JURNAL MEDIA HUKUM

Vol. 32, No. 1, June 2025
P-ISSN: 0854-8919, E-ISSN: 2503-1023
Nationally Accredited Journal, Decree MoHE No. 10/C/C3/DT.05.00/2025.

Authorship and Ownership of AI-Generated Works in Indonesia: A Doctrinal and Comparative Review

Chrisna Bagus Edhita Praja[1*], Budi Agus Riswandi[2], Sri Wartini[3], Hary Abdul Hakim[4], Gerald Antang Espares[5]

[1] *Faculty of Law, Universitas Muhammadiyah Magelang, Indonesia, and Center of Commercial and Corporate Law, Universitas Muhammadiyah Magelang, Indonesia*
[2,3] *Faculty of Law, Universitas Islam Indonesia, Indonesia*
[4] *Faculty of Law, Universitas Muhammadiyah Magelang, Indonesia*
[5] *College of Liberal Arts, University of Saint Anthony, Philippines*
**Corresponding Author: chrisnabagus@unimma.ac.id*

ARTICLE INFO

Keywords:
AI-Generated Works; Copyright Ownership; Legal Reform; Work Made for Hire

How to cite:
Praja, C.B.E., Riswandi, B.A., Wartini, S., Hakim, H.A., Espares, G.A. (2025). Authorship and Ownership of AI-Generated Works in Indonesia: A Doctrinal and Comparative Review. *Jurnal Media Hukum, 32(1)*, 151-170.

Article History:
Received : 27-12-2024
Reviewed: 10-02-2025
Revised : 13-05-2025
Accepted : 16-05-2025

ABSTRACT

The rise of generative artificial intelligence (AI) challenges the doctrinal foundations of copyright law in Indonesia, particularly the human-centered definition of authorship under Law No. 28 of 2014. This article examines whether Indonesia's copyright regime can accommodate AI-generated works within its current legal framework and whether adapting the concept of Work Made for Hire (WMFH) can provide a solution to growing legal uncertainties. Using a doctrinal and comparative method, this study analyzes the limits of Indonesian copyright provisions, especially Articles 1(2), 34, and 36, and compares them with legal approaches from the United States, the United Kingdom, and India. While U.S. law requires human authorship for protection, the UK and India allow copyright to be granted to the person who organizes or directs the creation of the work, even if produced by AI. Based on natural rights, incentives, and utilitarian theories, this article proposes a legal reform in Indonesia that would allow copyright ownership to be granted to the human who initiates or controls the AI system. This approach balances legal certainty with the need to support innovation, while preserving the human focus of copyright law.

DOI: *https://doi.org/10.18196/jmh.v32i1.25383*

1. Introduction

The rapid development of Generative Artificial Intelligence (Generative AI), such as ChatGPT, Midjourney, or Gemini, has brought into sharp focus one of the most fundamental questions of copyright law: Can a machine hold copyright? Or more precisely, can a machine be legally recognized as the author? and thus entitled to copyright protection? This question strikes at the authorship doctrine. Copyright systems around the world, including Indonesia's, are

premised on the assumption that creative works are the result of human intellectual labor.[1] Under this paradigm, authorship is not merely a technical attribution of rights, but a moral and legal recognition of human creativity and agency. Consequently, the notion that a machine lacking consciousness, intention, and moral personality could be the subject of copyright has traditionally been dismissed as incompatible with prevailing legal theory.[2]

However, generative AI challenges this assumption. Large language models (LLMs) and image-generation systems can now produce written, visual, and musical works that meet the formal characteristics of originality and fixation.[3] These outputs, though not stemming from human cognition, often rival or surpass human-created works in complexity, coherence, and expressiveness. As such, they test the doctrinal boundaries of who (or what) qualifies as an "author" under existing law. In jurisdictions such as Indonesia, where copyright law continues to rely on a traditional model of human authorship and ownership, these developments reveal a normative and doctrinal gap that has yet to be addressed by the current legal framework.[4]

Article 1(2) of Indonesia's Copyright Law No. 28 of 2014 defines a "author" as a natural person or group of individuals whose works reflect distinct and personal characteristics. This definition, while sufficient in the pre-AI era, is now inadequate to address the complexities of authorship involving AI. The AI systems, particularly those powered by large language models or deep learning architectures, can generate outputs that satisfy the legal standards of originality and fixation. The law makes no explicit mention of non-human or algorithmic authorship, nor does it provide interpretative guidance for works generated autonomously or semi-autonomously by machines. As a result, works produced by AI remain in a grey area, neither explicitly protected nor categorically excluded from protection, raising questions about their eligibility for copyright and the allocation of economic and moral rights.

According to Chesterman, the absence of legal certainty on AI authorship and ownership has led created inconsistencies in judicial reasoning due to the lack of applicable standards.[5] A report by Andrini, similarly, observed that "Indonesia's intellectual property framework reveals notable gaps when applied to AI-generated works, particularly around authorship, ownership, and enforceability.[6] These uncertainties discourage licensing, undermine contract enforcement, and disincentivize innovation in AI-driven sectors.[7]

---

[1] C Geiger, 'Elaborating a Human Rights-Friendly Copyright Framework for Generative AI', *IIC International Review of Intellectual Property and Competition Law*, 55.7 (2024), 1129–65. https://doi.org/10.1007/s40319-024-01481-5.

[2] M Miernicki and I Ng (Huang Ying), 'Artificial Intelligence and Moral Rights', *AI and Society*, 36.1 (2021), 319–29. https://doi.org/10.1007/s00146-020-01027-6.

[3] Chrisna Bagus Edhita Praja and others, 'Legal Analysis of AI-Generated Creations: Copyright Law Perspectives', in *INTERCONNECTS 2024* (E3S Web of Conferences, 2025), 03005. https://doi.org/10.1051/e3sconf/202562203005.

[4] Yordan Gunawan and Hanna Nur Afifah Yogar, 'Indonesia E-Hailing Taxi: The Competition between Law and Technology', *Handbook of Research on Innovation and Development of E-Commerce and E-Business in ASEAN*, 2 (2020), 594–606. https://doi.org/10.4018/978-1-7998-4984-1.

[5] Simon Chesterman, 'Artificial Intelligence and the Limits of Legal Personality', *International and Comparative Law Quarterly*, 69.4 (2020), 819–44. https://doi.org/10.1017/S0020589320000366.

[6] L Andrini, 'Redesigning Indonesia Copyright Act to Accommodate Autonomous Intelligent System: Status Quo and Room for Improvement', *Asian Journal of Law and Economics*, 9.3 (2018). https://doi.org/10.1515/ajle-2018-0013.

[7] M Giraudo, E Fosch-Villaronga, and G Malgieri, 'Competing Legal Futures - Commodification Bets All the Way From Personal Data to AI', *German Law Journal*, 25.7 (2024), 1095–1119. https://doi.org/10.1017/glj.2024.29.

Currently, the Indonesian government has been actively encouraging the development of digital startups to boost the economy and create jobs. This support is part of a broader strategy to embrace Industry 4.0, which includes AI technology as a core component.[8] This sector includes education, healthcare, ICT, licensing, transportation, and economic services.[9] This broad adoption indicates a growing interest and investment in AI technologies within the country. Despite this growth, according to Syafrinaldi, the absence of clear legal guidance on the authorship and ownership of AI-generated works creates uncertainty for commercialization, enforcement, and investment, thereby exposing stakeholders to legal and economic risk.[10]

In contrast, several jurisdictions such as the United States, the United Kingdom, and India have developed legal doctrines that offer institutional solutions to such challenges.[11] The work made for hire (WMFH) doctrine, recognized in these countries, permits the attribution of authorship and copyright ownership to legal entities or employers in cases of works created within the scope of employment or under contractual arrangements. For instance, Section 101 of the U.S. Copyright Act of 1976 defines WMFH and has been judicially interpreted in Community for Creative Non-Violence *v.* Reid to distinguish between employees and independent contractors in the allocation of copyright. These doctrines provide doctrinal mechanisms to preserve copyright protection in contexts where individual human authorship is ambiguous or absent, particularly relevant to AI-assisted or AI-generated works. This article seeks to critically examine whether, and to what extent, the work made for hire doctrine can be adapted into Indonesia's copyright regime to address the unresolved legal issues surrounding AI-generated ownership. Accordingly, the study aims to: (1) Analyze the existing legal concepts of "copyright authorship and ownership' also "creation" under Indonesian copyright law; (2) Evaluate the feasibility of incorporating the WMFH doctrine as a legal bridge to fill Indonesia's regulatory gap; and (3) Propose a legal framework for limited statutory reform that upholds legal certainty and aligns Indonesian copyright law with international developments. By addressing these objectives, the article contributes to the policy discourse on copyright in the age of artificial intelligence and provides a conceptual foundation for future legislative initiatives in Indonesia.

