

CRIMINAL LIABILITY OF ARTIFICIAL INTELLIGENCE ON COPYRIGHT INFRINGEMENT IN NIGERIA: AN OVERVIEW

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Abstract

Artificial Intelligence has become a new phenomenon that has found its way deep into intellectual property, particularly in copyright. The autonomous nature of artificial intelligence (AI) allows it to generate new creative works from existing original works. The lines between artificial intelligence and copyright have been blurred resulting to incidents of infringement in Nigeria without adequate legal and regulatory framework to address the challenges and liability of AI-based copyright issues. The paper adopted a doctrinal methodology, data obtained through primary and secondary sources will be analysed through descriptive and analytical approach. This paper found that the legislations across Nigeria have not adequately address the issue of AI-based copyright infringement. The paper concluded by establishing a need for provisions regulating artificial intelligence under copyright laws. Based on this, the paper recommended strict liability for AI systems and secondary liability for third parties such as users involved in the infringement. Furthermore, implementation of licenses that will ensure legal authorization from copyright holders must be obtained. Additionally, it is important to revise the current copyright legislations to adapt to and provide for AI based output and infringement.

Keywords: Artificial intelligence, Copyright infringement, Criminal liability, Generative output and Legal framework

1. Introduction

The interaction between artificial intelligence (AI) and copyright is an issue of peculiar importance to developed and developing economies. According to the World Intellectual Property Organization (WIPO), copyright is a legal term used to describe the rights that creators have in their literary and artistic works.¹ Works protected by copyright include books, paintings, sculptures, music, computer programs, databases, technical drawings and advertisements.² The advent of Artificial Intelligence, popularly called AI, can be traced back to the 1950s.³ John McCarthy coined the term at a Dartmouth conference in 1956, and described it as the science and engineering of making intelligent machines.⁴

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¹ World Intellectual Property Organization, 'Understanding Copyright and Related Rights' (WIPO, 2016).

² Anna Ubaydullaeva, 'Copyright for Computer Programs and Databases', (2024) 2(4) International Journal of Law and Policy 85-96 DOI: 10.59022/ijlp.181

³ Michael Haenlein and Andreas Kaplan, 'A Brief History of Artificial Intelligence: On the Past, Present, and Future of Artificial Intelligence', (2019) 61(4) California Management Review 1-10 DOI: 10.1177/0008125619864925

⁴ John McCarthy, 'Father of Artificial Intelligence' (2014) 19(3) Resonance 198-207 DOI: 10.1007/s12045-014-0027-9; see also, Christopher Collins and other, 'Artificial Intelligence in Information Systems Research: A Systematic Literature Review and Research Agenda' (2021) 60, International Journal of Information Management 1-17 doi.org/10.1016/j.ijinfomgt.2021.102383

Years ago, inventors created something called 'automatons' which were mechanical and functioned without human intervention.⁵ Automation means to act of one's own will. From autonomous cars to precision medicine, machine translations to smart assistants; AI has spread its tentacles deep into every sphere of human life and society⁶. With these tremendous advances and changes in the world, it is not hard to foresee a future where technology takes absolute control, becoming the creator and pilot of everything innovation.

Artificial intelligence (AI) and intellectual property (IP) are closely interrelated. This close connection in the context of copyright is considered a third computer-enabled technological shift in the means of creative and artistic production.⁷ The advancement of AI at an unprecedented pace continues to have a significant effect on intellectual property specifically in copyright.⁸ The rapid rise in artificial intelligence systems, particularly in Generative AI, has brought with it a fresh array of issues. Generative AI systems such as Chat GPT that is capable of composing poems, writing essays, summarizing articles, assisting students with school work and even passing complex professional exams.⁹ These systems can also create remarkable artworks, often by imitating the works of renowned artists and even surpassing their style and quality.¹⁰ For example, despite only having been launched recently in November 2022, ChatGpt has received worldwide acceptance from many in society and has broken the record for being the fastest application to ever reach over 100 million users.¹¹

Artificial intelligence is prominent in three areas of copyright: writings, music and pictures. The first category is writings. Companies like Automated Insight and Narrative Science allow their customers to create narrative with many of these works involving no human intervention.¹² The next category is pictures, DeepDream is one of many artificial systems that can generate pictures without human direction.¹³ The AI system uses a technique known as *Inceptionism*, which instructs the AI to dream up images when fed a picture of random noise.¹⁴ The final category is music; Watson Beat is an example of an artificial system that does not require human input to create

⁵ Malvinder Sing, 'History of AI' (2020) 7(8) Journal of Emerging Technologies and Innovative Research 58-61

⁶ Ademola Adeyoju, 'The Role of Intellectual Property in Artificial Intelligence' <<https://www.mondaq.com/nigeria/patent/794610/the-role-of-intellectual-property-in-artificial-intelligence>> accessed 2 June 2025.

