The Utilization of Artificial Intelligence in the Indonesian Copyright Law System

1st Raden Handiriono
Law Department, Faculty of Law
Universitas Swadaya Gunung Jati
Cirebon, Indonesia
raden.handiriono@ugj.ac.id

2nd Tina Marlina
Law Department, Faculty of Law
Universitas Swadaya Gunung Jati
Cirebon, Indonesia
tina.marlina@ugj.ac.id

3rd Irma Maulida
Law Department, Faculty of Law
Universitas Swadaya Gunung Jati
Cirebon, Indonesia
Irma.maulida@ugj.ac.id

4th Nur Alma Azizah B
Law Department, Faculty of Law
Universitas Swadaya Gunung Jati
Cirebon, Indonesia

aazizahn17@gmail.com
5th Dharliana Hardjowikarto*
Law Department, Faculty of Law
Universitas Swadaya Gunung Jati

Cirebon, Indonesia
dharliana.ayu@ugj.ac.id

Abstract - **Intellectual Property Right (IPR) play an important role in the world of work protection. This is because IPR is closely related to technology and economics. Because IPR is important in people's life IPR should be protected. One form of IPR that must be protected is copyright. The purpose of this study is to determine the relationship between creations derived from artificial intelligence (AI) and Copyright Law in Indonesia, particularly in relation to the act of modifying and combining existing works to become a new work. This research explores the history of technological developments, especially AI and the background of the formation from the copyright law with a qualitative research approach of in-depth analysis of literature review. The results of this study found that the regulations on Copyright Law in Indonesia still do not regulate the existence of creations derived from Artificial Intelligence programs therefore along with the times, the regulations on Copyright must also be adequate by regulating the boundaries of the extent to which a work of creation can be protected.**

Keywords—*protection; copyright, artificial intelligence*

I. INTRODUCTION

The consequence of human thought expressed as ideas that are realized as creations or works is known as intellectual property rights, or IPR. IPRs need to be protected legally from several angles. Intellectual property rights encompass various forms, such as copyright, patents, and trademarks. Thus, having sufficient and functional laws pertaining to intellectual property rights is one type of legal protection. The rise of works created by technological advancements like artificial intelligence (AI) is linked to the significance of copyright, one of the IPR forms, in the growth of internet technology. AI-generated art, such as drawings, is one example of a work[1]. A piece of art produced with the aid of generative AI is called AI art. Large data sets are searched for patterns by the technology, which then leverages the findings to produce new content.

Internet technology, and artificial intelligence in particular, has advanced quickly in the last several years due to the emergence of applications involving data processing, machine learning, and automated decision-making. Technology is being used more and more in all areas of the creative arts, including writing, music, and filmmaking. The way that internet technology is currently used is changing the way that creation, which was once done in physical form, is now done in digital form[2] The availability of the internet can facilitate the sharing of knowledge and publications more easily, but this ease also carries a risk that careless individuals could take advantage of. For example, it can be easy for a work to be altered or modified without permission, which can have negative effects and often violate copyright laws. These days, artificial intelligence technology has advanced to the point where it can create a variety of written works, sounds, and images using only human-written orders.

Determining the limits of copyright is challenging due to the development of algorithms that may create artistic works with little to no human involvement. In the context of creativity involving artificial intelligence, the identification of the creator—a crucial component of copyright—becomes hazier as concerns about striking the right balance between promoting innovation in the field of artificial intelligence and defending the creative rights of the original owner of a work grow. Meanwhile, there are serious concerns over originality and the preservation of creative rights when Artificial Intelligence is used to alter already-existing works. Consequently, it is becoming more and more crucial to do in-depth study on the connection between copyright and artificial intelligence. A comprehensive understanding of these facets is vital not only for tackling the essential

transformations in the realm of creativity and art production, but also for formulating a legal structure that can adapt to the obstacles and prospects brought about by these technological breakthroughs.

II. METHOD

The research uses a type of qualitative research with descriptive analysis method, namely recognizing data on the object of research in the form of current situations, laws and regulations, and regarding the use of artificial intelligence based on the enforceability of the Copyright Law in Indonesia. This research uses a normative juridical approach, namely research that refers to the literature study of data collection related to examining literature, theoretical studies of legal experts in the form of scientific books. The researchers want to offer a thorough examination of the legal concerns raised by AI, particularly when algorithms are used to produce artistic works that may violate copyright holders' rights.