2. Research Method

This study employs a normative legal research method, which is appropriate for examining the coherence, adequacy, and interpretive scope of legal norms in the face of emerging technological challenges. The normative method allows for a critical evaluation of existing statutory provisions, legal doctrines, and international instruments relevant to the ownership

[8] A A Salim and S.-M. Tang, 'Occupational Safety in the Age of Artificial Intelligence: Reformation of the Indonesian Work Safety Law', *Journal of Indonesian Legal Studies*, 9.2 (2024), 985–1026. https://doi.org/10.15294/jils.v9i2.4621.

[9] Y Yusriadi and others, 'Implementation of Artificial Intelligence in Indonesia', *International Journal of Data and Network Science*, 7.1 (2023), 283–94. https://doi.org/10.5267/j.ijdns.2022.10.005.

[10] S Syafrinaldi and others, 'Artificial Intelligence, Innovation, and Copyright: Comparing Intellectual Property Law in Indonesia and South Korea', *Lex Scientia Law Review*, 8.2 (2024), 1143–80. https://doi.org/10.15294/lslr.v8i2.1227.

[11] F A Rodrigo-Sanbartolomé, 'Intellectual Property from a Labour Law Perspective: The Transfer of Authors' Rights in Labour Relationships', *International Journal of Intellectual Property Management*, 10.2 (2020), 174–79. https://doi.org/10.1504/IJIPM.2020.108098.

of AI-generated works. The research draws upon three interrelated approaches: statutory, conceptual, and comparative.

The statutory approach is used to analyze Indonesia's Copyright Law No. 28 of 2014 in conjunction with international copyright instruments such as the Berne Convention, TRIPS Agreement, and WIPO Copyright Treaty. The conceptual approach is employed to clarify legal notions of "authorship," "creation," and "ownership," particularly as they relate to non-human agents. Meanwhile, the comparative approach explores how the United States, United Kingdom, and India address similar challenges, with particular focus on the doctrine of work made for hire (WMFH). These jurisdictions were selected for three reasons: (1) the United States provides the doctrinal origin and most developed jurisprudence on WMFH; (2) the United Kingdom applies a statutory model of employer ownership under common law; and (3) India, as a fellow developing jurisdiction, incorporates employer authorship in its Copyright Act while offering a civil law-based interpretation of derivative ownership.

This study acknowledges its limitations. It is primarily doctrinal and does not include empirical interviews, field-based policy evaluation, or statistical analysis. While judicial interpretations in Indonesia are referenced where available, there is a lack of reported case law specifically addressing AI-generated works. Consequently, the study focuses on doctrinal reasoning, legislative interpretation, and normative extrapolation rather than evidence-based or behavioral analysis. The conclusions should thus be read as contributions to legal reasoning and reform proposals, rather than as definitive solutions grounded in empirical observation.

In supporting the analysis, this study draws upon several foundational theories of copyright: the natural rights theory, which emphasizes the moral bond between a creator and their work; the incentive theory, which justifies copyright as a reward mechanism to stimulate creativity; and utilitarianism, which views copyright as an instrument to promote societal welfare through the production and dissemination of knowledge. These theories are integrated to frame the core issue: whether the absence of human creativity necessarily invalidates the attribution of authorship. The natural rights approach, for instance, supports the traditional view that authorship presupposes personal expression, thereby excluding AI as a legal subject. Conversely, incentive and utilitarian theories may justify broader interpretations of authorship or institutional ownership, particularly when creative outputs are machine-generated under the direction of human actors or institutions.

3. Results and Discussion

3.1 Human-Centered Copyright in Indonesia: A Doctrinal Boundaries

The current Indonesian Copyright Law, Law No. 28 of 2014, adopts a fundamentally anthropocentric model of authorship and ownership. Article 1 paragraph (2) defines author (*pencipta*) as "a person or several persons who, individually or jointly, produce a work that is distinctive and personal." This definition implies that authorship and, therefore, copyright ownership can only be attributed to a natural person.

Authorship, in copyright law, refers to the original source of creative expression from the person who conceives and fixes the work in a tangible medium. Authorship is the origin of both moral and economic rights. Ownership, on the other hand, refers to the legal entitlement to exercise the economic aspects of copyright, such as reproduction, adaptation, and distribution. While ownership often begins with the author, it can be transferred contractually or determined by law through employment or commissioning relationships. In short, not all copyright owners are authors, and not all authors retain ownership.

This human centered reflects the enduring influence of natural rights theory, particularly the Lockean view that creative works are extensions of human labor and personality. Under this philosophy, authorship is a moral entitlement, one that presupposes intentionality, autonomy, and moral agency. As Kumar explains, "a creative work is a personal expression inherently attached to its author".

Refer to the definition of author in Indonesian Copyright Law 2014, incorporates two key elements:

a. Individual or Collective Creation: A creator can be an individual or a group working either independently or collaboratively.
b. Distinctive and Personal Creation: The creation must exhibit characteristics that are unique and reflect the personal expression of the creator(s).

The first element, referring to " a person or several persons who, individually or jointly," highlights the concept of legal subjects (*rechtsubject*), defined as entities capable of bearing rights and obligations, which include both natural persons and legal entities. Indonesian law recognizes all humans as legal subjects. This principle is reflected in Article 1(1) of the Indonesian Civil Code (*KUH Perdata*), which states that the enjoyment of civil rights is not contingent upon a person's nationality. This provision implies that being a legal subject, as a citizen or otherwise, is not subject to specific conditions set by the state. Recognition of humans as legal subjects' spans from conception to death. This is further elaborated in Articles 2 and 3 of the Indonesian Civil Code:

a. Article 2: A child in utero is considered to have been born if it is in the child's interest, provided the child is born alive. If the child is born deceased, it is considered never to have existed.
b. Article 3: No punishment can result in "civil death" or the loss of all civil rights.

From a philosophical standpoint, humans can be understood through three perspectives: the Classical Definition (animal rationale), *Geist-in-Welt*, and *Esprit Incarne*.[12] The Classical Definition, derived from ancient philosophical thought, defines humans as animal rationale — rational beings distinguished from other creatures by their capacity for reason. This distinction does not merely suggest that humans are animals endowed with reason; it underscores the unique psychological and intellectual faculties that set humans apart. While biological responses might momentarily align with those of animals, the realm of thought, reflection, and moral reasoning belongs solely to humanity, establishing humans as creators of ideas and innovations.

