement. As an AI developer, Meta bears responsibility for ensuring that the use of data in AI training complies with these principles. The absence of consent or compensation to rights holders, as emphasized in the Kadrey lawsuit, highlights an explicit violation of the fair use principles embodied in international standards.¹⁵ Consequently, AI companies cannot justify such

¹⁴ Berne Convention for the Protection of Literary and Artistic Works, "Article 9(2), as revised at Paris, 1971, World Intellectual Property Organization (WIPO)."

¹⁵ Azzahra Wida Be Paradita, and Aurora Jillena Meliala, "Implikasi Prinsip Fair Use Sebagai Penyeimbang Eksklusivitas Hak Kekayaan Intelektual Dengan Anti Monopoli," *Jurnal Kertha Semaya* 12, no. 2 (2023): 142. See too, Chanhon Lou, "Develop-Fair Use for Artificial Intelligence: A Sino-US Copyright Law Comparison Based on the Ultraman, Bartz v. Anthropic, and Kadrey v. Meta Cases," *arXiv preprint arXiv*, (2025).

practices by claiming that the use is merely non-commercial or purely technical in nature.¹⁶

Article 13 of the TRIPS Agreement further regulates limitations on exclusive rights by requiring that such limitations be confined to certain special cases, not conflict with the normal exploitation of the work, and not unreasonably prejudice the legitimate interests of the rights holder.¹⁷ In practice, this standard reinforces the provisions of the Berne Convention by providing a more structured framework for assessing the legality of the use of works by commercial entities. In Meta's case, the training of AI models that are subsequently deployed for commercial purposes generates direct or indirect economic benefits. This practice runs counter to the principle of non-prejudice to rights holders, as copyrighted works are used to support commercial activities without authorization. Thus, even in the absence of direct distribution of Kadrey's works, such use still violates the principles guaranteed under the TRIPS Agreement.¹⁸

Agreement. The use of copyright-protected works for AI training by Meta is difficult to categorize as a limited exception, given its massive scale and its impact on the economic interests of rights holders. The WCT emphasizes that, in the digital environment, copyright protection must remain robust and cannot be set aside on the grounds of technological advancement. Accordingly, Meta's defense of unauthorized data use may be considered weak if it fails to satisfy the requirements of the three-step test. AI companies that rely on large-scale data collection from the internet must therefore align their practices with this legal framework.

The legal responsibility of companies such as Meta extends beyond administrative compliance and also implicates the reputation and legitimacy of their AI products.¹⁹ Large-scale copyright infringement may give rise to class action lawsuits brought by multiple rights holders who suffer harm.²⁰

¹⁶ Lesza Leonardo Lombok, Arthur Tuwaidan, and Veronika Takasana, "Tinjauan Hukum Terhadap Pelanggaran Hak Cipta Karya Digital Content Creator Di Indonesia," *INVENTION: Journal of Intellectual Property Law* 1, no. 1 (2024): 49.

¹⁷ WIPO Copyright Treaty (WCT), Article 10, adopted by the Diplomatic Conference on December 20, 1996.

¹⁸ Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), "Marrakesh Agreement Establishing the World Trade Organization", Article 13, Annex 1C, 1994.

¹⁹ Andika Wardhana Machmud, and Tiara Oktavia Namira Daud, "Pertanggungjawaban Hukum Mengenai Hak Kekayaan Intelektual Pengguna AI Dalam Pembuatan Karya Seni," *Jurnal Rechten: Riset Hukum dan Hak Asasi Manusia* 5, no. 3 (2023): 53.

²⁰ Si Wu, "Research on the Liability for Copyright Infringement of Generative Artificial Intelligence," *Law and Humanities* 1, no. 2 (2025): 46. See too, Ratih Widowati, and Ifah Atur Kurniati, "Peran dan Tanggung

Moreover, judicial decisions in certain jurisdictions may compel companies to pay substantial compensation or even suspend the operation of developed AI models. This demonstrates that compliance with copyright law is not merely a formality but an integral component of ethical governance in technology companies.²¹ Consequently, Meta should establish licensing procedures or fair compensation schemes before using copyright-protected data.

Considering the complexity of the Kadrey Vs. Meta case, the sense of injustice experienced by the plaintiffs does not merely stem from evidentiary shortcomings, but also from the unpreparedness of the legal framework in addressing artificial intelligence business models that operate through the large-scale copying of creative works without authorization. Therefore, more substantive solutions should not rely solely on judicial rulings, but also on restructuring evidentiary strategies and improving legal norms. At the litigation level, authors should be afforded greater opportunity to present more comprehensive economic evidence, for example through expert analyses on long-term market impacts and dataset forensics demonstrating that their works were indeed included in the training process of the LLaMA model. This approach is crucial, as long as harm is deemed immeasurable, AI developers will continue to occupy a structurally advantageous position. In addition, from a normative perspective, it is time for states to establish explicit rules governing the use of copyrighted works in AI training, either through amendments to national legislation or the implementation of collective licensing schemes to accommodate large-scale data use.

