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Research Article

Optimizing the Balance Between the Fulfillment of Authors' Economic Rights and Users' Access Rights in the Era of Artificial Intelligence

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ABSTRACT

The background of this research is that copyright law seeks to balance authors' economic interests with broader public interests. However, AI development requires large-scale access to copyrighted works, while Indonesian Copyright Law does not specifically regulate such use. This regulatory gap risks infringing authors' economic rights and creates legal uncertainty for AI developers. The purpose of this research is to formulate an appropriate balance between authors' economic rights and access rights in the context of AI development. The method used is normative legal research through the analysis of legislation, legal principles, and scholarly opinions. The results obtained are: first, the current Indonesian copyright framework has not adequately addressed AI-related challenges, resulting in an imbalance between copyright protection and access to information and data. Second, a more balanced framework can be achieved through copyright reform that treats the protection of economic rights, scientific advancement, and technological innovation as complementary objectives. The conclusions that can be drawn are that Indonesia's copyright regime requires reform based on the principle of balancing interests to protect authors' economic rights while providing proportionate access to copyrighted works for AI development.

Keywords: Balance of Interests; Copyright; Artificial Intelligence.

A. INTRODUCTION

The Intellectual Property (IP) regime, particularly in developing countries, should not merely serve as a means of adapting to global developments but must also contribute to the economic welfare of society. Consequently, the legalization and implementation of intellectual property rights within the context of globalization are accompanied by various principles that seek to safeguard public interests, especially in developing countries such as Indonesia.

The intellectual property system provides protection to individuals who create intellectual works or produce inventions. In essence, intellectual property refers to exclusive rights given to an individual's ability to engage in intellectual and creative activities that culminate in the creation of inventions and other forms of intellectual outputs (Atsar, 2017). Its objective is not only to protect private interests but to strike a balance between individual rights and societal needs. This balance is found, for instance, in legal provisions regarding the social function of intellectual property and in licensing requirements. The social side of intellectual property is also reflected in the fact that

intellectual works become public property at the expiration of the protection term (Habibaty & Wadi, 2023).

The notion of copyright, a fundamental part of the intellectual property system, is that protection of intellectual creations stimulates creativity, innovation and economic development. Managing intellectual property rights is crucial to guarantee that intellectual property rights are known, safeguarded and have economic worth including those acquired from local wisdom and traditional knowledge (Adhi, Sulistianingsih, & Fidiyani, 2021).

The evolution of copyright has moved beyond the mere protection of the authors' economic interests to the provision of public access to information and technology as a realisation of the social function of intellectual intellectual property. Huang and Chen (2025) contend there are two main elements of copyright law. The first one is technological. It is evidenced by the reproduction of the works under the copyright protection. The second dimension, the economic one, is expressed in the economic incentives that copyright owners have and the potential market effects that they might have. However, the balance that has led to long-term copyright protection is being disrupted by the rise of Artificial Intelligence (AI). Lim argues that the basic aim of copyright law is still to encourage human creativity. The view is that artificial intelligence is a tool to help the creative process, not the author. Hence, the extent of human intellectual input in the production of a work continues to be a significant factor for copyright protection (Lim, 2023). Luk (2024) notes that generative AI is facing similar legal concerns as those historically seen with the rise of digital platforms. AI has generated new uses of copyrighted works that differ substantially from the uses of copyrighted works under traditional copyright regimes. There is some question as to whether the existing legal frameworks can strike this balance between protecting the writers' economic rights and access to copyrighted works in the digital age.

The evolution of Artificial Intelligence (AI) has transformed the landscape of copyright-protected works in digital contexts. AI also suggests the need for regulatory regimes that can balance protection of authors' economic rights and access to creative works. Copyright law is inherently a balancing of interests, but the changing nature of content use in the digital age has revealed problems that the legal structure has not yet effectively addressed.

The requirements of copyright limitations and exceptions contained in Articles 43 to 51 show the dimension of public interest, while the protection of author's economic rights is governed in Articles 8 and 9 of Law Number 28 of 2014 on Copyright in Indonesia. Conceptually, therefore, the Indonesian copyright system seeks to establish a balance between protecting authors' economic rights and ensuring public access to copyrighted works.