⁷ Ayoyemi Arowolo, *Babcock University Essays on Contemporary Issues: Law and Digital Technology* (2edn, Ababa Press 2018) 33.

⁸ James Godefroy, 'How Does Artificial Intelligence Affect Intellectual Property?' <<https://rouse.com/insights/news/2024/how-does-artificial-intelligence-affect-intellectual-property-protection>> accessed 3 June 2025.

⁹ Gill Appel, Juliana Neelbauer and David A. Schweidel 'Generative AI Has an Intellectual Property Problem' Harvard Business Review, <<https://hbr.org/2023/04/generative-ai-has-an-intellectual-property-problem>> accessed 3 June 2025.

¹⁰ Mariam Chaduneli 'The Future of Intellectual Property in the Era of AI' <<https://networkreadinessindex.org/the-future-of-intellectual-property-in-the-era-of-ai/>> accessed 3 June 2025.

¹¹ Blessing Nwankwo, 'The Intersection Between AI and IP' <<https://www.mondaq.com/nigeria/new-technology/1348568/the-intersection-between-ai-and-ip>> accessed 3 June 2025.

¹² Victor M. Palace, 'What if Artificial Intelligence wrote this? Artificial Intelligence and Copyright Law' (2019) 71 Florida Law Review 224. ; see also Mohammed Saidul Islam and others, 'Data Narrative: Automated Data-Driven Storytelling with Visualizations and Texts' (2024) Conference on Empirical Methods in Natural Language Processing, 19253–19286

¹³ *ibid*

¹⁴ Ayoyemi Arowolo, *Babcock University Essays on Contemporary Issues: Law and Digital Technology* (2edn, Ababa Press 2018) 33

music. The system can compose music by listening to few seconds of songs to create a new track.¹⁵ Such generative works under copyright law may not be protected due to the lack of originality. This lack of originality from AI systems further proves the point of AI-violations leading to copyright infringement.

The relationship between AI and copyright can be described as a “double-edged sword” which has been gaining momentum in today's tech-savvy world. AI has made significant headway and improvements in the copyright sector, but at the same time, generative AI creations make use of original works without permission causing infringement on the copyright of other authors. In the case of *Andersen v Stability AI*,¹⁶ three artists sued multiple AI systems, on the claim of the AI using their original work without permission or license to train their AI in their styles, thus allowing users to generate insufficient transformative works from their already existing and protected works and as a result would be unauthorized derivative works.¹⁷ It is important to consider the potential risks involved with AI's rapid advancements in the incidence of copyright and infringement in relation.¹⁸

The intersection of AI and copyright is a complicated and evolving vicinity of regulations.¹⁹ This has led to debates with respect to ownership and authorship of copyright creations of AI-generated works and where there is an infringement, who should be criminal liable.²⁰ In addition, AI being able to produce its own creations poses a complication as there are no clear legal provisions in Nigeria on whether AI itself can own a copyright work and when there is an infringement who will be liable? AI machine or it is the users and developers that should be held liable.²¹ This obscurity creates a legal grey area. Under the regulations in place, AI can rightly be considered as a threat to copyright holder's rights, causing issues relating to ownership, authorship as well as infringement.²²

Many AI companies are increasingly developing AI systems tailored specifically to academics. In fields such as academia, wherein research output is linked to professional success and prestige, a lack of acknowledgement not only denies compensation but also causes reputational harm.²³ It is becoming more challenging for academics to safeguard their publications from generative AI systems. Also, many researchers do not own the copyright to their works, they are owned by

¹⁵ *ibid*

¹⁶ [2023] ND Cal 700 F Supp 3d 853.

¹⁷ Gil Appel, Juliana Neelbauer, and David A. Schweidel, 'Generative AI has an Intellectual Property Problem' Harvard Business Review, <<https://hbr.org/2023/04/generative-ai-has-an-intellectual-property-problem>> accessed 3 June 2025.