The perspective of *Geist-in-Welt* shifts the focus to human autonomy, portraying individuals as entities with absolute will over themselves. This philosophy highlights the intrinsic capability of humans to exercise self-determination and sovereignty, reflecting their capacity to shape their destinies and influence the world around them. It is this autonomy that empowers humans to create works imbued with originality and individuality, which the law seeks to protect. [13]

Lastly, the *Esprit Incarne* perspective views humanity as spiritual beings manifest in physical form. This interpretation bridges the material and the metaphysical, recognizing humans as entities where body and spirit converge. This holistic understanding celebrates the profound

[12] Dyah Hapsari Prananingrum, 'Telaah Terhadap Esensi Subjek Hukum: Manusia Dan Badan Hukum', *Refleksi Hukum: Jurnal Ilmu Hukum*, 8.1 (2014), 73–92. https://doi.org/10.24246/jrh.2014.v8.i1.p73-92.
[13] Suhermanto Ja'far, 'Konsep Being Perspektif FIlsafat Dan Islam', *Islamica: Jurnal Studi Keislaman*, 11.2 (2017), 522–45. https://doi.org/10.15642/islamica.2017.11.2.522-544.

interplay between tangible and intangible elements of human existence, acknowledging the depth of creativity as an expression of both physical effort and spiritual inspiration. [14]

Another legal subject regulated in the *Burgelijk Wetboek* is a legal entity. According to R. Subekti, in addition to natural persons, organizations or associations also possess rights and can perform legal acts like an individual.[15] These entities have their own assets, participate in legal transactions through their representatives, can sue, and be sued in court. In civil law, legal entities have long been recognized as independent legal subjects (*persona standi in judicio*) capable of engaging in unlawful acts (*onrechtmatige handelen*).[16] Legal entities hold the authority to undertake legal actions, but such actions are generally limited to matters on property law. Given their nature as organizations or institutions, legal entities act through their representatives in executing legal actions.

Van Beers describes legal entities as juridical persons or artificial persons. [17] His view reinforces R. Subekti's assertion by distinguishing natural persons from artificial persons based on certain biological characteristics. Five key attributes highlight these differences:

a. All natural persons inherently belong to the human species;
b. The beginning of a natural person coincides with birth;
c. The end of a natural person coincides with death;
d. Natural persons are born from the union of two individuals of different sexes;
e. Natural persons are either male or female.

This distinction emphasizes the unique characteristics of natural persons while affirming the legal recognition and operational mechanisms of artificial persons within the legal framework. Avila Negri states that the term legal entity refers to a corporation. [18] While legally recognized, legal entities do not possess inherent rights like natural persons, such as the right to life or personal autonomy. Their rights are granted and limited by law, which varies based on jurisdiction and the type of entity involved. Unlike natural persons, whose existence is finite, corporations can continue to exist regardless of changes in ownership or the death of individuals associated with them. Furthermore, legal entities have the rights and obligations to engage in legal relationships, whether with other legal entities or natural persons. They can enter into agreements such as sales, exchanges, leases, and various other transactions related to assets. Legal entities are understood as actors possessing rights and obligations, despite

[14] Muhammad RM Fayasy Failaq, 'Transplantasi Teori Fiksi Dan Konsesi Badan Hukum Terhadap Hewan Dan Kecerdasan Buatan Sebagai Subjek Hukum', *Jurnal Hukum Dan HAM Wara Sains*, 1.02 (2022), 121–33. https://doi.org/10.58812/jhhws.v1i02.

[15] Jessica Fionita and Ariawan Gunadi, 'Telaah Pergeseran Paradigma Asas Dan Prinsip Dalam Pendirian Perusahaan Pasca Undang-Undang Cipta Kerja: Tinjauan Konsep Dan Penerapannya Terhadap Perusahaan Perorangan', *Unes Law Review*, 6.1 (2023), 5186–94. https://doi.org/10.31933/unesrev.v6i2.1344.

[16] Ardina Khoirun Nisa, 'The Prospect of AI Law in Indonesian Legal System: Present and Future Challenges', *The Indonesian Journal of International Clinical Legal Education*, 6.1 (2024), 25–48. https://doi.org/10.15294/ijicle.v5i3.72001.

[17] Britta Van Beers, 'The Changing Nature of Law's Natural Person: The Impact of Emerging Technologies on the Legal Concept of the Person', *German Law Journal*, 18.3 (2017), 559–94. https://doi.org/10.1017/S2071832200022069.

[18] Sergio M.C. Avila Negri, 'Robot as Legal Person: Electronic Personhood in Robotics and Artificial Intelligence', *Frontiers in Robotics and AI*, 8.2 (2021), 1–10. https://doi.org/10.3389/frobt.2021.789327.

lacking life or a soul, unlike natural persons who have both. As such, legal entities are confined to laws governing property or assets. [19]

In principle, based on the first element, a creator must be a natural person, not a legal entity. However, Article 37 of the Copyright Law provides an exception. If a legal entity announces, distributes, or communicates a work originating from the entity without attributing it to an individual, the legal entity is deemed the creator unless proven otherwise. Thus, a legal entity can be considered a creator if it announces, distributes, or communicates a work without naming an individual as the creator. However, if evidence subsequently establishes otherwise, the legal entity will no longer be regarded as the creator.

The second element of the definition of an Author is "producing a creation that is distinctive and personal." According to Indonesia's 2014 Copyright Law, a Creation is defined as any result of intellectual work in the fields of science, art, and literature, produced from inspiration, ability, thought, imagination, dexterity, skill, or expertise and expressed in a tangible form. For a work to qualify as a Creation under copyright law, it must meet two primary criteria: originality and fixation. To be considered original, a work merely needs to be created independently. In other words, it must not be a copy of another work. The concept of originality is expressed in the Indonesian Copyright Law with the phrase "distinctive and personal," which reflects the essence of authorship. Meanwhile, the requirement of fixation is fulfilled by the phrase "expressed in a tangible form" as stated in the law. Notably, these criteria do not require the work to be entirely new (as is required in patent law), unique, imaginative, or inventive. The work only needs to demonstrate a minimal degree of creativity to satisfy the originality requirement.

Originality is a fundamental requirement for copyright protection, but its interpretation varies across jurisdictions. In the UK and other common law systems, originality is often linked to the skill, labor, and judgment invested in producing a work, even without demonstrable creativity.[20] Conversely, U.S. law and civil law jurisdictions emphasize that creativity is essential, as affirmed in Feist v. Rural Telephone Service Co., where the U.S. Supreme Court held that originality must include a minimal degree of creativity, not just effort. [21]

This divergence is exemplified in Walter v. Lane, where UK courts upheld copyright in a journalist's verbatim transcript of a public speech, recognizing the effort and precision involved, despite the lack of original content. Such cases affirm that under the "sweat of the brow" doctrine, protection may arise from effort alone. [22] However, scholars like McDave question whether elements like skill and labor must originate solely from the human creator, especially in an era where technological assistance (e.g., computers or AI) automates tasks

[19] David Tan, 'Scrutinizing Perseroan Perorangan: The Brainchild of Societas Unius Personae in the Realm of Indonesian Company Laws', *Lex Scientia Law Review*, 6.2 (2022), 391–442. https://doi.org/10.15294/lesrev.v6i2.56059.

[20] P. Bernt Hugenholtz and João Pedro Quintais, 'Copyright and Artificial Creation: Does EU Copyright Law Protect AI-Assisted Output?', *IIC International Review of Intellectual Property and Competition Law*, 52.9 (2021), 1190–1216. https://doi.org/10.1007/s40319-021-01115-0.

[21] Tareck Alsamara, Mohammed Iriqat, and Almokhtar Zamouna, 'Legal Protection of Copyright in the Digital Era', *Journal of Ecohumanism*, 4.1 (2025), 1905–11. https://doi.org/10.62754/joe.v4i1.6008.

[22] Xiaochu Tian and Nan Zhang, 'Controversy of Copyright Application and the China Plan of Metaverse Products', *International Journal of Digital Law and Governance*, 1.1 (2024), 155–85. https://doi.org/10.1515/ijdlg-2023-0003.

once considered creative labor.[23] As automation increases, the threshold for originality in such works becomes less clear—raising doubts about their eligibility for copyright protection.