Empirical developments, however, reveal that AI has generated conflicts of interest that existing legal frameworks have yet to adequately address. Various copyright disputes related to AI have emerged across different jurisdictions. In 2023, the Authors Guild filed a lawsuit against OpenAI, alleging that copyrighted works had been used in the development of AI systems without authorization or adequate compensation (Authors Guild, 2023). The New York Times filed a lawsuit against OpenAI and Microsoft for allegedly using copyrighted journalistic content to build artificial intelligence (Justia U.S. Law, 2023). Other jurisdictions' similar disputes demonstrate that AI raises new questions on what constitutes the limits of copyright protection and how much access to copyrighted works is permissible (Samuelson, 2024).

The rise of Generative Artificial Intelligence (Generative AI) has brought up significant legal issues in the area of copyright. Concerns about copyright and database rights are not only about the authorship of AI-generated outputs, but also the processes that create them, in particular text and data mining (TDM) (Tyagi, 2024). In response to the needs of digital technologies, the EU has introduced special exceptions for text and data mining through the Directive on Copyright in the Digital Single Market. Japan has broadened the scope of permitted use of copyrighted works for the purpose of developing technology and analysing data, while Singapore has introduced a computational data analysis exception to promote data-driven innovation. These developments show that many countries have started to adapt their copyright regimes to establish a new balance between the protection of authors' economic rights and the promotion of access to works in the age of AI. On the other hand, Indonesia still depends on the application of Law Number 28 of 2014 on Copyright that is valid before the advent of generative AI.

This situation exemplifies the divide between das sollen and das sein. Copyright law tries to balance the economic rights of authors against the public's interest in benefiting from scientific and technological advances. But, at present, there are no specific rules on the interaction between the development of AI and copyright law, which creates legal uncertainty for both authors and users of technology, as empirical evidence bears out. In the traditional copyright framework, the concepts of economic rights and moral rights face a challenge when applied to autonomously AI-generated works because there is no clearly identifiable human author, which is the fundamental basis for copyright ownership and protection (Mayana et al., 2024b). The authors are worried about the loss of control over the exploitation of economically valuable works and AI developers and users are not sure what are the permissible limits of the use of copyrighted materials in AI-based digital environments.

The author surveyed prior research on related topics to evaluate the novelty of the

present study. Alesia Zhuk's work explored comparative approaches to AI copyright regulation in the European Union, United States, and China, including protection of authors' economic rights and access to works used in AI systems (Zhuk, 2024).

Zhuk urged the adoption of worldwide standards and regulatory guidelines to help ensure recognition of copyright protection relating to AI, and so encourage harmonisation across legal systems. The paper underscores the need for proactive action by legislators to address the legal difficulties of AI, drawing on recent copyright legislation in the European Union and the United States. Unlike Zhuk, this study is concerned with the need to keep a balance in copyright law between the author's exclusive rights and the wider public interest. Thus, from this point of view, copyright is not merely a mechanism for the protection of commercial rights, but an instrument for facilitating access to knowledge, stimulating innovation and enhancing the welfare of society. Striking this balance requires protecting the moral rights of writers while ensuring the legal framework allows for the ethical development and deployment of AI technologies.

The conflicting interests of writers and the imperative of data access when copyrighted works are utilised as training data for AI were considered by Juha Vesala (Vesala, 2023). "The use of Artificial Intelligence (AI) to generate content raises major issues related to copyright, especially when such works are used without permission, which can hinder the development of AI and its applications," says Vesala. The present study, unlike Vesala's approach, aims to develop a legal framework that enables the use of copyrighted materials in the development of generative AI without violating the rights and interests of authors. The study emphasises the notion of copyright balance as a way to achieve this goal. Copyright protection is to be established to protect authors' economic and moral interests, and at the same time, to encourage innovation, knowledge dissemination, and responsible development of AI technologies.

