

Legal Liability for Artificial Intelligence-Generated Content from an Intellectual Property Perspective in Indonesia

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Abstract. Generative artificial intelligence now produces economically valuable works on a massive scale, while Indonesian copyright law still recognises human beings as the only possible authors. This study analyses the legal status of artificial intelligence-generated content from an intellectual property perspective and formulates a liability model suited to the Indonesian legal system. This normative legal research applies statutory, conceptual, case, and comparative approaches. Primary legal materials comprise Law Number 28 of 2014 on Copyright, the Indonesian Civil Code, and the Electronic Information and Transactions Law, while secondary materials consist of reputable literature published within the last five years, analysed through content analysis, legal interpretation, and deductive syllogism. The findings show that artificial intelligence can be neither a legal subject nor an author. Copyright protection attaches only insofar as a human creative contribution determines the final form of the work, consistent with the direction and supervision logic of Article 34. Liability for infringement must therefore be transferred to the human or legal entity connected to the system. This study formulates a tiered liability model distributing the burden among model developers, platform providers, and users according to degree of control, creative contribution, knowledge of risk, and discharge of the duty of care.

Keywords: AI-Generated Content; Artificial Intelligence; Copyright; Legal Certainty; Legal Liability.

1. INTRODUCTION

Generative artificial intelligence systems now produce text, images, music, and program code at volumes that were scarcely imaginable a few years ago. What has changed is not merely speed. An analysis of more than four million digital works shows that text-to-image tools raise their users' creative productivity by roughly 25 per cent while multiplying the market appreciation accorded to the resulting works (Zhou & Lee, 2024). At the same time, the collective diversity of circulating works contracts, because machine outputs tend to resemble one another (Doshi & Hauser, 2024). It is this shift of the marginal cost of creative production towards zero that makes the technology structurally, rather than merely instrumentally, consequential (Feuerriegel et al., 2023; Zhang et al., 2025). The creative industries face substitution pressure of a kind they have never experienced (Amoah et al., 2024), while the surrounding ethical debate still revolves around unresolved questions of attribution, bias, and transparency (Al-kfairy et al., 2024). The wave of litigation now under way in various courts signals that these questions have migrated from the seminar room to the courtroom (Samuelson, 2023), and the governance of generative AI in general is still searching for an adaptive form (Taeihagh, 2025).

Indonesian copyright law has not moved in step with that change. Law Number 28 of 2014 on Copyright defines an Author as "a person or several persons" who produce a work bearing a distinctive and personal character (Republik Indonesia, 2014). The formulation in Article 1 point 2 is anthropocentric and closed: only human beings, singly or jointly, can qualify

as authors. The consequences are layered. Output produced by a system without human creative involvement fails the "distinctive and personal" requirement and therefore falls outside the scope of protection; meanwhile, when such output reproduces expression belonging to a third party, no norm expressly determines who bears the legal consequences. Doctrinal studies of the Indonesian framework confirm that the human authorship principle remains the backbone of the system, and that this framework has not been matched by normative instruments accommodating AI (Mayana et al., 2024). A comparable problem arises across other intellectual property regimes: protection for AI in Indonesia has so far been available only through the door of copyright over software, with all the limitations that entails (Ramli et al., 2023; Saputra et al., 2023).

International scholarship has been fairly dense on the upstream side and on the question of eligibility for protection. A number of studies trace the originality of prompts as creative instructions and their relationship to machine output (Jon, 2025; Mazzi, 2024), test the conformity of AI-assisted output with European Union originality standards through a four-step test (Fritz, 2025; Hugenholtz & Quintais, 2021), and map cross-jurisdictional divergence in determining copyright eligibility (Furqan et al., 2026; Gaffar & Albarashdi, 2024). Some studies even place the question within a philosophical frame concerning the fading figure of the author (Zollinger, 2024). Debate over the use of copyrighted material at the training stage is livelier still, covering text and data mining exceptions, the three-step test, and transparency obligations for training data (Buick, 2024; Kretschmer et al., 2024; Lucchi, 2023; Manteghi, 2024; Rosati, 2025; Senftleben, 2026). In the policy arena, the European Union's risk-based framework has become the dominant reference for many states currently drafting AI regulation (Cancela-Outeda, 2024; Ebers, 2024; Guadamuz, 2024).

Discourse on legal liability has developed along a relatively separate track. Work on the responsibility gap shows that the autonomy of learning systems makes it difficult to attribute fault to any single human actor (Santoni de Sio & Mecacci, 2021). Some authors propose a strict liability regime for certain categories of loss (Soyer & Tettenborn, 2022), others advocate no-fault compensation schemes so that the burden of proof does not paralyse innovation (Marchisio, 2021), and still others highlight the conceptual weaknesses of electronic personhood proposals (Negri et al., 2021). From the standpoint of obligations law, the concept of a defective product has been proposed for expansion so that liability may attach without proof of fault (Hassan & Atwan, 2025). Studies of online intermediaries add a further layer: platform operators no longer act as passive conduits but help shape outcomes, so that the classical safe harbour protection loses its footing (Luk, 2024; Sahak et al., 2025). Early work

addressing liability for AI-induced copyright infringement had already proposed attaching that burden to the human being who exercises decisive influence over the infringing algorithm (Škiljić, 2021).