III. RESULT AND DISCUSSION

Intellectual property rights (IPR) are protection related to the process of human thinking (intellectual), given to every creator for creative work and the utilization of the work. Therefore, IPR can be specifically defined as rights arising from a work created with human intellectual abilities and beneficial to human life. IPR refer to creations of the mind such as science, inventions in the field of technology to art and satsra that have moral and economic values. That is why legal protection is provided by adequate regulations on IPR. IPR are divided into several types, namely: Copyright which is regulated in Law Number 28 of 2014, Trademarks and Geographical Indications regulated in Law Number 20 of 2016, Patents regulated in Law Number 13 of 2016, Trade Secrets regulated under Law Number 30 of 2000, Industrial Design regulated in Law Number 31 of 2000, Integrated Circuit Layout Design which is regulated under Law Number 32 of 2000

From the explanation above, we know that there is a very wide scope of protection of IPR. The protection which will be discussed further in this paper is the protection of Copyright, especially Copyright on a work produced by AI.

According to Article 1 paragraph (1) of Law Number 28 of 2014 concerning Copyright, Copyright is the exclusive right of the creator that arises automatically based on the declarative principle after a work is realized in a tangible form without reducing restrictions in accordance with the provisions of laws and regulations.

Simply put, copyright is the right given to a person/group that produces a work to receive utilization of the work that

has been produced.[3] Copyright arises automatically when a creation is born, this copyright consists of moral rights and economic rights. Moral rights are inherent rights that can not be removed, replaced or eliminated from the creator of a work while economic rights are the right to obtain economic benefits from the creative work.

Subjects in copyright are creators and copyright holders. The creator automatically becomes the copyright holder, but the copyright holder is not necessarily the creator. Explanation of the subject of copyright protection described in Article 1 paragraph (2) of Law No. 28 of 2014 on Copyright "the Creator is a person or several people individually or jointly produce a distinctive and personal creation."

Meanwhile, copyright holders can be divided into three, the explanation is contained in Article 1 Point (4) of Law Number 28 Year 2014 on Copyright, Creator as copyright owner, Parties who receive such rights legally from the creator; or Another party who receives further rights from the parties who receive such rights legitimately.

According to article 1 paragraph (3) of law number 8 of 2014 on copyright referred to an object of copyright is any copyrighted work in the field of science, art and literature produced by inspiration, ability, thought, imagination, dexterity, skill, or expertise expressed in real form. The form of expression in question is the creation has been published so that it can be seen, heard, or communicated in other ways.

A creation must meet several requirements to be covered by copyright. First, the most crucial component of copyright protection is this criterion's uniqueness. Second, to meet this criterion for creativity, a work must be copyright protected and the result of the creator's original ideas, reflecting the creator's own identity. Third, a work that is eligible for copyright protection must be a fixation—that is, a concrete work as opposed to an idea or an idea with no actual form.[4]

In recent years, rapidly developing technology has produced several new discoveries that have greatly influenced human life. One example is the presence of AI which was first introduced at a conference about AI at Dartmouth College with the assumption that human intelligence/logical thinking can be simulated by computers.[5]

AI is a program technique that is used to imitate intelligence possessed by humans to solve a problem through feelings, thoughts, and opinions. Besides that, currently AI has developed not only into a problem-solving program but rather a program that can produce a work that may have economic value (selling power). In general, the types of AI are divided into three, Artificial Narrow Intelligence (ANI), Artificial General Intelligence (AGI), and Artificial Super Intelligence (ASI).[6]

Artificial Narrow Intelligence (ANI) is Artificial Intelligence that is made for performing simple tasks or commands.[7] This AI is an early stage of artificial intelligence that has inability to learn skills beyond its design independently and does not have any thinking ability. It only performs a set of functions that have been specified in its program. Therefore ANI is also known as weak and limited Artificial Intelligence. Examples of this AI include ChatBot, Google Search, Apple's Siri and Amazon's Alexa.

Artificial General Intelligence (AGI) is an Artificial Intelligence designed to be able to perform tasks or commands efficiently such as imitating the cognitive abilities of the human brain.[8] This AGI system has the main feature of flexible thinking and reasoning. Until now, the AGI system is still under development and it still takes a lot of time to realize this system perfectly. Some devices that are claimed to be pointing towards the AGI system are Alpha-Go, IBM Watson, and Neuralink.