Besides, Martin Kretschmer, Thomas Margoni and Pinar Oruç examined the different copyright implications of machine learning during its lifecycle, from the creation of datasets containing underlying expressive copyrighted works to the economic rights that copyright holders have over the use of their works as both datasets and software applications (Kretschmer, Margoni & Oruç, 2024). João Pedro Quintais looked into the transparency obligations, the compliance mechanisms and the enforcement frameworks that have been put in place by the AI Act (Quintais, 2025). Yohan Hwang, Dongkwang Shin and Jang Ho Lee provided insights into intellectual property issues in the co-creation processes of humans and AI. The biggest challenge of generative AI is not only ownership of output created by AI or usage of data in the training process but also the concept of creativity as modified by copyright law (Lemley, 2024). AI

Busaidi et al. advocated for Dynamic Ethical Framework and more global coordination to make sure copyright law maintains pace with the advancement of AI technology (Al Busaidi et al., 2024).

In Indonesia, Chrisna Bagus Edhita Praja and others discuss copyright on AI-generated works. who examined copyright ownership of AI-generated works, the authorship and ownership concept in Indonesia law, and legal reform to accommodate AI-generated works consistent with the fair balance between protecting author rights on one side, and technology development on said other side (Praja et al., 2025). Similarly, R. Mustar Lofi contends that AI-created works cannot be considered original. They do not have human inventiveness which is a requirement for copyright protection under Indonesian law. He also points out that training artificial intelligence systems on copyrighted information could lead to legal problems (Lofi, 2026). Unlike Lofi's research which doesn't address how to balance the interest of the authors and copyright user, this study underscores the importance of ensuring fair access to the copyrighted work for legitimate purpose including AI development. He argued that a balanced copyright framework is needed to protect authors' rights while at the same time allowing technological innovation and wider dissemination of knowledge.

Rosati further contends that the essential problem is not just the use of copyrighted materials to train AI but also the legal liability for AI-generated content that is substantially comparable to protected works (Rosati, 2024). Rosati discusses the importance of the fair dealing theory in legitimising the use of copyrighted works for AI-related objectives. However, the study does not investigate how copyright law might more generally balance the rights of authors against the interests of users. In particular, it does not treat the copyright balance principle as a normative framework to protect authors' economic and moral rights and guarantee appropriate access to copyrighted material for AI development. The purpose of this study is to address this void and to provide a balanced copyright approach that facilitates the protection of the creators and the encouragement of technological innovation. Ananta & Roisah (2025) provides a set of operational criteria to distinguish valid uses of artistic style from copyright infringement, applying the theories of idea-expression dichotomy, originality, and substantial resemblance.

Ananta and Roisah contend that the effective regulation of AI-generated visual works requires a complete governance structure that includes doctrinal clarity, evaluation of policy, and reform of legal education. While their approach enriches the wider discourse on AI governance, they do not investigate how the copyright balancing principle might be used as a tool to reconcile authors' rights with users' access to copyrighted works. This study is different in that it centers the analysis on copyright balance. It

contends that a balanced copyright regime is critical for protecting authors' interests while allowing legal uses of copyrighted content that facilitate technological innovation and AI development.

Based on the review of prior studies, the novelty of this research is that it argues that in the era of Artificial Intelligence (AI) growth, a balance should be established between the preservation of authors' economic rights and users' access rights to copyrighted works. This balance is put into practice by implementing the idea of copyright balance, which is aimed at the effective realization of economic rights, fair remuneration methods and the regulation of the use of copyrighted works in the development of AI technologies.

The comparatively lengthy term of copyright protection can, in certain circumstances, be in conflict with the social role of copyright when faced with the growing broad and potentially unlimited access to copyrighted materials, including their usage in AI development. Intellectual property law acknowledges that intellectual contributions have social value in themselves and serve broader society goals. However, it is still important to ensure a copyright balance between the protection of the authors' private rights and realisation of public interests. This balance guarantees that copyright is not just a means of protecting economic interests, but also a mechanism for promoting the dissemination of knowledge, cultural progress and public welfare in a broad and responsible manner through the protection of authors' moral rights.

Therefore, a copyright balance is a perfect state that guarantees the economic and moral rights of authors and allows users to have enough access to copyrighted works in the context of AI development. In the digital era, this balance has become more critical, since technical development calls for a copyright law that not only secures creators but also promotes the mass distribution of knowledge, creativity and innovation.