It is precisely at the meeting point of these two tracks that a research gap opens. First, most studies stop at the question of who owns AI output and have not carried it forward to the question of who bears the consequences when that output infringes the rights of others; yet a systematic review of the literature on intellectual property and generative AI positions liability mitigation as an agenda that remains incompletely worked out (Arnaudo et al., 2026). Second, the empirical and normative base of existing studies rests on the European Union, the United Kingdom, the United States, and more recently China, so that its explanatory power is limited when confronted with a mixed, continental-European-based legal system such as Indonesia's (Chen et al., 2026; Praja et al., 2025). Third, no model is yet available that apportions liability among developers, platform providers, and users according to criteria that can be tested in court. Fourth, discussion of Indonesia tends to proceed sectorally: some work maps the criminal risks of deepfakes (Oktaviani et al., 2026), some examines algorithmic contracts (Tejomurti et al., 2025), and some charts the liability of AI providers in general terms (Zakiah et al., 2026), but none integrates the Copyright Law, the Civil Code, and the Electronic Information and Transactions Law into a single analytical framework for liability.

Recent developments make that vacuum more keenly felt. In 2023 the Beijing Internet Court recognised an AI-generated image as a protected work provided demonstrable human intellectual input is present (Lin et al., 2025), a position running counter to United States administrative practice, which refuses registration of works lacking human authorship (Furqan et al., 2026). The European Union completed Regulation (EU) 2024/1689, which imposes transparency obligations on general-purpose AI models, including a summary of the material used in training (Union et al., 2024). Indonesia, for its part, has stopped at non-binding ethical instruments, while its national AI policy operates atop a decentralised governmental structure with uneven capacity (Asri et al., 2025). Calls for Indonesia to prepare dedicated artificial intelligence legislation have been voiced across sectors, including from studies on the threat AI poses to electoral integrity (Armiwulan et al., 2024). The absence of binding norms is not merely a technical matter; it touches legal certainty as a precondition for the protective system to function at all (Setiawan et al., 2025).

The novelty of this study lies in two respects. First, it links the question of eligibility for protection to the question of liability within a single chain of reasoning, so that the legal status of AI output does not stop at ownership but continues into the question of who bears the

risk. Second, it formulates a tiered shared liability model built from provisions already in force in Indonesia, namely Article 1 point 2, Article 34, and Article 36 of the Copyright Law, Articles 1365 to 1367 of the Civil Code, and the provisions on the liability of electronic system operators in the Electronic Information and Transactions Law. The model employs four calibrating variables degree of control, creative contribution, knowledge of risk, and discharge of the duty of care so that the apportionment of burden is not left to judicial intuition alone. Its contribution is twofold: theoretically it extends the reach of tort doctrine to autonomous systems, and practically it supplies a normative design that legislators can adopt without waiting for comprehensive AI legislation.

Proceeding from the foregoing, this study addresses three legal questions. What is the legal status of artificial intelligence-generated content under the Indonesian copyright regime, and to what extent does human creative contribution operate as a condition of its protection? How is legal liability constructed when the output of an AI system infringes the copyright of another party, and on whom is that burden placed under the positive law in force? And what model of liability best suits the Indonesian legal system when compared with the regulatory choices made in other jurisdictions? The objective of this study is to analyse these three problems and to formulate an operational model of legal liability for the reform of national intellectual property law.

2. RESEARCH METHODS

This study is normative or doctrinal legal research, that is, research treating norms, principles, and the systematics of law as its primary object and treating legal sources as the only legitimate avenue for altering rules of law. That choice carries methodological consequences worth stating openly: the conclusions of doctrinal research stand or fall with the quality of the legal sources analysed, not with field data (Theil, 2025). Doctrinal reasoning is also hermeneutic, since the researcher does not stand outside the object but enters the very circle of interpretation under examination (Byrne & Olsen, 2024). That awareness matters in a study of a technology whose norms are still forming, because the greatest risk is to conclude further than the legal text will bear.

Four approaches are used in layers. The statutory approach serves to examine the formulation, scope, and interrelation of norms in Law Number 28 of 2014 on Copyright, the Civil Code (Kitab Undang-Undang Hukum Perdata), the Electronic Information and Transactions Law as twice amended, the Government Regulation on the Operation of Electronic Systems and Transactions, and the Personal Data Protection Law (Republik

Indonesia, 2014; Republik Indonesia, 2019; Republik Indonesia, 2022; Republik Indonesia, 2024). The conceptual approach serves to dissect the concepts of legal subject, authorship, originality, and liability as developed in doctrine. The case approach is used in limited fashion in relation to decisions and administrative practice already documented in the academic literature reviewed, rather than to primary case files. The comparative approach serves to locate Indonesia's position among the regulatory choices already made in other jurisdictions, with an awareness that the transplantation of norms is never neutral with respect to the institutional context and legal culture of the receiving system (Asri et al., 2025).