¹⁸ Japhet Eneh, Vincent Ibekwe and Ibrahim Haroon, 'IP Rights for Works Produced by Artificial Intelligence' <https://www.gelias.com/images/Newsletter/IP_Rights_For_Works_Produced_by_Artificial_Intelligence_.pdf> accessed 3 June 2025.

¹⁹ Muhammad Hamza, Zakir, Syed Hammad Khan and Kiran Tanoli, 'The Impact of Artificial Intelligence on Intellectual Property Rights' (2023) 3(4) 312-319.

²⁰ *ibid*

²¹ Katarzyna Szczudlik, 'Liability for Copyright Infringement by AI' 2018 *Newtech Law*, <<https://newtech.law/en/articles/liability-for-copyright-infringement-by-ai>> accessed 21 January 2025; see also Arthur Oforbuike Ezema and Chineze Sophia Ibekwe, 'Ownership of Copyright in Works of Artificial Intelligence: Need For A Legal Framework' (2020) 10 *Journal of Public and Private Law*, UNIZIK 108-125

²² James Godefroy, 'How Does Artificial Intelligence Affect Intellectual Property?' <<https://rouse.com/insights/news/2024/how-does-artificial-intelligence-affect-intellectual-property-protection>> accessed 8 June 2025.

²³ Amanda Heidt, 'Intellectual Property and Data Privacy: The Hidden Risks of AI' <<https://www.nature.com/articles/d41586-024-02838-z>> accessed 8 June 2025.

publishers and companies that can work with these AI companies to produce output for academics. Based on the foregoing issues, this paper looks into the criminal liability of artificial intelligence on copyright infringement in Nigeria.

2. Conceptual Framework

The advent of artificial intelligence (AI) has ushered in unprecedented technological advancements and complicated legal challenges in fields like copyright infringement. The growing intersection between copyright and artificial intelligence has raised concerns, particularly with infringement, the focal point being liability.²⁴

The Guangzhou Internet Court in China gave the first ruling in a case involving AI and copyright infringement. The plaintiff, Shanghai Xinchuanhua Cultural Development Co., Ltd.,²⁵ the exclusive licensee of the cartoon Ultraman sued the defendant upon discovery of an AI image generating system producing images like the cartoon. The court held the defendant guilty of infringement.²⁶ It is crucial at this point to discuss certain concepts for better understanding of the crux of this paper.

i. Artificial Intelligence

Artificial Intelligence 'AI' has become a buzzword in almost every aspect of human life.²⁷ The sophistication of AI systems is such that AI can function in every aspect of human life independently of humans, making these systems 'self-reliant.' Artificial Intelligence is a branch of computer science that involves a computer's ability to imitate the characteristics of an intelligent being.²⁸

AI is a general term that refers to the use of a computer to model intelligent human behaviour with minimal human interference.²⁹ It emerged initially in 1956. John McCarty, one of the founders of artificial intelligence, explained AI roughly as developed machines that behave as though they were intelligent.³⁰ AI has garnered many definitions from its different pioneers. Similarly, AI is defined as the ability of machines to communicate with humans through electronic output devices without revealing they are not humans, where the essential judgment criterion is binary.³¹

In several areas, advances in AI have fueled not only an explosion in efficiency but also opened new doors for opportunities in various sectors for business enterprises. AI has become central in

²⁴ Gil Appel, Juliana Neelbauer and David. A. Schweidel, 'Generative AI has an Intellectual Property Problem' (*Harvard Law Review*, 7 April 2023) <<https://hbr.org/2023/04/generative-ai-has-an-intellectual-property-problem>> accessed 10 June 2025.

²⁵ Shanghai Character License Administration Co., Ltd (SCLA) v. AI Company (2024) Yue 0192 Min Chu No. 113.

²⁶ Justin Davidson and Stanley Ng, 'Who is liable when an Artificial Intelligence System Infringes Copyright- A Missed Opportunity by the PRC Court' <<https://www.thebrandprotectionblog.com/2024/05/who-is-liable-when-an-artificial-intelligence-system-infringes-copyright-a-missed-opportunity-by-the-prc-court/>> accessed 10 June 2025.

²⁷ Yuchen Jiang, Xiang Li, Hao Luo, Shen Yin and Okyay Kaynak, 'Quo Vadis Artificial Intelligence', (2022) 2 Discover Artificial Intelligence 1.

²⁸ Jessica L. Gilotte, 'Copyright Infringement in AI-Generated Artworks' (2020) 53 UC Davis Law Review 2657.