Instruments such as the Berne Convention, TRIPS, and the WCT have in fact provided a conceptual foundation through the three-step test; however, translating these principles into the AI context requires more robust legal instruments.²² At the industry level, companies such as Meta should also be required to implement dataset transparency, source verification mechanisms, and the provision of fair compensation to copyright holders. Through a combination of these measures strengthening evidentiary standards in litigation, reforming positive law, and promoting more ethical corporate

Jawab Perguruan Tinggi Dalam Pencegahan Pelanggaran Hak Cipta di Indonesia,” *Jurnal Analisis Hukum* 8, no. 1 (2025): 89.

²¹ Eleonora Rosati, “Infringing AI: Liability for AI-generated outputs under international, EU, and UK copyright law,” *European Journal of Risk Regulation* 16, no. 2 (2025): 621. See too, Direktorat Jenderal Kekayaan Intelektual, Peningkatan Pelindungan Hak Cipta Melalui Revisi UU Hak Cipta, September 11, 2025.

²² Nanda Yuniza Eviani, Maskun Maskun, and Ahmad Fachri Faqi, “Legal challenges of AI-induced copyright infringement: evaluating liability and dispute resolution mechanisms in digital era,” *Jambura Law Review* 6, no. 2 (2024): 413.

governance the imbalance of power between creators and technology companies can be addressed, so that cases such as *Kadrey Vs. Meta* no longer reflect a vacuum of legal protection, but instead serve as a starting point for systemic improvements in copyright protection in the era of artificial intelligence.²³

3.2. The Impact of Regulatory Vacuum in Indonesia on Legal Protection of Copyright in the Context of Artificial Intelligence Development and Utilization

The regulatory vacuum concerning the use of copyrighted works for training Artificial Intelligence (AI) systems constitutes one of the most fundamental challenges currently faced by Indonesia.²⁴ Although Law Number 28 of 2014 on Copyright governs the exclusive rights of creators, its provisions do not explicitly address the phenomenon of large-scale data ingestion by AI models, thereby creating a significant legal gap in the enforcement of domestic copyright protection.²⁵ The practical impact is evident: in the absence of clear norms determining whether AI training constitutes reproduction or another form of use requiring authorization, creators face substantial difficulties in establishing a solid legal basis for claims when their works become part of training datasets used by local or international companies.

When the legal system lacks instruments capable of penetrating or auditing the technical architecture owned by technology companies, regulatory vacuum becomes inevitable. This condition demonstrates that weaknesses in legal protection are not solely caused by the absence of written rules, but also by the state's inability to access digital structures that are entirely controlled by AI developers. In the context of AI training, this analytical framework explains why the absorption of copyrighted works can occur without adequate oversight mechanisms. The *Kadrey Vs. Meta* case illustrates how

²³ Bambang Slamet Eko Sugistiyoko, and Aulia Rahman Hakim, "Eksistensi Manusia sebagai Subjek Hukum di Era Kecerdasan Buatan: Kajian Hukum dan Etika untuk Reformasi Regulasi di Indonesia," *Yustitiabelen* 11, no. 2 (2025): 119.

²⁴ Michael P. Goodyear, "Who Is Responsible for AI Copyright Infringement?" *Issues in Science and Technology* 41, no. 1 (2024): 33.

²⁵ Directorate General of Intellectual Property (DJKI), "Undang-Undang Republik Indonesia Nomor 28 Tahun 2014 tentang Hak Cipta," *JDIH DJKI*, 2014. Retrieved in October 22, 2025 from. https://jdih.dgip.go.id/produk_hukum/view/id/3/t/undangundang%2Bnomor%2B28%2Btahun%2B2014%2Btentang%2Bhak%2Bcipta. See too, Calista Putri Tanujaya, "Analisis Karya Ciptaan Artificial Intelligence Menurut Undang-Undang Nomor 28 Tahun 2014 Tentang Hak Cipta," *Journal of Law, Education and Business* 2, no. 1 (2024): 437; Rafly Nauval Fadillah, "Perlindungan Hak Atas Kekayaan Intelektual Artificial Intelligence (AI) dari Perspektif Hak Cipta dan Paten," *Das Sollen: Jurnal Kajian Kontemporer Hukum Dan Masyarakat* 2, no. 02 (2024): 12.

Meta's system architecture enabled the collection of works from various sources, including illegal book-sharing websites, without technical barriers. Such actions did not occur due to legal legitimacy, but rather because the internal code architecture provided both the space and capability to do so.²⁶

The concept of code is law, introduced by Lawrence Lessig in *Code v2*, provides a theoretical foundation for understanding why states often lag behind in responding to the rapid development of digital technology. Lessig emphasizes that within digital spaces, the behavior of users and developers is governed more by system architecture namely software code than by legal norms. Code determines technical boundaries, access mechanisms, and the ways in which data are collected and processed, thereby creating a regulatory structure that operates faster and more effectively than positive law.