Primary legal materials comprise the Indonesian legislation already mentioned, together with international and regional instruments in the form of the Berne Convention (World Intellectual Property Organization, 1979), Directive (EU) 2019/790 on copyright in the digital single market (European Union, 2019), and Regulation (EU) 2024/1689 on artificial intelligence (Union, 2024). Secondary legal materials consist of articles in reputable scholarly journals, particularly those published in the last five years in Scopus-indexed journals in the fields of intellectual property law, technology regulation, and AI governance. Tertiary legal materials in the form of legal dictionaries and online encyclopaedias are used only to clarify terminology.

Legal materials were collected through library research and the inventorying of legal materials. The literature search was conducted systematically across academic databases using combined English and Indonesian keywords, then filtered by issue relevance, journal quality, and recency of publication. Every reference was verified for existence through digital object identifier lookup so that no source is cited without being traceable. Statutory texts were updated against the official versions in force, including the most recent amendment to the Electronic Information and Transactions Law.

Analysis of legal materials was carried out descriptively and analytically using content analysis. Grammatical interpretation was applied in reading the formulations of Article 1 point 2, Article 34, and Article 36 of the Copyright Law; systematic interpretation was applied in connecting the copyright provisions with the provisions on unlawful acts and on the liability of electronic system operators; and teleological interpretation was applied in testing whether the proposed reading remains consistent with the objective of protecting authors. Conclusions were drawn using deductive legal syllogism, with the major premise consisting of positive legal norms and the minor premise consisting of the technical characteristics of generative AI systems as described in the literature. The validity of the analysis was safeguarded through literature triangulation, that is, cross-testing every proposition against at least two independent

sources before accepting it as a finding. As normative research, this study produces no field data and makes no claim to describe the actual conduct of the parties; it offers a legal construction which, for empirical testing, will require further research.

3. RESULTS AND DISCUSSION

The Legal Status of Artificial Intelligence-Generated Content under the Indonesian Copyright Regime

The first question to be answered is not who owns AI output but whether that output falls within the reach of the statute at all. Article 1 point 3 of Law Number 28 of 2014 defines a Work as a product in the fields of science, art, and literature produced by inspiration, ability, thought, imagination, dexterity, skill, or expertise, expressed in tangible form (Republik Indonesia, 2014). Every attribute in that series is mental and attaches to a subject possessing consciousness. Read together with Article 1 point 2, which confines Authorship to "a person or several persons", the formulation constitutes a tightly closed anthropocentric whole. Grammatical reading leaves no interpretive room: a computational system, however complex its architecture, cannot qualify as an author.

That closure is reinforced by the structure of rights the statute adopts. Article 4 affirms copyright as an exclusive right comprising moral rights and economic rights, while Article 5 provides that moral rights attach perpetually to the person of the Author. Moral rights presuppose a person capable of feeling aggrieved when their name is removed or their work mutilated. A language model has no interest capable of infringement in that sense. Doctrinal studies of the Indonesian framework reach the same conclusion, namely that the human authorship principle is a foundation that cannot be shifted by interpretation and can be changed only through the making of new norms (Mayana et al., 2024; Praja et al., 2025). Mapping across the entire national intellectual property regime yields a consistent result: AI can be treated only as an object of protection, never as a rights-holding subject (Ramli et al., 2023).

The practical consequence is severe. Output generated autonomously, without demonstrable human creative contribution, receives no copyright protection and therefore occupies a position factually resembling the public domain. Anyone may copy, modify, and commercialise it without exposure to suit under the Copyright Law. This situation creates an asymmetry businesses rarely appreciate: a firm building a product line atop fully generated images or texts has no legal basis for preventing a competitor from using similar assets. Cross-jurisdictional analysis shows that this consequence is no Indonesian peculiarity but a pattern recurring in almost every system that retains a human authorship requirement (Furqan et al.,

2026; Gaffar & Albarashdi, 2024). Precisely because the gap recurs, some authors conclude that a dedicated legal framework for AI is needed to reduce ambiguity while raising accountability (Bisoyi, 2022).

Some writers read that situation as an invitation to confer limited legal personality on AI, by analogy with the legal entity, which is likewise an artificial construct (Mayana et al., 2024). The argument is attractive but fragile. A legal entity acquires personality precisely because human beings stand behind it who control it, capitalise it, and bear its consequences; that personality is a technique of attribution, not a recognition of consciousness. Conceptual critiques of electronic personhood show that such proposals often become trapped in anthropomorphic rhetoric and neglect the grammatical function of the term "legal subject" within a legal system (Negri, 2021). Traced further, conferring personality on AI without separate assets and a veil-piercing mechanism creates a liability shield rather than closing a gap (Cheong, 2021). Analysis of Polish and European civil law reaches a parallel conclusion, namely that the real need is to adjust the rules of liability rather than to create a new legal subject (Ziemianin, 2021). For the Indonesian context, recent normative mapping affirms the same point: AI cannot be recognised as a legal entity, so primary responsibility remains with the system provider (Zakiyah et al., 2026).

The legal status of AI content under the Indonesian regime may therefore be stated in three propositions. First, AI is not a legal subject and cannot be an author or a copyright holder. Second, purely autonomous output fails the "distinctive and personal" requirement and thus falls outside the scope of protection. Third, protection can attach only to output containing a real human creative contribution, and the rights holder is that human being. It is the third proposition that harbours the most intricate problem, because the statute supplies no measure for judging when a contribution counts as sufficient.