²⁹ Pavel Hamet and Johanne Tremblay, 'Artificial Intelligence in Medicine' (2017) 69 *Metabolism* 36-40.

³⁰ *ibid.*

³¹ Yuchen Jiang, Xiang Li, Hao Luo, Shen Yin and Okyay Kaynak, 'Quo Vadis Artificial Intelligence' (2022) 2 Discover Artificial Intelligence 1.

many leading organizations such as Apple, Microsoft, Meta which employ the advantages of artificial intelligence to level up their operations and surpass their competitors.³²

However, what is often referred to as AI is rather a subset of AI, a well-established technology such as machine learning.³³ This discussion on AI will not be complete without mentioning the systems that keep AI functioning, machine learning, and deep learning.

a. Machine Learning

Machine learning is the concept that a computer program can learn and adapt to new data without human intervention.³⁴ Machine learning is used to teach the computer how to apply data more efficiently.³⁵ Commonly, machine learning is associated with predictive analysis in which researchers utilize machine learning as a way to analyze data and make predictions. Today, machine learning algorithms are employed in numerous real-life applications, such as internet search engines, facial recognition, and data mining.³⁶ Machine learning (ML) is a pathway and component of artificial intelligence that focuses on data and algorithms to imitate human behavior in machines, gradually improving its accuracy.³⁷ The term machine learning was first coined in 1959 by computer scientist Arthur Samuel, who described it as 'a computer's ability to learn without being explicitly programmed.'³⁸ It was first introduced as a discipline in 1959, but it was not until the 1990s that machine learning took flight, as steady advancements in digitization, more nuanced computer languages, cost effective computing power, and memory enabled data scientists to train machine learning models to learn independently.³⁹ The process of machine learning begins with data collation. This involves gathering relevant data, including photos, numbers, and texts from various sources such as online repositories and databases. The collated data is what is used to train the machine learning mode; the more relevant data collated, the higher the quality of the model performance. The next step after this is that the machine programmer selects a machine learning model to use, feeds the training data to, and allows the computer model to teach itself to find patterns and make predictions. The program may occasionally adjust the hyper parameters to improve model performance. The programmer tests the model's validity on predictions to ensure its results are error-free. If the outcome or result does not match what is expected, the algorithm is re-trained multiple times until the desired result is achieved.

b. Deep Learning

Deep learning is a component of machine learning that makes use of several processing layers to learn complex abstractions in data.⁴⁰ Deep learning uses multiple layers of hierarchical, sequential,

³² Lev Craig, 'What is AI: Artificial Intelligence explained' <<https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence>> accessed 17 June 2025.

³³ *ibid.*

³⁴ Amilcar Chavarria, 'Understanding Machine Learning; Uses and Examples' <<https://www.investopedia.com/terms/m/machine-learning.asp>> accessed 17 June 2025.

³⁵ Batta Mahesh, 'Machine Learning Algorithms - A Review', (2020) 9 IJSR 381.

³⁶ Harry Surden, 'Machine Learning and Law' (2021) Research Handbook on Big Data Law 171.

³⁷ Yew Kee Wong, 'Machine Learning and Deep Learning Technologies' (2021) 11 Academy and Industry Research Collaboration Centre (AIRCC) 175.

³⁸ 'What is Machine Learning?' (*McKinsey & Company*, 30 April 2021) <<https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-machine-learning>> accessed 17 June 2025.

³⁹ *ibid.*

⁴⁰ Kinza Yasar and others, 'What is Artificial Intelligence and how does it work' <<https://www.techtarget.com/searchenterpriseai/definition/deep-learning-deep-neural-network>> accessed 18 June 2025.

and reoccurring computational units to extract features from raw data at multiple levels.⁴¹ The process of deep learning requires the selection of data points as inputs, multiplying the inputs with some arbitrary weights, formation of hidden layers, and obtaining of output.⁴² Deep learning has grown more popular over the years, and its application has shown very promising results, achieving superhuman performance in certain problems.⁴³

Deep learning is an area of machine learning that is inspired by the way the brain works.⁴⁴ Using a mesh of layers referred to as neural networks, step by step, each layer of the process takes in varying information to produce output.⁴⁵ Over the years, deep learning has proven itself to be the powerhouse of machine learning, especially because it utilizes Big Data.