B. RESEARCH METHODS

This study employs a normative legal research method using two approaches: the statutory approach and the conceptual approach (Marzuki, 2005). The statutory approach is utilized to examine the provisions of the Indonesian Copyright Law, while the conceptual approach is employed to analyze concepts and theories concerning the need to reformulate copyright regulations through specific provisions grounded in the principle of the balance of interests. Such reformulation aims to ensure the protection of authors' economic rights while simultaneously providing proportionate access for the development and utilization of Artificial Intelligence (AI).

The collected data were analyzed using a qualitative descriptive method (Soekanto & Mamudji, 1990). This analysis involved organizing and synthesizing all secondary data, identifying

the most relevant information through data classification and categorization, and subsequently drawing conclusions based on the findings (Miles, Huberman, & Saldaña, 2014).

C. RESULTS AND DISCUSSION

1. Regulatory Gaps in Copyright Law in Accommodating the Use of Digital Works by Artificial Intelligence and Maintaining a Balance Between Authors' and Users' Interests

Copyright, as regulated under Law Number 28 of 2014 on Copyright, is an exclusive right granted to authors that arises automatically under the declaratory principle once a work has been expressed in a tangible form, without prejudice to the provisions stipulated by applicable laws and regulations. Copyright constitutes a special legal right held by authors over works in the fields of science, art, and literature, and it may be enforced against any party who infringes upon such rights in accordance with prevailing legal provisions. Copyright protected works include books, musical compositions, films, computer programs, dramatic works, paintings, and various other forms of creative expression (Yanto, 2015); (Puspita, Roisah, & Lestari, 2024).

Copyright is applicable to the works of human intellectual endeavour in the field of science, art and literature. Such protection exists naturally when a work is fixed in a tangible form. Thus, copyright is a private legal right that the author automatically owns while creating the work (Jaman, Putri, & Anzani, 2021).

Copyright has two key aspects: economic rights and moral rights (Dewi, 2018). Copyright protects both the economic rights and the moral rights of authors (Anjani, 2013). Moral rights are personal rights inherently attached to the author and include the right to determine whether the author's name should be attributed when the work is publicly used, the right to use either a real name or a pseudonym, the right to modify the work in accordance with accepted societal standards, the right to alter the title or subtitle of the work, and the right to preserve the integrity of the work against modifications that could harm the author's reputation. Moral rights may only be transferred after the author's death. In this context, an author is generally presumed to be the person whose name appears on the work, who is explicitly identified as the author within the work, whose name is listed in the copyright registration certificate, or whose name is recorded in the official register of authors (Fitriadina, Rahayu, & Pratama, 2023); (Rifqi, Roisah, & Lestari, 2023).

Moral rights differ from other forms of intellectual property rights because they are inseparably linked to the author's personality and cannot be fully transferred through technological means (Raharja, 2020). This difference is due to the fact that copyrighted works are the product of human intellectual creativity and cannot be duplicated totally by computers or technological

systems. Therefore, the Copyright Law grants writers exclusive rights on the use of their works which include rights to reproduce, distribute, and publicly disclose them. This legal framework protects the work of creators from unauthorised use or exploitation and allows them to monetise their creations and invest their time, energy and resources in creating new and unique content.

The use of Artificial Intelligence (AI) in the creation, processing and use of intellectual works is increasing and this is now posing new challenges for Indonesian copyright law. Artificial intelligence has already altered the conventional paradigm of copyright law based on the notion that authors and users are human legal persons intimately involved in the creation and use of copyrighted works. In practice, AI systems require access to large amounts of digital content for training procedures, text and data mining, and machine learning operations in order to deliver increasingly accurate and inventive outputs.

The 2014 Copyright Law was written before these technological changes, so it lacks any specific rules concerning the use of copyrighted material for training AI. Because the law doesn't define what is allowed, there is a lot of confusion over whether collecting and processing this data is copyright infringement, or simply a normal part of developing new technology (Samuelson, 2024).