The Threshold of Human Creative Contribution as a Condition of Protection

The Copyright Law is in fact not without guidance. Article 34 provides that where a work is designed by one person and realised and executed by another under the direction and supervision of the person who designed it, the one deemed to be the Author is the person who designed the work (Republik Indonesia, 2014). The provision was framed for relations between human beings, but its normative logic supplies a useful analogy. What determines authorship is not who executes but who designs and controls the process of realisation. Placed in the context of generative AI, the question becomes: to what extent does the user genuinely design and control, rather than merely trigger.

Doctrinal comparison shows that this threshold can be unpacked into more operational elements. The four-step test developed from European Union case law places free and creative human choices at the stages of conception, execution, and editing as determinative of whether AI-assisted output satisfies the originality requirement (Hugenholtz & Quintais, 2021). Subsequent development adds questions about who was involved, the type of system used, the sufficiency of subjective judgement in composing the work, and the adequacy of control over execution (Fritz, 2025). A more compact formulation proposes a criterion of substantial creative direction with three elements: effective control over the generative process, verifiable creative input, and identifiable expressive intent (Zaga, 2025).

The next issue is the status of the prompt itself. A prompt consisting of a few keywords states only an idea, and ideas are not protected by copyright under the idea-expression dichotomy embraced by the Berne Convention and by national legislation (World Intellectual Property Organization, 1979). A long, structured prompt containing specific aesthetic choices stands differently; it can be analogised to a collage, whose originality lies in selection and arrangement (Mazzi, 2024). On that basis, some writers propose tiered protection linking the breadth of rights to the degree of human creative input, while cautioning against abuse in the form of overreaching claims to commonplace prompt formulations (Jon, 2025).

Chinese judicial practice has moved in a comparable direction, the Beijing Internet Court having recognised an AI-generated image as a work provided demonstrable intellectual input and originality are present, with assessment conducted case by case (Zhang et al., 2025). Examination of that decision highlights that the strength of its reasoning lies precisely in treating AI as an ordinary tool, not in relaxing the originality threshold (Dai & Jin, 2023; Lin, 2025). The shift revives a long-standing debate about who truly speaks through a work (Zollinger, 2024).

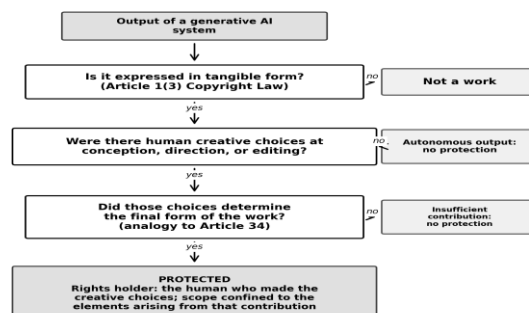


Figure 1. Decision Path for Copyright Protection of Artificial Intelligence-Generated Content under Indonesian Law.

Source: developed by the authors (2026).

Figure 1 distils that determination into four sequential test nodes. The first node asks whether expression exists in tangible form; without embodiment there is no object of protection. The second tests whether a human being made creative choices at the stage of conception, direction, or editing. The third gauges whether those choices sufficiently determine the final form of the work, following the direction and supervision logic of Article 34. The fourth establishes the rights holder, namely the human being who made those creative choices, with protection confined to the elements genuinely originating in that contribution. This path creates no new norm; it merely rearranges existing norms so that they can be applied to cases unimagined when the statute was framed.

That construction carries one implication worth stating plainly. The more sophisticated the generative system, the smaller the share of creative choice left to the user, and the narrower the protection that can be claimed. This tendency is highlighted in work adopting human rights as an assessment framework, concluding that the protectability of AI output must be treated with the utmost care and granted only where AI genuinely functions as a technical tool for a human creator (Geiger, 2024). That view accords with the observation that the shift in the human role from executor to curator relocates creative value rather than abolishing it (Chen & He, 2026; Epstein et al., 2023). The remaining question then shifts: if protection narrows, how does the law handle the converse, namely where AI output itself infringes the rights of others.

Constructing Legal Liability for Copyright Infringement by Artificial Intelligence Systems

Copyright infringement by generative systems can occur at two legally distinct points. The first lies upstream, in the reproduction of copyrighted material during corpus assembly and model training. The second lies downstream, where output presented to the public contains expression substantially similar to a protected work. This separation matters because the parties active at those two points are not the same. Analysis of the machine learning lifecycle shows that data collection, data organisation, model training, and model operation are stages with differing legal implications (Kretschmer et al., 2024). At the upstream stage the act at issue is reproduction; downstream, what is at issue is communication to the public and the potential for functional substitution of the original work (Dornis & Lucchi, 2025). Indonesian copyright law recognises no text and data mining exception of the kind adopted in the European Union and Japan, so that reproduction for training enjoys no clear justificatory shelter domestically (Dermawan, 2023; Senftleben, 2026; Thongmeensuk, 2024). Debate over whether text and data mining ultimately sustains or erodes the incentive to innovate remains unsettled (Tyagi, 2024),

and comparative examination of algorithmic crawling practice shows that divergent approaches across jurisdictions generate uneven compliance costs (Chen & Long, 2026).