The final issue pertains to creativity, which remains a requirement, albeit to varying degrees across jurisdictions. For instance, creativity is emphasized in France through the concept of "personality contribution," expressed in the term *apport personnel de l'auteur*. In Germany, the focus is on "personal intellectual creation" (*persönlich geistige Schöpfung*). These approaches align with the EU Directive, which stipulates that a creation must meet two conditions: First, the creator must be recognized as the work's author. Second, the work must be a personal intellectual creation that fulfills the element of creativity attributed to the author. This evolution in copyright law highlights the ongoing debate over how originality and creativity should be evaluated, particularly in an era of rapid technological advancement. Different legal systems continue to grapple with finding a balance that accommodates both traditional notions of effort and modern interpretations of creativity in copyright protection. Since AI systems lack personhood, volition, and a sense of ownership, they fall outside the ontological foundation upon which copyright law was built. The normative assumption underlying Article 1(2) therefore excludes AI not merely as a matter of formal legal provision, but as a matter of legal philosophy.

Although Article 40 provides a non-exhaustive list of protected works, including written works, lectures, musical compositions, and computer programs, it does not expand the notion of authorship to accommodate non-human agents. Furthermore, the general requirement of originality, while not expressly stated in the statute, is embedded in the term "distinctive and personal," and is widely understood in Indonesian legal doctrine to require a work of the author's own intellectual creation.[24] Thus, for a work to qualify for protection, it must originate from human creativity and intention. This exclusion is not merely a matter of domestic legislative choice. It is structurally reinforced by Indonesia's adherence to international copyright instruments, most notably the Berne Convention, the TRIPS Agreement, and the WIPO Copyright Treaty (WCT). Article 2(1) of the Berne Convention refers to protection for "literary and artistic works" created by "authors," without defining the term explicitly, but universally interpreted as referring to natural persons. TRIPS Article 9(1) requires WTO members, including Indonesia, to comply with the substantive provisions of Berne, thereby entrenching this human-centered model within binding trade obligations. The WCT, which supplements Berne for the digital age, similarly preserves the foundational requirement that only works by authors, understood as human creators qualify for protection. As such, Indonesia's statutory exclusion of AI authorship is not a doctrinal anomaly, but a direct consequence of its commitments under international copyright law.[25]

This doctrinal orientation results in a legal vacuum when dealing with AI generated works particularly works created autonomously by AI systems without direct human intervention. In such cases, no human author can be identified who has exercised sufficient creative control over the output, making it legally ambiguous whether such works constitute creations under Article 1 paragraph (3). Consequently, AI-generated works fall outside the current scope of

---

[23] Kujo E. McDave and Alexander Hackman-Aidoo, 'Originality in Derivative Works: The Academy Logo in the Light of United Kingdom, South African and Ghanaian Copyright Laws', *US-China Law Review*, 17.8 (2020), 356–68. https://doi.org/10.17265/1548-6605/2020.08.004.

[24] Yordan Gunawan, 'Arbitration Award of Icsid on the Investment Disputes of Churchill Mining Plc v. Republic of Indonesia', *Hasanuddin Law Review*, 3.1 (2017), 14–26. https://doi.org/10.20956/halrev.v3i1.948.

[25] Yordan Gunawan, M. Fabian Akbar, and Eva Ferrer Corral, 'WTO Trade War Resolution for Japan's Chemical Export Restrictions to South Korea', *Padjadjaran Jurnal Ilmu Hukum*, 9.3 (2022), 408–31. https://doi.org/10.22304/pjih.v9n3.a6.

copyrightable subject matter, leaving them in a grey area of enforceability. Without a clearly defined author, AI-generated works risk being deemed unprotected or treated as public domain by default. This scenario exposes creators, investors, and institutions to uncertainty in terms of licensing, enforcement, and commercialization as reported by Ameye et.al.[26] The following section will examine whether Articles 34 and 36 of Indonesia's Copyright Law can be used or reimagined as legal mechanisms to assign ownership of AI-generated works, even in the absence of traditional human authorship.

3.2 Reimagining Articles 34 and 36 Indonesian Copyright Law: Can Contractual Attribution Rescue AI Works?

As established in the previous sections, Indonesian copyright law requires that a work meet two fundamental criteria to qualify for protection: originality and fixation. These elements are embedded in the statutory requirement that a creation must be "distinctive and personal" and "expressed in a tangible form." Originality refers to the result of the author's own intellectual effort, while fixation requires that the work be perceptible in a concrete medium. Both elements presuppose human intervention and expression. The very act of authorship, under current doctrine, is inseparable from human volition and agency. In the absence of explicit legal provisions addressing non-human authorship, Articles 34 and 36 of the Indonesian Copyright Law present a possible doctrinal basis for interpreting how rights in AI-generated works could be attributed or assigned. These articles, although originally designed for human relationships, raise the possibility of functional attribution—that is, assigning authorship or ownership based on roles and intentions rather than the source of creativity alone. Article 34 provides that "In the event that a Work is designed by one person and realized by another person under the designer's direction and supervision, the person who designed the Work shall be considered the Creator."

This article reflects a recognition that authorship can lie not with the executor of the work, but with the one who conceives and directs it. At first glance, this provision may appear adaptable to AI contexts: a human user who designs prompts or instructs an AI system could be seen as the "designer," while the AI operates as an executor. However, the text of Article 34 assumes that both designer and executor are human. Furthermore, the legal requirement of "direction and supervision" presumes responsiveness—i.e., that the executor is capable of being guided or corrected in real time. Current generative AI systems, while responsive in output, do not operate under human supervision in the juridical sense. Their autonomous functioning, especially in zero-shot or unsupervised contexts, challenges the interpretive reach of Article 34. Thus, the designer–executor model, while interesting as an analogy, cannot conclusively establish the human user as the statutory "creator." Moreover, the phrase "direction and supervision" should not be understood in a purely mechanical or technical sense. Rather, it presumes an interactive relationship between the designer and the executor—one in which the executor is capable of understanding, responding to, and adjusting their actions in accordance with the instructions provided. This presupposes a level of consciousness, responsiveness, and accountability typically found only in human actors.

Direction and supervision, as core functions in organizational and legal relationships, imply the existence of intentional and voluntary behavior on the part of the subordinate or executor. Supervision is fundamentally about providing guidance and direction to others, ensuring that

[26] N Ameye, J Bughin, and N van Zeebroeck, 'How Uncertainty Shapes Herding in the Corporate Use of Artificial Intelligence Technology', *Technovation*, 127 (2023). https://doi.org/10.1016/j.technovation.2023.102846.

tasks are performed correctly and efficiently. This inherently requires the subordinate to engage intentionally and voluntarily in the tasks assigned.

Applied to copyright law, this understanding of "direction and supervision" raises critical doubts about its applicability to generative AI systems. AI, especially when operating autonomously, does not possess legal personhood, volition, or moral agency. It cannot be said to understand human direction or act responsively in the legal sense. Therefore, any attempt to analogize AI to a human executor under Article 34 collapses under the weight of this doctrinal assumption. In short, the legal structure of designer–executor attribution rests on the idea that the executor is a legal subject capable of conscious and directed behavior. When the executor is an AI system devoid of such qualities, the normative basis for attribution under Article 34 is fundamentally absent.

Article 36, by contrast, governs works made under employment or commission. It states that "Unless otherwise agreed, the party who creates a Work within an employment relationship or under commission shall be considered the Creator, unless the commissioning party is stated as the Creator in the agreement." This provision allows contractual flexibility in determining authorship and has enabled institutions to lawfully claim authorship or ownership of works made by employees or contractors. In AI contexts, this opens the door to two possibilities: (a) A company could claim ownership if it develops or deploys AI as part of its institutional activities, and (b) A platform may specify in its terms of service (e.g., ChatGPT, Midjourney) that users own the output generated via their prompts.