Deep learning makes use of artificial neural networks to learn from data. A neural network is a method in artificial intelligence inspired by the human brain that teaches computers to process data. It is made up of interconnected nodes or neurons in a layered structure that resembles the human brain, and each node is responsible for learning a feature of the data.⁴⁶ There are numerous types of deep learning, with the most common types including Convolutional Neural Networks (CNNs) used for image recognition and processing, Deep Reinforcement Learning used for robotics and game-playing, Recurring Neural Networks (RNNs) used for natural language processing and speech recognition.⁴⁷

In the world of modernity today, many tech companies utilize deep learning to run their operations, apps and AI models. Applications like Facebook use deep learning to analyse texts; Google and Microsoft use deep learning for image search and machine translation. Deep learning is also being applied in different sectors. For instance, in the healthcare sector, deep learning is used to process medical images and diagnose health conditions.⁴⁸ In life sciences, deep learning is used for advanced image analysis, research, and drug discovery.

ii. Generative AI

Generative AI (Gen AI) is an artificial intelligence system that is capable of generating seemingly new, meaningful content such as text, audio, images, and training data.⁴⁹ With the advent of generative AI technologies such as ChatGPT, there has been a lot of attention because of its creativity and flexibility.⁵⁰ OpenAI.org was introduced to the world in November 2022, and ever since its release, it has become widely spread, reaching one million users five days after its release.

⁴¹ Siddarth Misra and Hao Li *Machine Learning for Subsurface Characterization* (Gulf Professional Publishing, 2020) 183.

⁴² Shams Forruque Ahmed and others, 'Deep Learning Modelling Techniques: Current Progress, Applications, Advantages, and Challenges' (2023) 56 *Artificial Intelligence Review* 13521–13617

⁴³ Ionnis Antolopoulos, 'Artificial intelligence and machine learning approaches to energy demand-side response: A systematic review' (2020) 130 *Renewable Energy Reviews* 109899.

⁴⁴ Bailey Janeczko and Gautam Srivastava 'The Internet of Multimedia Things (IoMT): Techniques and Applications' (1st edn, Academic Press, 2022).

⁴⁵ *ibid.*

⁴⁶ Jakub Kufel and others, 'What Is Machine Learning, Artificial Neural Networks and Deep Learning?—Examples of Practical Applications in Medicine' (2023) 13(15) *Diagnostics* 2583 DOI: 10.3390/diagnostics13152582

⁴⁷ Paschalis Tsirtsakis and others, 'Deep Learning for Object Recognition: A Comprehensive Review of Models and Algorithms', (2025) 6 *International Journal of Cognitive Computing in Engineering* 298-312

⁴⁸ *ibid.*

⁴⁹ Stefan Feuerriegel, Jochen Hartmann, Christian Janiech, and Patrick Zschech, 'Generative AI' (2024) 66 *Business & Information System Engineering* 111-126.

⁵⁰ Zhihan Lv, 'Generative artificial intelligence in the metaverse era', (2023) 3 *Cognitive Robotics* 208-217.

ChatGpt and its fellow Genial applications are already being applied in a diverse array of sectors and applications. Recent discussions surrounding generative AI applications has been on the Large Language Models (LLMs) used by ChatGpt and BingAI and image-generating AI applications that allow its users to create formal, professional-like texts and images using prompts.⁵¹

The ability of generative AI to work across various types of media makes it a novel tool with a wide range of opportunities and possibilities impacting multiple sectors, from healthcare to business. Generative AI applications such as ChatGpt, BingAI, GitHub, Stable Diffusion, and other have captured public attention and, thus, resulted in significant levels of investments in recent years that have advanced machine learning and deep learning.⁵²

iii. Copyright

Copyright is a legal term used to describe the rights that creators have over their literary and artistic works. WIPO defined the scope of works covered by copyright to include books, music, paintings, sculptures, films, computer programs, databases, advertisements, maps, and technical drawings.⁵³ Copyright law exists to protect the artistic, literary musical and audio visual works of creators fixed in a tangible medium of expression which can include physical forms like books or intangible forms like digital audio files; it does not protect thoughts or ideas. For a work to be protected by copyright, it must be original and must be in tangible form of expression. Several international legal instruments, such as the Berne Convention, regulate various aspects of copyright and have been ratified by many nations. Today, in Nigeria, the Nigerian Copyright Act 2022⁵⁴ is the legislation responsible for copyright regulation and protection.