Because AI is not a legal subject, liability must be transferred to the human being or legal entity standing in a legal relationship with the system. Indonesian civil law supplies three points of entry. Article 1365 of the Civil Code imposes an obligation to compensate for an unlawful act causing loss, while Article 1366 extends this to negligence and want of care, and Article 1367 imposes liability for loss caused by persons for whom one is answerable or by goods under one's supervision (Republik Indonesia, 1847). The third door is the most promising for autonomous systems, since its logic rests on possession and supervision rather than on the will of the actor. Recent normative mapping of the Indonesian landscape identifies Articles 1365 to 1367 as the available foundation while marking its limits (Zakiyah et al., 2026).

That limitation lies in proof. A fault-based regime requires the claimant to establish an act, fault, loss, and a causal link. In a learning system with billions of parameters, showing that a particular output arose from a particular fault of a particular party is a burden practically impossible for an individual to bear. The responsibility gap arising from system autonomy is not one problem but a cluster of problems at the level of culpability, moral accountability, public accountability, and active responsibility (Sio & Mecacci, 2021). The black-box character of models aggravates matters, because the causal chain cannot be reconstructed even by the developers themselves (Alqodsi & Gura, 2023; Braun, 2025). The same opacity recurs in the criminal sphere, where the elements of conduct and mental state are equally difficult to attach to algorithmic behaviour (Maskur et al., 2025; Sayyed, 2024). Against this impasse the literature offers three ways out, differing in character. Expanding the concept of a defective product enables strict liability without proof of fault (Hassan & Atwan, 2025). Confining strict liability to certain categories of loss, with a fault-based regime for other losses, is offered as a middle path so that innovation is not impeded (Soyer & Tettenborn, 2022). No-fault compensation schemes shift the problem from identifying a party at fault to managing loss financially (Marchisio, 2021). Critical assessment of the European Union expert group report cautions that distinguishing high from low risk may itself become a source of fresh uncertainty where the criteria are vague (Bertolini & Episcopo, 2021). Reading from the standpoint of obligations law adds an important note: established risk-assessment doctrine in fact supplies adequate analytical tools, provided it is not treated as a merely administrative instrument (Chamberlain, 2022).

The position of platform providers warrants separate attention. The safe harbour doctrine was built on the premise that intermediaries are passive conduits unaware of the content they carry. That premise no longer holds for generative AI service providers, who determine training data, tune parameters, install filters, and derive direct profit from every output. Cross-jurisdictional study concludes that intermediaries in the AI era act as co-creators and gatekeepers, so that a layered duty of care is required that differentiates responsibility at the stages of data assembly, model training, and content dissemination (Yang, 2025). Historical comparison of the legal treatment of online intermediaries shows how readily authors' rights were sacrificed in the name of technological progress, and why greater caution is now required (Luk, 2024). A systematic review of intermediary liability affirms that inconsistency across jurisdictions remains the principal obstacle to accountability (Sahak et al., 2025). The experience of content platforms in China shows that when copyright enforcement is delegated to platform-owned filtering algorithms, the balance of public interest shifts without oversight (He, 2022). As against generative AI service providers, some writers judge the safe harbour exemption no longer tenable, since they are the parties reaping the greatest benefit from the output produced (Huang & Chen, 2025). Within the European Union framework, duties of care and transparency under the Digital Services Act operate alongside the special copyright regime, with a division of roles that is not always clean (Frosio & Geiger, 2023; Quintais & Schwemer, 2022).

Indonesian law in fact already has a hook for this construction. The Electronic Information and Transactions Law obliges electronic system operators to operate their systems reliably and securely and to be responsible for the proper functioning of those systems, with exceptions limited to force majeure and user fault (Republik Indonesia, 2024). That obligation is elaborated further in the implementing regulation on the operation of electronic systems and transactions (Republik Indonesia, 2019).

Generative AI service providers operating in Indonesia satisfy the qualification of electronic system operator, so that this liability regime applies to them without the need for new legislation. What is not yet available is elaboration of the content of the duty of care in the intellectual property context, for example an obligation to filter output substantially similar to protected works, an obligation to provide a complaints mechanism for rights holders, or an obligation to document the provenance of training data. A comparable vacuum is recorded in the regime governing algorithmic contracts, which indicates that the problem is systemic rather than sectoral (Tejomurti et al., 2025).

Comparison of International Regulation and Indonesia's Legal Position

The major jurisdictions have made differing choices, and those differences are not random but reflect their respective copyright philosophies. The United States maintains the human authorship requirement strictly, so that applications to register works declared to be wholly machine-generated are refused; protection is granted only for elements originating in human contribution (Furqan et al., 2026). The United Kingdom has taken a different route through its provision on computer-generated works, which designates as author the person who undertakes the arrangements necessary for the creation of the work, with a shorter term of protection and without full moral rights (Mazzi, 2024; Praja et al., 2025). The European Union has created no special regime for AI output, instead maintaining an originality standard based on free and creative choice while adding a layer of risk-based regulation with training-data transparency obligations for general-purpose models (Union et al., 2024; Guadamuz, 2024; Hugenholtz & Quintais, 2021).