The issue of copyright balance has become more and more important with the development of digital technology. Copyrighted materials can be spread quickly and widely over the internet. Such a development, although benefiting society by increasing access to information, also increases the potential of copyright infringement through unauthorised reproduction and distribution. Several countries have modified the copyright rules to protect authors sufficiently, without overly restricting public access to information (Sganga, 2024).

The system of limitations and exceptions to copyright is one of the main tools to achieve this balance. These rules allow the use of copyrighted works without the need for prior authorisation by copyright holders in certain cases, such as for educational purposes, research, criticism, review, library services or accessibility needs for persons with disabilities. Thomas Dreier, the concept of limitations and exceptions is an important element in the deliberation about the balance of the interests of writers, rights holders, users and society in modern copyright systems (Dreier, 2010).

One of the most glaring limitations of Indonesian Copyright Law is that there are no specific provisions that regulate licensing mechanisms and compensation systems as well as benefit-sharing arrangements when copyright works are used in the development of AI. The lack of a general regulatory framework in this area is especially concerning since the exploitation of AI has created considerable economic value through training on data, at least part of which is using_and many believe misusing__copyrighted works. This for example, can lead to grossly

inequitable consequences for authors, whose data are used without permission and fair compensation (if any) to train AIs.

Simultaneously, overly strong copyright protection may stifle innovation by raising transaction costs and imposing restrictive licensing frameworks that are costly to navigate (Guadamuz, 2024). Thus, the flaws of current regulatory framework is not just hampering authors' economic rights protection but also may eventually hamper innovation and the development of Artificial Intelligence industry in Indonesia.

The table below highlights the regulatory weaknesses of Indonesian Copyright Law in its balancing role between protecting authors and users especially considering that AI technology is progressing very rapidly. It identifies the primary practical legal issues that first came to light as AI began interacting with works protected by copyright:

Table. 1
Regulatory Deficiencies in Balancing Competing Interests under Copyright Law

Interest Area	Current Regulation	Regulatory Weakness
Length of copyright protection	Protection extends for the lifetime of the author plus 70 years after death.	Authors' economic rights are protected; however, public access to copyrighted works is delayed due to the lengthy protection period.
Utilization of digital works	No specific provisions governing the use of copyrighted works within the digital ecosystem.	Creates tensions between copyright protection and users' access rights.
Protection of users' rights	Users' rights are not explicitly regulated, as the law primarily focuses on authors' exclusive rights.	A protection gap exists because users' interests receive limited legal recognition.
Use of copyrighted works by AI	No specific regulation exists.	Creates legal uncertainty regarding the ownership and legal status of AI-generated works.
Balance between AI innovation and authors' economic rights	No specific regulation exists.	Potential conflicts may arise due to the risk of economic harm to authors.
Transparency in AI use of copyrighted works	No specific regulation exists.	Potential conflicts may emerge between authors and AI developers regarding the use of copyrighted materials.

Source: Author's analysis

This gap indicates that the Indonesian Copyright Law has not yet properly realised the social role of copyright which must be balanced with the exclusive rights of the author and the wider interests of the public. One major cause for this weakness is that the Copyright Law was promulgated long before the exponential growth of Artificial Intelligence (AI) and hence is not well

equipped to deal with the complex legal problems presented by AI-related activities. The existing regulatory system has major legal loopholes, which lead to uncertainty regarding the rights and obligations of the different actors. These flaws have significant potential to create conflicts of interest, particularly given the discrepancy between the level of protection provided to copyright holders and the legal certainty required by AI developers, users and the public.

From a conceptual standpoint, copyright is not meant to simply provide authors a monopoly over their work. Instead, it is intended to foster the diffusion of information, culture and technical innovation for the benefit of society as a whole (Merges, 2011). Notwithstanding, the copyright limitations and exceptions in Articles 43 to 51 of the Indonesian Copyright Law are still primarily orientated to educational activities, research, libraries and persons with disabilities. “Text and data mining activities, a crucial part of the development of AI, are not allowed under these provisions in relation to digital works. Unlike the EU and Japan, which have made specific exceptions for the use of copyrighted works in machine-based data analysis, Indonesia remains under a regulatory vacuum, creating uncertainty as to where the line is between permissible use and copyright infringement in the context of AI (Senftleben, 2026).