Yet even this logic rests on the assumption that the "party who creates" is a legal subject—either a human or a corporate entity acting through human agents. AI, not being a legal person, cannot be a party to a contract nor recognized as an author. Consequently, when AI generates a work with minimal or no human input, the logic of Article 36 collapses. The law provides no basis for ownership to arise when the act of creation cannot be legally attributed to a person. Although both articles offer some interpretive flexibility for works involving human relationships, they fail to resolve the doctrinal impasse presented by fully AI-generated content. As Mayana *et.al* rightly observes, "the existing legal framework does not clearly regulate copyright attribution for works produced by intelligent machines."[27] Articles 34 and 36 remain anchored in a human-to-human paradigm that presupposes the presence of human authorship, direction, or commissioning. Moreover, even if an AI-generated work exhibits originality and is expressed in a tangible form, as required by Article 1 paragraph (3), the absence of a human source of expression makes it difficult. If not impossible to fulfill the statutory threshold. Without a creator, there can be no basis for rights to arise, let alone to be transferred.

In light of this doctrinal void, merely extending existing attribution rules is insufficient. A more robust legal response is necessary, possibly in the form of legislative reform. One such path, examined in the next section, is the adoption or adaptation of the work made for hire doctrine, as developed in jurisdictions such as the United States and the United Kingdom. This model allows for institutional or contractual attribution of ownership—even in cases where human authorship is minimal or absent—thus offering a potential solution to the challenges exposed by Indonesia's current framework.

[27] R F Mayana and others, 'Legal Issues of Artificial Intelligence – Generated Works: Challenges on Indonesian Copyright Law', *Law Reform: Jurnal Pembaharuan Hukum*, 20.1 (2024), 54–75. https://doi.org/10.14710/lr.v20i1.61262.

3.3 Comparative Legal Analysis: Institutional Pathways to Resolve AI Authorship Dilemmas

The doctrinal and normative limitations of Indonesia's copyright framework contrast with the more functional approaches adopted in several other jurisdictions. Countries such as the United States, the United Kingdom, and India have established legal mechanisms that enable copyright ownership to be attributed to legal entities through employment or commissioning arrangements. These comparative approaches offer valuable insights into how institutional attribution of authorship can be accommodated within different legal traditions. The work-made-for-hire (WMFH) doctrine governs who is deemed the author (and thus first owner) of a creative work made under employment or commission. With the rise of generative AI, all three jurisdictions grapple with attributing authorship when a machine produces content. In the United States, WMFH is strictly defined by statute, generally allowing an employer or commissioning party to be the author only if a human employee or creator produced the work. The U.S. Copyright Office and courts have made clear that a work generated solely by an AI (with no human creative input) is not eligible for copyright at all, and thus cannot fall under WMFH. By contrast, the UK and India have statutory provisions that assign authorship of computer-generated works to a human "stand-in," enabling copyright protection of AI outputs by treating a person as the author. Below, we compare each system's WMFH rules and consider how they are applied (or cannot be applied) to AI-created works, highlighting any gaps or debates that have emerged.

3.3.1 United States

In the U.S., the Copyright Act defines a "work made for hire" in 17 U.S.C. §101. Circular 30 of the U.S. Copyright Office explains that WMFH applies only in two cases: (1) the work is prepared by an employee within the scope of employment, or (2) the work is specially ordered or commissioned (in a narrow category) with a written agreement specifying WMFH. In either case, the employer or commissioning party is considered both the author and copyright owner (even though the actual creator was an employee). Absent one of these statutory scenarios, the natural person who creates the work is the author (and owner). Crucially, U.S. law requires an initial human author. The recent Thaler v. Perlmutter litigation (D.D.C. 2023, affirmed 2025) drove this point home.[28] In Thaler, a machine called the "Creativity Machine" autonomously generated an image (presented in **Figure 1**). Dr. Thaler applied to register copyright listing the AI as author, but the Copyright Office denied it for lack of human authorship.[29] The district court and then the D.C. Circuit confirmed that "[h]uman creativity is the sine qua non" of copyright. Because the AI machine (a non-human) created the work without any human "skill, labor or judgment," no copyright arose and WMFH could not transfer anything to Dr. Thaler. As the district court held, the Creativity Machine "was never eligible for copyright," so it had no protectable interest to transfer even if Dr. Thaler were its owner. The court also noted the Copyright Office's explanation that an AI is not a legal entity or "employee," so it cannot enter a WMFH contract.

[28] D Pryputen and others, 'The Use of Artificial Intelligence in Combating Offenses in the Field of Illegal Drug Trafficking: Legal Regulation, Administrative and Criminal Aspects', *Journal of Drug and Alcohol Research*, 13.10 (2024). https://doi.org/10.4303/JDAR/236415.

[29] Pryputen and others.

Figure 1. AI-generated artwork ("A Recent Entrance to Paradise") created by Dr. Thaler's "Creativity Machine," at issue in Thaler v. Perlmutter (Source: Wikimedia Common)

Importantly, the U.S. rule does not categorically ban AI-assisted works: if a human with creative input guides the AI, that human can be the author.[30] The D.C. Circuit expressly noted that the human-authorship requirement "does not prevent copyright law from protecting works made with AI". In practice, this means an employee who crafts prompts or edits an AI output can still be considered the author. If that employee was working "in the course of" their employment, the employer would be the first copyright owner under the usual WMFH rule. By contrast, when no human does any original creative work (purely autonomous AI output), U.S. law treats it as uncopyrightable: WMFH has no effect because there is no copyright to claim. In the U.S., WMFH applies only to works by human creators. Statutory WMFH (17 U.S.C. §101) covers works prepared by an employee or specially commissioned works. A purely AI-generated work without human authorship cannot be copyrighted, so no WMFH situation can exist. The Thaler case held that an AI is not an "employee" and its output had "no copyright…to transfer". If a human provides the creative spark (e.g. detailed prompts), that human is the author. If that human was employed to produce the work, the employer owns it as WMFH. In other words, U.S. law treats AI as a tool: copyright protects only the human contribution, and WMFH functions normally with respect to that human author.

3.3.2 United Kingdom

UK law approaches WMFH through the broader authorship and first-ownership rules in the Copyright, Designs and Patents Act 1988 (CDPA). Generally, the author of a literary, dramatic, musical or artistic (LDMA) work is the person who creates it, and that author is the first copyright owner. Section 11(2) CDPA then provides the WMFH-like rule: if an LDMA work is "made by an employee in the course of his employment," the employer is the first owner of copyright (subject to any agreement to the contrary). Thus, like the U.S., an employee-creator's employer typically owns the work, absent a contract saying otherwise. UK law also explicitly covers computer-generated works. CDPA Section 9(3) (formerly s.178) grants copyright even if no human authored the work. It provides that in a computer-generated literary, dramatic, musical or artistic work, "the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken." In practice, this means a human – often

[30] Firas Massadeh and others, 'The Legal Protection of Artificial Intelligence-Generated Work: The Argument for Sui Generis Over Copyright', *Corporate Law and Governance Review*, 6.1 (2024), 49–56. https://doi.org/10.22495/clgrv6i1p5.

the programmer or operator – is treated as the author of a machine-made work. Unlike normal works (which have authorship fixed at creation), these "AI works" can be owned by a person who merely set the process in motion.

The UK limits such computer-generated works to a 50-year term (no author lifespan) and excludes moral rights. UK courts have applied Section 9(3) in at least one notable case. In Nova Productions Ltd *v.* Mazooma Games Ltd (EWCA 2007), video-game software autonomously generated thousands of images. The Court of Appeal held that the game's programmer – who "devised the appearance" of the frames and wrote the rules of the game – had "made the necessary arrangements" and was therefore the author of those images under s.9(3). The user (who merely played the game) was not deemed to have undertaken the arrangements, so he was not the author. The court's analysis suggests the "moving force" or designer behind an AI system will usually be treated as author, whereas a passive user will not. Scholars debate whether a program's user (prompt-engineer) might sometimes qualify as the arranger, but Nova indicates ownership favors the developer unless the user has a more active creative role.[31]

The UK Copyright, Designs and Patents Act 1988 provides in Section 11(2) that works created by employees "in the course of employment" are initially owned by the employer. While authorship remains human, ownership automatically vests in the institution, creating a clear framework for commercial use. More relevant to AI, Section 9(3) of the Act introduces a novel approach: for computer-generated works, where no human author can be identified, "the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken." This rule, while rarely tested in courts, opens the possibility of constructive authorship based on control and initiative, offering a pathway for addressing AI-generated content within existing legal doctrine. In the UK, employee creations follow the familiar rule that an employer is the first copyright owner of LDMA works made by an employee in the course of employment. Any contrary agreement can override this.