China offers the sharpest contrast. The Beijing Internet Court recognised protection for an AI-generated image by treating the generative system as a tool and the user as the author, provided the intellectual input can be demonstrated (Lin et al., 2025). At the same time, Chinese policy towards the training stage is comparatively permissive, with control emphasised instead at the downstream stage (You & Luo, 2025). That combination of upstream permissiveness and downstream recognition reflects a utilitarian orientation differing from the natural-rights tradition of continental Europe (Chen et al., 2026; Dai & Jin, 2023).

India and a number of other Commonwealth states take a middle path by linking ownership to the party who causes the work to be created (Praja et al., 2025). Japan sits at the permissive extreme of the training spectrum through a non-enjoyment use exception of the broadest scope in the world (Dermawan, 2023). A comprehensive mapping of eight jurisdictions shows that the issues recurring everywhere are control, compensation, transparency, and legal certainty, though the weight of emphasis differs (Durantaye, 2025).

Table 1. Comparison of Protection and Liability Regimes for Artificial Intelligence-Generated Content across Five Jurisdictions.

Jurisdiction	Status of autonomous output	Determination of rights holder	Treatment of the training stage	Training-data transparency duty
United States	Not protected absent human authorship	The human, confined to elements of their contribution	Turns on the fair use doctrine, still disputed	No general obligation
United Kingdom	Protected through the computer-	The person making the	Mining exception limited to non-	No general obligation

	generated works regime	necessary arrangements	commercial research	
European Union	Not protected absent free and creative human choice	The human who made the creative choices	Mining exception with an opt-out for rights holders	Required for general-purpose models
China	Protectable where human intellectual input is present	The user supplying the intellectual input	Comparatively permissive; control emphasised downstream	Governed through sectoral regulation
Indonesia	Not protected; no special regime	Not expressly regulated	No text and data mining exception	No obligation

Source: compiled by the authors from (Chen et al., 2026; de la Durantaye, 2025; Dermawan, 2023; Furqan et al., 2026; Guadamuz, 2024; Hugenholtz & Quintais, 2021; Lin, 2025; Mazzi, 2024; Praja et al., 2025; Thongmeensuk, 2024; You & Luo, 2025; Zhang et al., 2025).

Table 1 sets these five choices side by side and reveals a pattern seldom noticed. Jurisdictions most permissive at the training stage tend to be strictest on transparency obligations or most permissive in recognising output, as though an implicit counterbalancing mechanism were at work. Indonesia sits at no point on that spectrum. There is no text and data mining exception, so that normatively training falls within a grey zone tending towards infringement; there is no provision on computer-generated works, so that autonomous output is cast out of protection; and there is no training-data transparency obligation, so that rights holders lack even the means to learn whether their works have been used. An absence of choice is not neutrality; it is a normative vacuum that places the entire risk on the party in the weakest position.

That comparison also warns of the limits of transplantation. The United Kingdom model is attractive because it supplies certainty, but it was born of a copyright tradition oriented towards investment and according little weight to moral rights, whereas the Indonesian Copyright Law treats moral rights as perpetually attached. Adopting the computer-generated works provision wholesale would create internal tension within the system. The Chinese model is likewise difficult to transfer directly, since its strength rests on a judiciary able to move quickly without being bound by formal precedent. Study of Indonesian legal culture shows that the legal response to AI is determined not only by written law but also by collective moral expectations, so that any adopted framework must resonate culturally in order to acquire legitimacy (Asri et al., 2025). The experience of an ambitious national AI policy hampered by capacity asymmetries between central and regional government adds further reason to choose instruments that are simple and enforceable (Wadipalapa et al., 2024). The risk-based approach is itself not without defect; it has been criticised for relying on normatively ambiguous risk

measurement, concentrating attention excessively on the high-risk category, and depending on technical standardisation whose democratic legitimacy is questioned (Ballot Jones et al., 2025; Cantero Gamito & Marsden et al., 2024).

A Tiered Liability Model for the Indonesian Legal System

The findings in the three preceding subsections point to a single constructive conclusion. Because AI cannot bear liability and no single party controls the whole value chain, the legal burden must be shared among those who genuinely contribute to the occurrence of infringement. That sharing must not be equal, since their roles plainly differ. What is required is proportional apportionment with testable calibrating variables. This study proposes four: the degree of control over the process generating the output, the degree of creative contribution to the final form of the output, knowledge or constructive knowledge of the risk of infringement, and discharge of the duty of care attaching to each position. The first variable is rooted in the proposition that liability properly attaches to the party exercising decisive influence over the infringing algorithm (Škiljić, 2021), while the fourth adopts the accountability-by-design logic recommended for AI-based services (Qutieshat et al., 2026).

The model developer occupies the first tier. It determines the source and composition of the corpus, designs the architecture, and sets the optimisation objective. It is at this tier that reproduction of copyrighted material occurs, and at this tier that the memorisation enabling output to reproduce original expression is formed (Arnaudo et al., 2026). A reasonable duty of care for developers encompasses documenting the provenance of training data, honouring opt-outs declared by rights holders, and applying technical mitigation against outputs resembling source works. Transparency obligations of this kind have been enacted in the European Union, though their impact is doubted absent improvement in the underlying copyright rules (Buick, 2024; European Union, 2019). Analysis of training-data governance affirms that opacity at this stage is not merely a technical obstacle but a source of distributive inequality between developers and the owners of works (Pasetti et al., 2025). Because its position is furthest from the concrete event yet most determinative of systemic risk, developer liability is most appropriately constructed as risk-based liability with a reversal of the burden of proof, rather than as liability for fault in the strict sense.