As such, revision of copyright law has become an urgent necessity to achieve an appropriate balance between the protection of authors’ economic and moral rights and the need for data access for AI development. Such reform is necessary in order to allow the goals of copyright protection and technical progress to be compatible. Too much copyright protection might create difficulties for users who want to access knowledge and information. However, if access is too broad with insufficient restrictions, authors can lose the incentives needed to keep developing and inventing.

This conflict of interests can be resolved by the adoption of the concept of copyright balance as the guiding principle of copyright regulation. The principle is meant to harmonise two interests typically seen as opposing. Copyright law must, on the one hand, afford sufficient protection to authors to be recognised and to make a profit from their creative work. On the other hand, users should have appropriate access to use, study, develop and benefit from those works for purposes of education, research, cultural development and innovation.

2. Optimizing the Balance Between the Fulfillment of Authors’ Economic Rights and Users’ Access Rights Through the Reformulation of Copyright Law Based on the Principle of Balance of Interests to Ensure the Protection of Authors’ Economic Rights and Access to Artificial Intelligence

Hopefully the implementation of Copyright Law including copyright protection and the development of the creative economy sector will

have a favourable contribution to national economic growth. It is a way of protecting and utilizing copyrighted works for the benefit of society at large. Enforcing copyright is a practical attempt on the part of the government to protect the economic and moral rights of authors and rights holders. This protection provides an essential basis for the promotion of creativeness and innovation at the national level. Experiences of industrialised countries show that the efficient protection of copyright may considerably boost the growth of the creative economy, which will also bring great benefits for economic development and public welfare (Iswahyudi, 2022).

Neglecting copyright as a social function and reducing it to a machine that caters only to the interests of authors or related right holders but disregards that these rights were acquired so that society could use works. Once works enter the public domain this becomes problematic and may also reduce the creative ambition necessary for authors and related rights holders to keep creating. The fall of the spirit in creativeness will have a larger effect as well, through reducing the innovative levels inside Indonesian society (Entjarau, Sondakh & Nachrawy, 2021).

Although there are legal protections in place, flaws hamper the effort to balance the interests of writers and users. It is therefore necessary to re-examine the underlying aim of copyright protection, especially as to the granting of exclusive rights as a form of limited monopoly subject to statutory constraints and exceptions. Special attention should be paid to the question of copyright protection periods in Indonesia and comparative countries. Such a review is necessary to strike a proper balance between authors' rights and the access interests of users, so that copyright protection may continue to serve private and public interests in a fair manner.

Table 2.
Comparison of Copyright Protection Terms in Indonesia and Other Countries

Country	Copyright Protection Term	Legal Basis
Indonesia	Life of the author plus 70 years after death	Article 58(1) of Law No. 28 of 2014 on Copyright
United States	Life of the author plus 70 years after death	17 U.S.C. § 302 – Duration of Copyright: Works Created on or After January 1, 1978
United Kingdom	Life of the author plus 70 years after death	Section 12(2) of the Copyright, Designs and Patents Act 1988
Japan	Life of the author plus 70 years after death	Article 51(2) of the Copyright Act of Japan
Mexico	Life of the author plus 100 years after death	Article 29(I) of the Federal Copyright Law (Ley Federal del Derecho de Autor)

Source: (Database Peraturan BPK, n.d.); (Legal Information Institute, n.d.); (legislation.gov.uk, 1988); (CRIC, 2023); (Juristas. MX, n.d.).

The comparative table above shows that the amendment of the copyright protection term under Law No. 28 of 2014 on Copyright from life of the author plus 50 years to life of the author plus 70 years after death is a manifestation of Indonesia's efforts to harmonise its legal framework with international standards applied in countries such as the United States, the United Kingdom and Japan. In the context of the adaptation of copyright law to the development of Artificial Intelligence (AI), the comparative analysis of the terms of copyright protection supports the extension of the protection period, to life of the author plus 70 years, as argued by Menna, which reinforces the economic rights of the authors and their heirs (Menna, 2025).