For AI-generated works with no human author, CDPA s.9(3) automatically assigns authorship to the person who arranged the creation. This ensures AI outputs can be copyrighted. The result is a UK copyright (50-year term, no moral rights) in favor of some human (e.g. programmer or director) even though the work was autonomously produced. In practice, courts have held that the individual most responsible for the AI's creative setup is the author. In Nova v. Mazooma, the game programmer was deemed author of the computer-generated images. The legislation itself is silent on how much human "skill or labor" an arranger must expend, so its boundaries remain somewhat unclear in the AI era (prompting recent calls for reform.[32]

3.3.3 India

Indian copyright law, like the UK's, provides for works made by employees and even mentions computer-generated works. Section 2(d) of the Copyright Act 1957 defines "author" for various works. It was amended to add that for any literary, dramatic, musical or artistic work "which is computer-generated," the author is "the person who causes the work to be created". In other words, India treats the initiator of an AI process (e.g. the programmer or

[31] A. Kirakosyan, 'Intellectual Property Ownership of AI-Generated Content', *Digital Law Journal*, 4.3 (2024), 40–50. https://doi.org/10.38044/2686-9136-2023-4-3-3.

[32] I Gede Widhiana Suarda and others, 'Artificial Intelligence and New Era of Plagiarism in Education : Problem and Solution', *Journal of Infrastructure, Policy and Development*, 8.28 (2024), 1–24. https://doi.org/10.24294/jipd9609.

operator who makes the work appear) as the author of a computer-generated work. Section 17 of the Act then says that subject to the Act's provisions, the author is the first owner of the copyright. Clause (c) of Sec.17 explicitly states that if a work (that isn't otherwise covered by special cases) is made in the course of employment, the employer is the first owner.[33] Thus, an employee who "causes" an AI work in her job would leave ownership with her employer. Putting these together, Indian law effectively mirrors the UK, namely an AI tool itself cannot hold copyright, so the human behind it is treated as author and owner. For instance, if a software engineer ("causing the work") programs the AI to produce an artwork, she would be the author (and initially own the copyright) unless she made it under employment, in which case her employer owns it. India does not currently impose a reduced term for computer-generated works; since the author is a natural person, the usual term (life of author plus 60 years) would apply. India's stance on AI authorship has drawn attention. In a reported incident, the Indian Copyright Office registered a painting by listing an AI program (called RAGHAV) as co-author along with its human developer.[34] The office had initially rejected the application listing only the AI, but when refiled naming both man and machine, it issued a registration in 2020. The human developer hailed this as forward-looking, though he acknowledged that treating software as a legal "author" was legally dubious.[35]

This episode underscored that Indian law is ambiguous: strictly speaking, only persons can be authors (per Sec.2(d)(vi)), so the recognition of AI as co-author goes beyond the statute. It also illustrates the policy debate. The Indian government told Parliament that no special AI rights are needed and existing law is "well-equipped" for AI-generated works.[36] Nonetheless, in May 2025 India formed an expert panel to review whether the Copyright Act needs updating to address AI and recent lawsuits (e.g. against OpenAI).[37]

In India, the author of a computer-generated work is statutorily defined as "the person who causes the work to be created". This covers scenarios where a human operates or programs the AI. As per Sec.17(c), if the work was made by an employee in the course of service, the employer is the first owner of copyright. Otherwise, the human author (the "causer") owns it. The government has indicated no new legislation is needed for AI content, claiming current IPR laws suffice. The way that different countries apply the concept of Work Made for Hire (WMFH) to AI-generated content shows clear differences. One major point of divergence is the requirement of human authorship. In the United States, copyright protection is only available if a human being is the original author. If an AI system creates a work on its own without any meaningful human creative input, the work cannot be protected under U.S.

---

[33] Sayed Fayaz Ahmad and others, 'Impact of Artificial Intelligence on Human Loss in Decision Making, Laziness and Safety in Education', *Humanities and Social Sciences Communications*, 10.1 (2023), 311. https://doi.org/10.1057/s41599-023-01787-8.

[34] K Hema, 'Protection of Artificial Intelligence Autonomously Generated Works under the Copyright Act, 1957-An Analytical Study', *Journal of Intellectual Property Rights*, 28.3 (2023), 193–99. https://doi.org/10.56042/jipr.v28i3.708.

[35] S Syafrinaldi and others, 'Artificial Intelligence, Innovation, and Copyright: Comparing Intellectual Property Law in Indonesia and South Korea', *Lex Scientia Law Review*, 8.2 (2024), 1143–80. https://doi.org/10.15294/lslr.v8i2.1227.

[36] Kailash Chauhan, 'Generative AI, Text & Data Mining and the Fair Dealing Doctrine: Examining the New Problem with the Old Regime', *Journal of Intellectual Property Rights*, 30.1 (2025), 77–85. https://doi.org/10.56042/jipr.v30i1.12652.

[37] Xiaodan Li, 'WDS-RDA Publishing Data Workflows Working Group Analysis Sheet', *International Journal of Criminal Justice Science*, 19.1 (2015), 117–34. https://doi.org/10.5281/ZENODO.19107.

copyright law. Because there is no copyright in the first place, the WMFH doctrine does not apply, since there are no rights to transfer or assign.[38]

In contrast, the United Kingdom and India have legal rules that allow human attribution for AI-generated works. The UK's Copyright, Designs and Patents Act states that when a work is generated by a computer and there is no human author, the author is considered to be the person who made the necessary arrangements for the creation of the work. Similarly, India's Copyright Act defines the author of a computer-generated work as the person who caused the work to be created. These rules allow copyright to exist even when the creative process is led or initiated by a machine by giving authorship to a human party behind the system. When a human is legally considered the author, ownership can then be transferred or assigned in line with standard WMFH principles. In all three jurisdictions, the U.S., UK, and India, if a work is created by an employee in the course of their duties, or under certain types of commission, the employer or commissioner is generally recognized as the first copyright owner. This means that if an AI-generated work is created with some level of human involvement in a professional or contractual setting, ownership may still be assigned to an institution, provided that the human involvement meets the definition of authorship under national law.[39]

There are also differences in how long these AI-generated works are protected. In the UK, computer-generated works receive protection for 50 years from the year the work was created, and moral rights do not apply. In India, if a person is legally recognized as the one who "caused" the work, the normal term of protection applies, the life of the author plus 60 years. In the U.S., since purely AI-generated works are not protected at all, this question only becomes relevant if a human is found to be the true author, in which case the standard term applies (life of the author plus 70 years).

In summary, the key factor across jurisdictions is who is considered the "author" of an AI-generated work. In the U.S., without a human author, no copyright exists. In the UK and India, however, the law allows a human figure—such as the person arranging or directing the AI process—to be named as the author. This legal attribution also enables WMFH rules to function, allowing ownership to transfer to employers or commissioning parties when applicable.

3.4 Proposed Legal Reform for Indonesia: Assigning Copyright Ownership for AI-Generated Works

The comparative review of the United States, United Kingdom, and India reveals three distinct legal models for addressing authorship and ownership of AI-generated works. The U.S. strictly adheres to human authorship as a prerequisite for copyright protection, rendering purely autonomous AI outputs unprotectable. The UK and India, in contrast, adopt a functional or causal attribution approach: they designate as author the human who arranges or causes the creation of a work generated by a machine. While different in doctrinal form, both frameworks offer practical responses to the legal void surrounding non-human creativity. These models illuminate potential institutional pathways for Indonesia.