The platform provider occupies the second tier. It operates the model, sets the terms of use, installs filters, and derives revenue from every interaction. Its duty of care is operational: providing a functioning complaints channel, acting on infringement notices within a reasonable period, logging requests and outputs for evidentiary purposes, and warning of the limits on commercial use of output. The legal basis already exists in the obligation of electronic system

operators to operate their systems reliably and securely and to be responsible for their proper functioning (Republik Indonesia, 2019; Republik Indonesia, 2024). Failure to discharge that obligation activates liability; proper discharge becomes a basis for limitation. A tiered construction of this kind accords with proposals for a layered duty of care differentiating responsibility across stages of the value chain (Yang, 2025). The element of meaningful human oversight, as enacted in European Union regulation, offers a reference for the minimum content of that obligation while warning that such oversight must not stop at a paper formality (Enqvist, 2023).

The user occupies the third tier and, in many cases, is in fact the party closest to the infringing event. It is the user who composes the instruction, selects among available outputs, and decides whether to publish or commercialise them. Where the instruction deliberately directs the system to imitate a style or reproduce a particular work, the element of fault in Article 1365 of the Civil Code is satisfied without need for additional construction (Republik Indonesia, 1847). Conversely, a good-faith user with no means of knowing that the output infringes a third party's rights should not properly bear the full burden, since they lack access to the information required to assess the risk. It is here that informational asymmetry becomes a normative argument rather than merely a practical complaint.

Table 2. Matrix for Apportioning Legal Liability for Copyright Infringement by Artificial Intelligence Systems,

Calibrating variable	Model developer	Platform provider	User
Degree of control over the generative process	High: determines corpus, architecture, and optimisation objective	Medium: operates the model, tunes filters and terms of service	Low to medium: directs through prompts and output selection
Degree of creative contribution to the final form	Indirect	Indirect	Direct, varying with prompt richness and editing
Knowledge or constructive knowledge of risk	High: knows data composition and memorisation potential	Medium: knows misuse patterns from usage logs	Low, unless imitation is deliberately directed
Attaching duty of care	Document training-data provenance, honour opt-outs, apply technical output mitigation	Complaints channel, action on notices, audit trail, warnings on commercial use	Good faith, no directed imitation, due diligence before publication
Legal basis available in Indonesia	Article 1367 Civil Code; risk-based liability with reversed burden of proof	Duties of electronic system operators under the ITE Law and its implementing regulation	Articles 1365 and 1366 Civil Code
Proposed character of liability	Risk-based	Based on negligence in the duty of care	Fault-based

Source: developed by the authors (2026) from (Bertolini & Episcopo, 2021; Braun, 2025; Chamberlain, 2022; Hassan & Atwan, 2025; Qutieshat et al., 2026; Santoni de Sio & Mecacci, 2021; Soyer & Tettenborn, 2022; Yang, 2025; Zakiyah et al., 2026; Škiljić, 2021).

Table 2 arrays those three tiers against the four calibrating variables and the available legal bases. It bears emphasis that the matrix fixes no percentages. It supplies a framework of reasoning so that judges can gauge each party's contribution in a structured manner, in a way resembling the assessment of contributory fault in conventional civil law. Where a user has deliberately directed imitation while the developer has applied mitigation and the platform has acted on complaints, the centre of gravity shifts almost entirely to the user. Where infringement arises from unmitigated model memorisation that the user could not possibly have known about, the centre of gravity shifts to the developer. Combinations between the two are resolved proportionally.

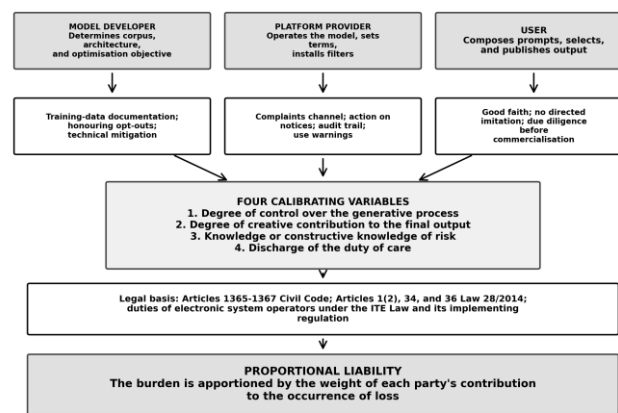


Figure 2. Tiered Liability Model for Artificial Intelligence-Generated Content. Source: developed by the authors (2026).

Figure 2 presents the model in full, showing the flow of control from developer to platform to user, together with the return flow of liability calibrated by the four variables at the centre. This structure changes the legal question from "who is at fault" to "how large was each party's contribution to the occurrence of loss", a shift better suited to the distributed character of the generative process. A comparable shift has been urged in work positioning transparency as a precondition for liability to be inescapable (Braun, 2025), and in work calling for the superior-subordinate principle to be reinterpreted for the complexity of autonomous systems (Bottomley & Thaldar, 2023).