3. Legal frameworks on AI-generated content and copyright infringement in Nigeria

Artificial intelligence due to its mutability is growing rapidly and adjusting itself to fit into every thread of society. With numerous technological advancements that afford it mutability, AI is taking over various industries with its autonomous capabilities. Hence, it is important to look into the various laws on copyright infringement in Nigeria.

i. Nigerian Copyright Act

Nigeria's copyright law was developed before the prevalence of AI usage in Nigeria, even with the recent amendment in 2022, Nigeria is still lagging behind in providing a comprehensive legal structure to address AI in copyright. Nigeria's Copyright Act does not have explicit provisions guiding the authorship and ownership situations that involve AI-generated outputs. Section 108 (1) of the Nigerian Copyright Act 2022 explained the term author as a person who is responsible for the creation of a work eligible for copyright. The eligible works for copyright protection are literary works, musical works, artistic works, audiovisual works, sound recording and broadcasting.⁵⁵ Section 2(2) of the Act states two requirements for works to be conferred with

⁵¹ Jim Euchner, 'Generative AI' (2023) 66 *Research Technology Management* 71.

⁵² Chui Michael and others, 'The Economic Potential of Generative AI: The Next Productivity Frontier' (*Three Oaks Advisory* 1 June 2023) <https://threeoaksadvisory.com/staging1/wp-content/uploads/2024/03/the_economic-of-generative-ai.pdf> accessed 25 June 2025.

⁵³ World Intellectual Property Organisation, 'What is Copyright?' (WIPO) <<https://www.wipo.int/en/web/copyright>> accessed 8 July 2025.

⁵⁴ Nigerian Copyright Act 2022.

⁵⁵ A. O. Oyewunmi *Nigeria Law of Intellectual Property* (University of Lagos Printing Press, 2015)

copyright protection which are; sufficient effort must have been expended on it to give it an original character and it must be fixed in a definite medium of expression.

Section 108 of the Copyright Act grants copyright to either an author who is either an individual or a corporate entity. As such the responsibility of expending effort to create a work rests with the author. On the other hand, in the context of generative AI, the user is the one responsible for expending effort and exhibiting a degree of originality.⁵⁶ In the case of *Yeni Anikulapo-Kuti & Ors v. Iseli & Ors*⁵⁷, on the question of effort the court held that a musical work must originate from its author who has expended special skill, and labour in producing it. In the context of expending effort, situations where the user provides the prompt, sets creative boundaries and guidelines, and refines the output, should count as exertion of effort.⁵⁸

Concerning infringement, the Act does not hold AI models liable for infringement. Under section 36(a), infringement occurs when a person does or causes another person to do an act which constitutes a violation of the exclusive rights conferred under this Act. Under the Act, a person who violates or causes another to violate a person's copyright, such a person shall be liable for infringement. Circling it back to artificial intelligence, where the infringement occurred in the process of training, the AI creator shall be held liable. However, where it occurs in the process of the AI's output to user's prompts, it is only logical for the users to be held accountable for the liability. Hence, Nigeria's Copyright Act, makes no provision for AI generated content as it only recognise human beings and not animals or robots to establish an infringement offence.⁵⁹ This position was in line with the decision of the U.S Court of Appeal in the "monkey selfie case" of *Naruto v Slater*.⁶⁰ A photographer, Slater had left his camera unattended to when a mascaque, monkey, Naruto found the camera and started taking selfies. The photographer decided to publish the photos in a book. The Court of Appeals of the Ninth Circuit held that since Naruto was not a human then it lacked subject matter jurisdiction and failed to state a claim under the Copyright Act.

Despite the limitation of the Copyright Act 2022 in addressing AI authorship on authors' ability to establish copyright in materials used by AI, section 78 of Copyright Act 2022 empowers the Nigerian Copyright Commission (NCC) to demand information and access any database relating to copyright, without warrant. This means that the NCC can potentially demand that an AI deployer provides access to the underlying data used in training its model, to ascertain if it was developed using copyrighted information.

ii. National Information Technology Development Agency (NITDA) Act

This Act developed the National Information Technology Development Agency. This agency is with the responsibility of enacting the right regulatory policies and incentives to support investment in the information technology industry.⁶¹ Where artificial intelligence is made use of in Nigeria, it will be controlled by the NITDA. Going further to its responsibility under this Act,

⁵⁶ Seun Lari-Williams, 'Are AI-Generated Content Covered by Nigerian Copyright Act?' <<https://www.theippress.com/2024/02/17/are-ai-generated-content-covered-by-nigerian-copyright-law/>> accessed 11 July 2025

⁵⁷ 51. P. L. R. [2003-2007] 53-73

⁵⁸ Supra.