As Indonesia's current copyright law remains centered on the human creator as the exclusive subject of authorship, is inadequate to regulate AI-generated works that lack direct human expression. Articles 34 and 36 address attribution within human relationships (e.g.,

[38] Tim Hinks, 'Artificial Intelligence Perceptions and Life Satisfaction', *Journal of Happiness Studies*, 25.1 (2024), 5. https://doi.org/10.1007/s10902-024-00727-w.

[39] Bart Verheij, 'Artificial Intelligence as Law', *Artificial Intelligence and Law*, 28.2 (2020), 181–206. https://doi.org/10.1007/s10506-020-09266-0.

employment or commission) but are structurally inadequate for resolving questions of authorship when no human qualifies as the source of creativity in the conventional sense.[40]

In response, this paper proposes a functional attribution model, adapted from the UK and Indian approaches, that allows Indonesia to preserve the doctrinal integrity of its copyright system while addressing the practical challenges of AI generative works. This model would introduce statutory recognition that in the case of works generated by artificial intelligence systems without a human author, the person or entity who arranges, causes, or supervises the creation process, whether through programming, prompting, or platform operation shall be considered the legal author for the purpose of copyright attribution.

This reform could be further operationalized by amending the Indonesian Copyright Law to:

a. Include an expanded definition of "pencipta" (author) to encompass the "causer" or "arranger" of AI-generated works;
b. Recognize attribution through contract (contractual assignment) when AI is used under employment or commission arrangements, as per Article 36;
c. Provide a specific duration for AI-generated works (e.g., 50 years from publication), and limit moral rights in such cases, in line with the UK model;
d. Clarify through administrative regulation (Peraturan Pelaksana) how human contribution, platform terms, or employment contracts can serve as evidence of functional authorship.

This proposal finds solid grounding in three foundational theories of copyright. First, Natural Rights Theory justifies the reform by anchoring authorship in the intentional and autonomous acts of the human actor behind the AI system. While AI lacks volition or moral agency, the human initiator embodies the labor and judgment traditionally associated with authorship. By attributing authorship to the human who causes the AI to create, the law preserves the anthropocentric core of copyright without denying the realities of machine assistance. Second, under the Incentive Theory, the proposal ensures that legal recognition and protection are afforded to those who invest in, design, or manage AI-driven creative processes. In the absence of legal clarity, investors, institutions, and creators face substantial uncertainty in commercializing AI-generated content. Recognizing the responsible human or entity as the legal author aligns the reward structure with real-world creative and economic inputs, promoting continued innovation. Third, the Utilitarian Theory supports this attribution framework to maximize the social utility of copyright. By assigning authorship and ownership to the party in the best position to exploit, license, and disseminate the work, the law enhances access, accountability, and market certainty. It avoids the undesirable consequence of AI-generated works falling into a legal grey area or public domain by default.[41]

4. Conclusion

This article finds that Indonesian copyright law does not yet provide a clear legal basis for handling AI-generated works. Its focus on human authorship and originality excludes the possibility of recognizing creative works produced by AI systems without significant human involvement. Although Articles 34 and 36 regulate ownership through employment or commissioned work, they still assume that a human is behind the creative act. A comparison

[40] Stanley Greenstein, 'Preserving the Rule of Law in the Era of Artificial Intelligence (AI)', *Artificial Intelligence and Law*, 30.3 (2022), 291–323. https://doi.org/10.1007/s10506-021-09294-4.

[41] Matthew U. Scherer, 'Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies', *Harvard Journal of Law & Technology*, 29.2 (2016), 1–23. https://doi.org/10.2139/ssrn.2609777.

with copyright legal systems in the United States, United Kingdom, and India shows that while U.S. law denies protection to works made entirely by AI, the UK and India allow copyright to be given to the person who directs or sets up the process. This ensures that AI-generated works can still be protected under the law, even if no individual directly created the content. To address this gap, the article proposes a legal reform in Indonesia that allows the person who initiates, guides, or operates the AI system to be treated as an author. This would give legal certainty, protect economic interests, and make it possible to enforce rights over AI-generated works. This approach allows Indonesia to adapt to the realities of AI technology while keeping the human element at the center of copyright law.

References

Ahmad, Sayed Fayaz, Heesup Han, Muhammad Mansoor Alam, Mohd. Khairul Rehmat, Muhammad Irshad, Marcelo Arraño-Muñoz, and others, 'Impact of Artificial Intelligence on Human Loss in Decision Making, Laziness and Safety in Education', *Humanities and Social Sciences Communications*, 10.1 (2023), 311. https://doi.org/10.1057/s41599-023-01787-8.

Alsamara, Tareck, Mohammed Iriqat, and Almokhtar Zamouna, 'Legal Protection of Copyright in the Digital Era', *Journal of Ecohumanism*, 4.1 (2025), 1905–11. https://doi.org/10.62754/joe.v4i1.6008.

Ameye, N, J Bughin, and N van Zeebroeck, 'How Uncertainty Shapes Herding in the Corporate Use of Artificial Intelligence Technology', *Technovation*, 127 (2023). https://doi.org/10.1016/j.technovation.2023.102846.

Andrini, L, 'Redesigning Indonesia Copyright Act to Accommodate Autonomous Intelligent System: Status Quo and Room for Improvement', *Asian Journal of Law and Economics*, 9.3 (2018). https://doi.org/10.1515/ajle-2018-0013.

Avila Negri, Sergio M.C., 'Robot as Legal Person: Electronic Personhood in Robotics and Artificial Intelligence', *Frontiers in Robotics and AI*, 8.December (2021), 1–10. https://doi.org/10.3389/frobt.2021.789327.

Chauhan, Kailash, 'Generative AI, Text & Data Mining and the Fair Dealing Doctrine: Examining the New Problem with the Old Regime', *Journal of Intellectual Property Rights*, 30.1 (2025), 77–85. https://doi.org/10.56042/jipr.v30i1.12652.

Chesterman, Simon, 'Artificial Intelligence and the Limits of Legal Personality', *International and Comparative Law Quarterly*, 69.4 (2020), 819–44. https://doi.org/10.1017/S0020589320000366.

Failaq, Muhammad RM Fayasy, 'Transplantasi Teori Fiksi Dan Konsesi Badan Hukum Terhadap Hewan Dan Kecerdasan Buatan Sebagai Subjek Hukum', *Jurnal Hukum Dan HAM Wara Sains*, 1.02 (2022), 121–33. https://doi.org/10.58812/jhhws.v1i02.

Fionita, Jessica, and Ariawan Gunadi, 'Telaah Pergeseran Paradigma Asas Dan Prinsip Dalam Pendirian Perusahaan Pasca Undang-Undang Cipta Kerja: Tinjauan Konsep Dan Penerapannya Terhadap Perusahaan Perorangan', *Unes Law Review*, 6.1 (2023), 5186–94. https://doi.org/10.31933/unesrev.v6i2.1344.

Geiger, C, 'Elaborating a Human Rights-Friendly Copyright Framework for Generative AI', *IIC International Review of Intellectual Property and Competition Law*, 55.7 (2024), 1129–65. https://doi.org/10.1007/s40319-024-01481-5.

Giraudo, M, E Fosch-Villaronga, and G Malgieri, 'Competing Legal Futures - Commodification Bets All the Way From Personal Data to AI', *German Law Journal*, 25.7 (2024), 1095–1119. https://doi.org/10.1017/glj.2024.29.

Gunawan, Yordan, 'Arbitration Award of Icsid on the Investment Disputes of Churchill Mining Plc v. Republic of Indonesia', *Hasanuddin Law Review*, 3.1 (2017), 14–26. https://doi.org/10.20956/halrev.v3i1.948.