The legal implications operate at three levels. At the legislative level, Indonesia needs to insert into the Copyright Law a norm on artificial intelligence output affirming that protection attaches only where human creative contribution is present and designating that human being as the rights holder. In step with this, a narrowly framed text and data mining exception is required, accompanied by an opt-out right for rights holders and a remuneration obligation for commercial use, as proposed in a number of studies on the balance of interests

(Geiger et al., 2024; Senftleben, 2023). Levy instruments on service providers, whether designed for user-generated content or for AI-generated content, merit consideration as a mechanism for funding remuneration, since they target the party gaining the greatest economic benefit without burdening end users (Huang & Chen, 2024; Huang & Chen, 2025). The principle of sustainability may also serve as a guide so that ease of access to knowledge is not achieved at the cost of authors' moral rights (Geiger & Di Lazzaro, 2025). At the level of implementing regulation, the duty of care of electronic system operators needs elaboration for the intellectual property context, covering documentation of training data, complaints mechanisms, and output filtering. At the institutional level, the Directorate General of Intellectual Property may issue registration guidelines requiring applicants to declare the use of AI and to describe their human contribution, following administrative practice already operating in other jurisdictions (Zaga, 2025).

The model has limitations that must be acknowledged. It presupposes the availability of an adequate audit trail, whereas many systems operate without records accessible to third parties. It also presupposes an institutional enforcement capacity that may not exist, particularly outside the principal economic centres. Moreover, its application to providers domiciled abroad depends on the effectiveness of extraterritorial jurisdiction, which has long been a weak point in Indonesian cyber law enforcement (Suseno et al., 2025). Those limitations do not invalidate the model, but they mark the point that norms alone are insufficient without improvement in enforcement infrastructure.

Taken as a whole, this discussion shows that the legal problem surrounding artificial intelligence content in Indonesia is not one of total vacuum but one of disconnection among norms that already exist. The Copyright Law supplies a logic of authorship extensible through Article 34, the Civil Code supplies three mutually complementary bases of liability, and the Electronic Information and Transactions Law supplies a regime of electronic system operator liability not yet harnessed for the intellectual property context. The principal contribution of this study lies in composing those three sources into a single coherent analytical framework, and in formulating calibrating variables that render the apportionment of liability legally arguable rather than merely morally felt. A benefit-oriented approach to national intellectual property law reform supplies an additional normative footing for a proportional choice of this kind, since it treats exclusive rights as conditional rights subject to the public interest (Nurani et al., 2026).

4. CONCLUSION

The Indonesian copyright regime closes the door to artificial intelligence as a legal subject. The formulations of Article 1 point 2 and Article 1 point 3 of Law Number 28 of 2014 require an author who is a person and a work bearing a distinctive and personal character, so that output generated autonomously without human creative contribution falls outside the scope of protection and factually occupies a position resembling the public domain. Protection attaches only insofar as human creative choices determine the final form of the work, and the direction and supervision logic of Article 34 supplies the closest normative analogy for gauging it. As against copyright infringement by generative systems, liability cannot be placed on the machine but must be transferred to the human being or legal entity connected to it, through Articles 1365 to 1367 of the Civil Code and the regime of electronic system operator liability in the Electronic Information and Transactions Law. Comparison with the United States, the United Kingdom, the European Union, China, and Japan shows that Indonesia has taken a position on none of the regulatory dimensions, and that absence of choice is itself a normative vacuum detrimental to rights holders.

The contribution of this study lies in recomposing norms already in force into a coherent framework of liability, and in formulating a tiered model apportioning the burden among model developers, platform providers, and users according to four calibrating variables: degree of control, creative contribution, knowledge of risk, and discharge of the duty of care. The model shifts the legal question from identifying the party at fault to gauging contribution to the occurrence of loss, a shift better suited to the distributed character of the generative process. Theoretically it extends the reach of tort doctrine to autonomous systems without requiring a construction of electronic personhood; practically it supplies a normative design that can operate before comprehensive artificial intelligence legislation becomes available.

On the basis of these findings, legislators need to insert into the Copyright Law a norm on artificial intelligence output affirming the requirement of human creative contribution together with the determination of its rights holder, and to frame a narrowly drawn text and data mining exception accompanied by an opt-out right for rights holders and a remuneration obligation for commercial use. Government needs to elaborate the duty of care of electronic system operators for the intellectual property context, covering documentation of training-data provenance, a functioning complaints mechanism, and the filtering of output substantially similar to protected works. The Directorate General of Intellectual Property needs to issue registration guidelines requiring applicants to declare the use of artificial intelligence together with a description of their human contribution. For subsequent researchers, empirical testing

of the applicability of this tiered model to actual disputes, and study of the effectiveness of jurisdiction over cross-border service providers, constitute the most pressing agenda for completing the limitations of the normative approach used here.

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Availability of Data and Legal Materials

All legal materials and secondary sources analysed in this study are cited in full within this published manuscript.

Statement on the Use of AI

The authors used artificial intelligence tools during literature mapping and language editing. All legal arguments, conclusions, and juridical reasoning were fully verified, tested, and approved by the authors.

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