However, from the standpoint of balancing the rights of creators with the rights of users, such a policy may also delay the entry of works into the public domain, therefore restricting the public's access to copyrighted works for a longer length of time. Any assessment of the breadth of copyright protection should thus take into account not only the interests of the writers but also those of the wider public.

Copyright protection is the reflection of exclusive rights of artists, and the Copyright Law stipulates that economic incentives must be provided to creators, but if the protection period is too long, it would hinder the dissemination of knowledge and culture. Hence there is a need to strike a fair balance between the interests of the artists and the interests of society. On the one hand, the employment of AI should not compromise the rights and interests of authors. On the other hand, copyright protection should not be an obstacle to the access rights of users or to the development of AI technology. This balance can be reached by reinforcing limitations and exceptions to copyright, notably for education, research, libraries and cultural preservation. In addition, the emergence of open licensing methods such as Creative Commons licenses may give an alternate option that allows authors to keep credit for their work while providing larger public access. Some scholars have called for more flexible arrangements, such as open licensing systems and the concept of implied permission, to improve public access to digital works while safeguarding authors' rights. Such an approach is seen as a better balanced compromise between the preservation of exclusive rights and the public interest in access to information (Jenkins, 2021). Thus, copyright protection can be a tool not just for the preservation of authors' economic rights, but also a mechanism for fostering the sustainable sharing of information and creativity. Meanwhile, De la Durantaye (2025) suggests that a more balanced structure would be one that combines data access with remuneration systems.

In the context of AI, the urgency of implementing the principle of balance of interests is even more evident, as tensions often emerge between the exclusive rights of authors as holders of economic rights and the need for access to

data, the principal foundation of development of AI. Much of the data utilised in machine learning and deep learning processes is derived from copyrighted items, such as scientific publications, books, literary works, images, music, movies, and other digital assets (Samuelson, 2024). Making the use of such works totally subject to individual licensing requirements could create enormous administrative and economic impediments to innovation. Conversely, if copyrighted works are used freely for AI training without constraint or remuneration, authors' economic rights may be damaged. Thus, the reformulation of the Copyright Law should be devised in a way to cater to both interests in a balanced way. Mayana contends that the conception of authorship in Indonesian copyright law remains grounded in human creativity. Consequently, the legal uncertainties surrounding authorship, ownership, and copyright protection are arising from works autonomously generated by artificial intelligence, requiring reformulation of the current regulatory framework to address the challenges posed by advances in AI (Mayana et al., 2024a). Such reform should be steered by the idea of balance of interests, which attempts to reconcile the preservation of authors' rights with the public interest in reaping the benefits of technological innovation.

The notion of balancing of interests is one of the basic pillars of modern systems of intellectual property. It stresses that the exclusive rights given to writers are not ends in themselves, but legal tools aimed at fostering creativity, innovation, and the sharing of knowledge for the benefit of all of society (Merges, 2011). From this perspective, copyright protection should not lead to overmonopolization preventing scientific and technological advancement. Similarly, there must not be open-ended access to copyright works to the point that it disrespects the economic and moral rights of the authors. So copyright legislation must strike a proportional balance between private and public interests.

The idea of copyright balancing is to find a middle ground between two interests that are typically seen as being in conflict. On the other hand, copyright law must afford authors appropriate protection to ensure that they are recognised and financially compensated for their creative contributions. Society must be given appropriate access to the use, study, development and benefit of copyrighted works for the purposes of education, research, cultural development and innovation.

One proposed change in the age of Artificial Intelligence to bridge the gap between the interests of copyright holders and users, in particular, is the introduction of specific legislation on Text and Data Mining (TDM) as a restricted exception to authors' exclusive rights. The Text and Data Mining (TDM) exemption, as explained by Maryna Manteghi, could offer a legal framework for Artificial Intelligence training activities, but it does not fully solve the copyright difficulties related to the use of protected works

(Manteghi, 2024). TDM stands for the process of analysing vast quantities of digital data in order to find out patterns, relationships and information needed for the development of Artificial Intelligence. These rules have been already integrated into the copyright law of the European Union by means of the Directive (EU) 2019/790 on Copyright in the Digital Single Market, which includes exceptions allowing the use of copyrighted works for TDM activities and preserves safeguards for the legitimate interests of rights holders (Senftleben, 2026). Within such a system, copyrighted works can be legitimately used for Artificial Intelligence training purposes without depriving the economic rights of writers.