This situation ultimately creates an imbalance between creators and technology companies. AI developers generally rely on massive datasets for training purposes, yet there is no legal obligation in Indonesia requiring them to disclose the origins of such data. The absence of transparency mechanisms has a direct impact on the protection of creators, because in order to file a legal claim, copyright holders must prove that their works were actually used, while access to such information remains exclusively in the hands of AI developers. Consequently, the burden of proof becomes nearly impossible for individual creators to bear, particularly when training processes occur within closed systems or foreign infrastructures.

At the global level, debates surrounding the use of copyrighted works for AI training have received considerable attention, including through international instruments such as the Berne Convention, the TRIPS Agreement, and the WIPO Copyright Treaty. These instruments provide a foundational framework governing the limitation of copyright, particularly through the three-step test, which requires that any exception be limited in scope, not prejudice the legitimate economic interests of rights holders, and not interfere with the normal exploitation of the work.²⁷ In practice, however, the interpretation of these principles in the context of AI remains inconsistent.

²⁶ Rahmadi Indra Tektona, "Quo Vadis Undang-Undang Hak Cipta Indonesia: Perbandingan Konsep Ciptaan Artificial Intelligence di Beberapa Negara (Quo Vadis Indonesian Copyright Law: Comparison of Artificial Intelligence Creation Concepts in Several Countries)," *Negara Hukum: Membangun Hukum untuk Keadilan dan Kesejahteraan* 12, no. 2 (2021): 289.

²⁷ Berne Convention for the Protection of Literary and Artistic Works, art. Law Library of Congress / Cornell Law School, 9(2) (1886, as revised). Retrieved in October 21, 2025 from. <https://www.law.cornell.edu/treaties/berne/9.html>

Experiences in other jurisdictions demonstrate that cases such as *Kadrey Vs. Meta* often result in rulings that focus heavily on evidentiary issues and market impact, leaving the substantive issue of unauthorized use largely unaddressed due to the weakness of technical evidence available to creators.

This condition is also reflected within Indonesia's creative ecosystem. Illustrators, photographers, writers, and musicians are increasingly voicing their concerns, as works uploaded to digital platforms are potentially being harvested en masse by AI systems without consent or compensation. Several creator communities have even submitted formal objections to the government, demanding clarity regarding the limits of permissible use of copyrighted works in AI training. These concerns are not unfounded, as legal ambiguity deprives creators of a reliable basis to protect the economic rights attached to their works. Moreover, the domestic creative industry may suffer structural harm if AI systems trained on unauthorized works subsequently generate products that directly compete with original creative outputs.²⁸

From a policy perspective, Indonesian law has frequently lagged behind global technological developments. The adoption of foreign legal regimes without adequate contextual adaptation has resulted in the absence of explicit normative instruments governing AI training processes. This legal vacuum allows the use of copyrighted works in AI datasets to occur without mechanisms of accountability or transparency, thereby posing long-term risks to legal certainty and justice for creators.²⁹ Consequently, Indonesia must take concrete steps to restructure its copyright regulations in order to address the challenges posed by AI.³⁰ Accelerated technological advancement has intensified regulatory imbalance, particularly within the intellectual property rights (IPR) regime.³¹ Exclusive rights that are not supported by adaptive

²⁸ Eka, "Makin resah! Komunitas ilustrator menuntut regulasi data training AI," *Kontrakhukum.com*, November 21, 2025. Retrieved in December 22, 2025 from <https://kontrakhukum.com/article/komunitas-ilustrator-tuntut-regulasi-data-training-ai/>.

²⁹ Aurora Jillena Meliala, and Jonathan Andre Woods, "The History of Indonesian Economic Law," In *Proceedings of the International Conference on Law Studies (INCOLS 2022)*, (2022), 219. See too, Hukumonline, "Masih Ada Kekosongan Hukum, Komdigi Susun Peta Jalan AI," *Hukumonline*, August 13, 2025. Retrieved in October 12, 2025 from <https://www.hukumonline.com/berita/>; ResearchGate Contributors, "Copyright Regulation for AI-Generated Images: Legal Approaches in Indonesia and the United States," *ResearchGate*, 2024. Retrieved in October 23, 2025 from https://www.researchgate.net/publication/387571040_Copyright_Regulation_for_AI-Generated_Images_Legal_Approaches_in_Indonesia_and_the_United_States.

³⁰ Uha Suhaeruddin, "Hak Kekayaan Intelektual Dalam Era Digital: Tantangan Hukum Dan Etika Dalam Perlindungan Karya Kreatif Dan Inovasi," *Jurnal Hukum Indonesia* 3, no. 3 (2024): 125.