Gunawan, Yordan, M. Fabian Akbar, and Eva Ferrer Corral, 'WTO Trade War Resolution for Japan's Chemical Export Restrictions to South Korea', *Padjadjaran Jurnal Ilmu Hukum*, 9.3 (2022), 408–31. https://doi.org/10.22304/pjih.v9n3.a6.

Gunawan, Yordan, and Hanna Nur Afifah Yogar, 'Indonesia E-Hailing Taxi: The Competition between Law and Technology', *Handbook of Research on Innovation and Development of E-Commerce and E-Business in ASEAN*, 2 (2020), 594–606. https://doi.org/10.4018/978-1-7998-4984-1.

Hema, K, 'Protection of Artificial Intelligence Autonomously Generated Works under the Copyright Act, 1957-An Analytical Study', *Journal of Intellectual Property Rights*, 28.3 (2023), 193–99. https://doi.org/10.56042/jipr.v28i3.708.

Hinks, Tim, 'Artificial Intelligence Perceptions and Life Satisfaction', *Journal of Happiness Studies*, 25.1 (2024), 5. https://doi.org/10.1007/s10902-024-00727-w.

Hugenholtz, P. Bernt, and João Pedro Quintais, 'Copyright and Artificial Creation: Does EU Copyright Law Protect AI-Assisted Output?', *IIC International Review of Intellectual Property and Competition Law*, 52.9 (2021), 1190–1216. https://doi.org/10.1007/s40319-021-01115-0.

Ja'far, Suhermanto, 'Konsep Being Perspektif FIlsafat Dan Islam', *Islamica: Jurnal Studi Keislaman*, 11.2 (2017), 522–45. https://doi.org/10.15642/islamica.2017.11.2.522-544.

Kirakosyan, A., 'Intellectual Property Ownership of AI-Generated Content', *Digital Law Journal*, 4.3 (2024), 40–50. https://doi.org/10.38044/2686-9136-2023-4-3-3.

Kujo E. McDave, and Alexander Hackman-Aidoo, 'Originality in Derivative Works: The Academy Logo in the Light of United Kingdom, South African and Ghanaian Copyright Laws', *US-China Law Review*, 17.8 (2020), 356–68. https://doi.org/10.17265/1548-6605/2020.08.004.

Li, Xiaodan, 'WDS-RDA Publishing Data Workflows Working Group Analysis Sheet', *International Journal of Criminal Justice Science*, 19.1 (2015), 117–34. https://doi.org/10.5281/ZENODO.19107.

Massadeh, Firas, Fayez Alnusair, Ali Abdel Mahdi Massadeh, and Mahmoud Ismail, 'The Legal Protection of Artificial Intelligence-Generated Work: The Argument for Sui Generis Over Copyright', *Corporate Law and Governance Review*, 6.1 (2024), 49–56. https://doi.org/10.22495/clgrv6i1p5.

Mayana, R F, T Santika, Y Y Win, J A K Matalam, and A M Ramli, 'Legal Issues of Artificial Intelligence – Generated Works: Challenges on Indonesian Copyright Law', *Law Reform: Jurnal Pembaharuan Hukum*, 20.1 (2024), 54–75. https://doi.org/10.14710/lr.v20i1.61262.

Miernicki, M, and I Ng (Huang Ying), 'Artificial Intelligence and Moral Rights', *AI and Society*, 36.1 (2021), 319–29. https://doi.org/10.1007/s00146-020-01027-6.

Nisa, Ardina Khoirun, 'The Prospect of AI Law in Indonesian Legal System: Present and Future Challenges', *The Indonesian Journal of International Clinical Legal Education*, 6.1 (2024), 25–48. https://doi.org/10.15294/ijicle.v5i3.72001.

Praja, Chrisna Bagus Edhita, Hary Abdul Hakim, Basri, Yulia Kurniaty, and Elvira Purnama Sari, 'Legal Analysis of AI-Generated Creations: Copyright Law Perspectives', in *INTERCONNECTS 2024* (E3S Web of Conferences, 2025), 03005. https://doi.org/10.1051/e3sconf/202562203005.

Prananingrum, Dyah Hapsari, 'Telaah Terhadap Esensi Subjek Hukum: Manusia Dan Badan Hukum', *Refleksi Hukum: Jurnal Ilmu Hukum*, 8.1 (2014), 73–92. https://doi.org/10.24246/jrh.2014.v8.i1.p73-92.

Pryputen, D, A Sotskyi, O Zhiltsov, A Dragonenko, and I Fedorchak, 'The Use of Artificial Intelligence in Combating Offenses in the Field of Illegal Drug Trafficking: Legal Regulation, Administrative and Criminal Aspects', *Journal of Drug and Alcohol Research*, 13.10 (2024). https://doi.org/10.4303/JDAR/236415.

Rodrigo-Sanbartolomé, F A, 'Intellectual Property from a Labour Law Perspective: The Transfer of Authors' Rights in Labour Relationships', *International Journal of Intellectual Property Management*, 10.2 (2020), 174–79. https://doi.org/10.1504/IJIPM.2020.108098.

Salim, A A, and S.-M. Tang, 'Occupational Safety in the Age of Artificial Intelligence: Reformation of the Indonesian Work Safety Law', *Journal of Indonesian Legal Studies*, 9.2 (2024), 985–1026. https://doi.org/10.15294/jils.v9i2.4621.

Scherer, Matthew U., 'Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies', *Harvard Journal of Law & Technology*, 29.2 (2016), 1–23. https://doi.org/10.2139/ssrn.2609777.

Syafrinaldi, S, K Hyeonsoo, R F Syafrinaldi, and D Hardiago, 'Artificial Intelligence, Innovation, and Copyright: Comparing Intellectual Property Law in Indonesia and South Korea', *Lex Scientia Law Review*, 8.2 (2024), 1143–80. https://doi.org/10.15294/lslr.v8i2.1227.

Suarda, I Gede Widhiana, Fendi Setyawan, Gio Arjuna Putra, Vicko Taniady, and Natasya Aulia Putri, 'Artificial Intelligence and New Era of Plagiarism in Education : Problem and Solution', *Journal of Infrastructure, Policy and Development*, 8.28 (2024), 1–24. https://doi.org/10.24294/jipd9609.

Syafrinaldi, S, K Hyeonsoo, R F Syafrinaldi, and D Hardiago, 'Artificial Intelligence, Innovation, and Copyright: Comparing Intellectual Property Law in Indonesia and South Korea', *Lex Scientia Law Review*, 8.2 (2024), 1143–80. https://doi.org/10.15294/lslr.v8i2.1227.

Tan, David, 'Scrutinizing Perseroan Perorangan: The Brainchild of Societas Unius Personae in the Realm of Indonesian Company Laws', *Lex Scientia Law Review*, 6.2 (2022), 391–442. https://doi.org/10.15294/lesrev.v6i2.56059.

Tian, Xiaochu, and Nan Zhang, 'Controversy of Copyright Application and the China Plan of Metaverse Products', *International Journal of Digital Law and Governance*, 1.1 (2024), 155–85. https://doi.org/10.1515/ijdlg-2023-0003.

Van Beers, Britta, 'The Changing Nature of Law's Natural Person: The Impact of Emerging Technologies on the Legal Concept of the Person', *German Law Journal*, 18.3 (2017),

559–94. https://doi.org/10.1017/S2071832200022069.

Verheij, Bart, 'Artificial Intelligence as Law', *Artificial Intelligence and Law*, 28.2 (2020), 181–206. https://doi.org/10.1007/s10506-020-09266-0.

Yusriadi, Y, N A Siregar, S Megawati, and G Sakkir, 'Implementation of Artificial Intelligence in Indonesia', *International Journal of Data and Network Science*, 7.1 (2023), 283–94. https://doi.org/10.5267/j.ijdns.2022.10.005.