The Copyright Law needs to be amended to provide licensing mechanisms that can keep pace with the constantly occurring technological advances. One option is to introduce an extended collective licensing (ECL) scheme where collective management organisations are given the power to grant licenses for the use of copyrighted works on behalf of writers for the purpose of developing Artificial Intelligence. This concept offers Artificial Intelligence developers a realistic way to acquire the datasets needed for technological innovation and to ensure that writers are fairly paid for the use of their works (Geiger, Frosio, & Bulayenko, 2021). The ECL system can assist in rights clearance through centralisation of the licensing procedure, reduce transaction costs of individual agreements and encourage more equitable distribution of economic rewards among the parties concerned.

The revision of copyright law should focus more on the idea of transparency in the use of digital works by AI developers. Perhaps the most significant issue facing authors today, is the ambiguity surrounding what works are being trained on by AI, and what those works are used for post-training. Therefore, AI developers should be forced to disclose, in an appropriate and accountable way, the sources of data used to train AI systems. Such transparency would offer authors with greater legal certainty and would make possible the deployment of more effective licensing and compensation arrangements (Guadamuz, 2024). Adam Buick says that rules to disclose and be transparent about the data sets used to train AI are essential to protect copyright owners' rights but also retain the ability to innovate using AI (Buick, 2025).

The copyright protection system based on the notion of the balance of interests is also in line with the social role of copyright. This social purpose suggests that the legal protection of intellectual works should not be for the advantage of authors alone, but should also contribute to the progress of education, research, culture and technology for the benefit of society as a whole. Hence, regulation of copyright in AI times must assure protection of authors' economic rights and at the same time provide a sufficient legal framework for usage of digital works in the technical advancement that creates social and

economic advantages for the public (Netanel, 2008).

Therefore, achieving an optimal balance between the fulfillment of authors' economic rights and users' access rights in the era of Artificial Intelligence cannot be accomplished through either an absolute protectionist approach or an unrestricted access model. The reformulation of the Copyright Law should be founded upon the principle of balance of interests by integrating provisions on text and data mining (TDM), collective licensing schemes, opt-out mechanisms, transparency in data use, and fair compensation systems. Through such an approach, Indonesian copyright law can become more responsive and adaptive to technological developments while maintaining an appropriate balance between the protection of authors' economic rights and the public interest in benefiting from advances in Artificial Intelligence.

D. CONCLUSION

The regulatory gap in copyright law concerning the use of digital works by Artificial Intelligence (AI) and the maintenance of a balance of interests arises from the absence of specific provisions governing licensing mechanisms, compensation schemes, and the distribution of economic benefits derived from the use of copyrighted works in AI development. As a result, the commercialization of AI may create inequitable outcomes for authors, whose works are utilized without their consent or adequate remuneration. Achieving an optimal balance between the fulfillment of authors' economic rights and users' access rights in the era of Artificial Intelligence cannot be accomplished through either an absolute protectionist approach or an unrestricted access regime. The principle of balance of interests serves as a fundamental foundation for addressing the gap between the interests of authors and users. In this respect, the term "copyright balance" has been coined as a concept referring to the attempt to maintain the proportionality between the exclusive rights of authors and the wider public interest. Copyright protection should not unduly restrict access to and use of copyrighted works for the advancement of knowledge, cultural development, and AI-driven innovation, while at the same time providing an incentive for creators through recognition and economic benefits from their intellectual works.

Accordingly, copyright law reform should aim at striking a proper balance between protecting authors' economic rights and ensuring responsible use of copyrighted works for AI technologies. This will allow copyright law to adapt to the needs of AI without losing its relevance and effectiveness in serving both individual and societal interests fairly and sustainably. Accordingly, the balancing of interests becomes a tool for achieving copyright balance.

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