³¹ Darwance, and Marsudi Triatmodjo, "Penggunaan Artificial Intelligence Berdasarkan Hukum Hak Kekayaan Intelektual: Pengaturan di Indonesia dan Tantangannya Secara Global," *Jurnal Magister Hukum Udayana (Udayana Master Law Journal)* 14, no. 3 (2025): 670.

regulation risk enabling the dominance of technology industry actors, marginalizing the interests of creators. This analysis is therefore highly relevant to AI training practices that absorb copyrighted works without authorization within closed algorithmic systems, further widening the gap between AI developers and copyright holders.

Indonesia needs to begin by formulating specific regulations governing the use of copyrighted works in AI training, either through amendments to the Copyright Law or through implementing regulations.³² These rules must clearly address two key issues: whether AI training constitutes an act of reproduction requiring authorization, and how to determine legally relevant harm when works are used as training materials. Indonesia must also adapt the three-step test under the Berne Convention, TRIPS Agreement, and the WIPO Copyright Treaty (WCT) to the digital context, for example by affirming that large-scale unauthorized use for commercial AI models cannot be considered an exception. Such clarity is necessary to prevent AI developers from sheltering behind technical justifications such as “internal use,” while the resulting models continue to generate economic benefits.³³

Indonesia also needs to update evidentiary rules in copyright disputes involving AI, as infringements often intersect with algorithms, servers, and large-scale datasets, rendering traditional methods of proof inadequate. Therefore, regulations should require AI companies to provide limited access to court-appointed digital forensic experts to examine training datasets, data ingestion logs, and model outputs, so that the burden of proof does not fall entirely on creators who typically lack technical access or large-scale infrastructure.

By aligning normative reforms, strengthening the role of collective management organizations (CMOs), mandating dataset transparency, and modernizing evidentiary procedures, Indonesia can protect copyright while simultaneously providing legal certainty for technology actors. Technical guidelines for digital forensics and standards for evidence handling, which have been adopted in many jurisdictions, may serve as operational references

³² Eleonora Rosati, “Infringing AI: Liability for AI-generated outputs under international, EU, and UK copyright law,” *European Journal of Risk Regulation* 16, no. 2 (2025): 622. See too, Tiara Mustika, and Aura Mustika Ambani, “Urgensi reformulasi Undang-Undang Hak Cipta hasil karya kecerdasan buatan perspektif kepastian hukum dan konsep beberapa negara,” *Al-Zayn: Jurnal Ilmu Sosial & Hukum* 3, no. 5 (2025): 7090.

³³ Sam Ricketson, *Limitations and Exceptions of copyright and related rights in the digital environment*, Geneva: World Intellectual Property Organization, 2003.

to ensure that access to and examination of data are conducted lawfully and securely.³⁴

4. Closing

4.1. Conclusions Indonesia faces a paradox in regulating the use of copyrighted works for artificial intelligence (AI) training, where the government encourages digital innovation but lacks an adequate legal framework. The Kadrey Vs. Meta case illustrates how unauthorized collection and processing of creative works occurs on a massive scale, while rights holders struggle to prove infringement because traditional legal frameworks are unable to address digital infringements hidden behind algorithms. In Indonesia, the absence of a clear definition of AI training as reproduction or adaptation creates an imbalance between technology developers and creators. Compounding this is the lack of dataset transparency, weak audit standards, and evidence mechanisms, leaving creators in an unfair position.

This situation is exacerbated by a closed AI training system that crosses national borders and involves millions of files, creating a gray area without clear legal risks. International principles such as the three-step test from the Berne Convention, TRIPS, and the WIPO Copyright Treaty can serve as references, but without translation into national regulations, Indonesia lags behind in protecting the economic and moral rights of creators. Other jurisdictions have adopted standards for dataset transparency, collective licensing mechanisms, and documentation of data sources, while Indonesia still relies on outdated Copyright Laws, which are out of step with the systematic and difficult-to-track patterns of AI infringement.

Legal reform is imperative, including classifying AI training as a permit-required use unless it meets strict exemption criteria, mandating dataset transparency through limited audits, and modernizing digital evidence procedures. A key takeaway is the need for structural reforms that include revising the Copyright Law, AI transparency and accountability regulations, modern digital evidence mechanisms, and licensing governance commensurate with the scale of data use. Without these steps, AI will become not just a technological challenge but a threat to justice and

³⁴ Karen Kent, Suzanne Chevalier, and Tim Grance, "Guide to integrating forensic techniques into incident," *Guide to Integrating Forensic Techniques into Incident Response* (2006): 800.

the protection of domestic creative works, with the Kadrey Vs. Meta case serving as a critical moment for legal system adjustments before imbalances become more entrenched.

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