Artificial Super Intelligence (ASI) is a development of AGI that has capabilities beyond human capacity.[9] ASI can intentionally suppress human capacity for decision-making and problem-solving. Scientists are still trying to achieve the effective functioning of ASI. Basically, there is no device or application that can be used as an example or potentially lead to capabilities based on ASI systems. Currently in Indonesia, there are not many discussions that take the topic of AI and its implications for Indonesian law. We also know that until today Indonesia does not have a law that regulates the existence of smart programs. The existence of AI poses a major challenge to the current Copyright Law. Manipulation of digital copyrighted works is straightforward, allowing them to be modified without destroying their original quality or even changing the identity of the creator.[10] While it may seem to provide freedom, in reality, this manipulation may adversely affect the copyright holder due to losses arising from unauthorized parties. Hence, stronger protection is needed for digital copyrighted works than conventional copyrighted works.

The use of Artificial Intelligence technology in the process of creating creative works presents common questions regarding the identification of the creator, originality and ownership of the copyright itself. Copyright Law was essentially established to protect works produced by human hands, which contain elements of creativity and originality. However, when AI algorithms and programs take on that role in the creation of works, the current legal framework feels inadequate.

The originality of a work created by AI is questioned because AI programs only modify pre-existing works based on the parameters made by the AI programmer[11]. This is because AI algorithms and programmes cannot be given the identity of the creator because they do not comply with the written provisions in the Copyright Law. It is still impossible to give a clear response to the question of how much human input goes into the process of making works using AI. This makes it difficult to decide who should be credited for the work and how to preserve the moral rights and associated economic rights from copyright infringement.

IV. CONCLUSION

Over time, science and technology have changed at a rapid and considerable rate. One way that these developments have significantly impacted people's daily lives is through the internet. Normative juridical research is one sort of legal study that is frequently done; in this context, law is regarded to be what is expressed in legislation or as standards of acceptable human behavior. As the sole authority to control how a work is used, copyright safeguards the author or copyright holder from unapproved use and guarantees that the work is only used with consent.

Within the framework of Indonesian copyright law, the application of artificial intelligence (AI) presents both new potential and concerns. The advancement of technology necessitates the modification and reworking of current copyright laws to better represent the nature of artistic creativity in the age of rapid technological advancement. The extent to which human roles can be identified and recognized in the process of creating works through Artificial Intelligence must be considered when drafting the legal framework. Additionally, mechanisms that ensure copyright protection remains effective without impeding technological development and innovation must be found.

More creative and cooperative talks between legal

professionals, tech developers, and creative industry stakeholders are needed to modify the Copyright Law to account for Artificial Intelligence's role in the creation of works. As a result, the study discussed here is crucial for understanding the dynamics of the present as well as for developing a legal framework that is appropriate for the rapidly changing age of technological innovation. In conclusion, a sustainable and adaptive approach is required to be able to address the challenges and investigate the positive potential that can be generated by the future collaboration between technology and copyright law in order to maximize the benefits of the utilization of Artificial Intelligence within the framework of Copyright Law in Indonesia.

REFERENCES

[1] Adobe Firefly. (2023). Retrieved from https://www.adobe.com/id_id/products/firefly/discover/what-is-ai-art.html

[2] Guadamuz, A. (2017, October). *WIPO Magazine*. Retrieved from WIPO: https://www.wipo.int/wipo_magazine/en/2017/05/article_0003.html

[3] Khan, H. (2021, October 2). Different Types of Artificial Intelligence. Retrieved from fossguru.com/types-of-ai-different-types-of-artificial-intelligencesystems

[4] Mijwel, M. M. (2015). History of Artificial Intelligence. *Computer Science University of Baghdad*, 1.

[5] Ravizki, E. N. (2022). Artificial Intelligence as a Legal Subject: A Conceptual Review and Regulatory Challenges in Indonesia. *Notaire Vol. 5 No. 3*, 351-376.

[6] Riswandi, B. A. (2016). Law and Technology: A Technology-Law Collaboration Model in the Framework of Copyright Protection on the Internet. *Law Journal IUS QUIA IUSTUM NO. 3 VOL. 23*, 345-367.

[7] Simatupang, K. M. (2021). Juridical Review of Copyright Protection in Digital Sector. *Scientific Journal of Legal Policy Vol. 15 Number 1*, 67-80.

[8] Ujang Badru Jaman, Galuh Ratna Putri, Tiara Azzahra Anzani. (2021). Urgensi Perlindungan Hukum Terhadap Hak Cipta Karya Digital . *JURNAL RECHTEN: RISET HUKUM DAN HAK ASASI MANUSIA Vol. 3 No. 1*, 9-17.