⁵⁹ Copyright.gov, 'Copyright Office Releases Part 2 of Artificial Intelligence Report' (2025) 1060 <<https://www.copyright.gov/newsnet/2025/1060.html>> accessed 23 July 2025.

⁶⁰ 888 F.3d 418 (9th Cir. 2018)

⁶¹ National Information Technology Development Agency (NITDA) Act 2007, s.5. .

the agency issued the Nigeria Data Protection guidelines in 2019. This control ensures that where artificial intelligence or technology in overall is required, the policy of a person's right to privacy which also goes further to personal data is preserved.

iii. Nigerian Data Protection Act 2023

The Nigeria Data Protection Act, 2023 (NDPA) is the primary data protection legislation in Nigeria. It restricts the exclusive use of automated decision-making processes for processing personal data, including profiling, that can result in legal or similarly significant effects on the data subject. Generative AI can generate results using data from another person without the person's knowledge. The exceptions to this restriction include obtaining the data subject's consent, fulfilment of a legal requirement, or where it is necessary for the performance of a contract involving the data subject. Therefore, creative work relying on AI for automated decision-making, must do this only in compliance with the NDPA.

4. Challenges of Nigerian Copyright Legislations with AI

Regardless, of the revision of the Nigerian Copyright Act structure, there still exist notable gaps in the way the Act addresses modern digital challenges. Nevertheless, connecting to digital copyright infringement, there is a need for unanimous legal revisions to provide solutions to issues of copyright infringement by AI.⁶² Aside the lacuna in our copyright laws, insufficient funding affects the Nigerian Copyright Commission in carrying out their roles such as; influencing investigations, technology adoption and prevention of digital infringement thus, limiting its operational efficiency.⁶³ The restraint in funding obstructs the establishment of the developed structures that are needed to counter emerging piracy mediums obstructing the investigation of digital infringement, therefore delaying the enforcement of the modern technologies to track numerous digital infringements.

Additionally, there is the issue of internet infringements that happen because of the intricate and wide nature of the internet. Users may not directly commit infringement but may cause it to happen by distributing or granting unauthorized usage of copyrighted creations resulting in indirect involvement in the infringement. In Nigeria, as the artificial intelligence develops, numerous emerging legal problems that are connected to copyright law are gaining prominence. These challenges highlight global trends while also emphasizing on local contexts. When it has to do with creation of AI-Generated works it becomes a serious challenge as to who has authorship and ownership to the work. Is it the human creators or is it the Artificial Intelligence? Traditionally copyright legislations grant rights to human creators, nevertheless, this does not eliminate the reality of AI systems possessing autonomous nature to create works of its own.⁶⁴

Determining whether AI-generated content is suitable as a derivative work and what rights owners are bestowed with and how, can be complicated. The application of copyright to derivative works by AI is still undefined and courts are struggling with how to apply existing legislations to this

⁶² Ikenna U Ibe and Noel N. Udeoji, 'The Challenges and Prospects of Nigeria Copyright Administration In a Digital Artificial Intelligence Age' (2019) 3(1) Afe Babalola University Law Journal 110-132

⁶³ *ibid.*

⁶⁴ N. Iguh and others, 'The Impact of Technology and the use of the Internet on Copyright Enforcement in Nigeria' (2023) 14(2) KIU Journal of International Law and Jurisprudence 7.

new technology. Derivative works is provided for in the Nigerian copyright legislation; however, its application to AI-generated content is not stated.

Nigeria is impacted by the international copyright treaties and regional contracts, which do not fully discuss AI connected problems. Nigeria has ratified some of the international covenants to protect copyright like, the Berne Convention, and the WIPO Copyright Treaty that addresses protection of works in the digital space. Policymakers must balance the protection of the owner's rights with the requirement to foster establishment and ensure that AI technologies can operate effectively.

The intersection of AI into creative organisations raises fundamental issues for copyright legislation in Nigeria. As AI technology changes, Nigerian legal structures need to adapt to ensure that they adequately discuss problems of authorship, protection and liability of AI works in accordance with the international structures.⁶⁵ In Nigeria, little development has been observed in handling the online infringement, a prominent shortfall in discussing the digital copyright problems. Regardless, of the efforts and legislation, weak adoption of the legislation continues and this is evident in the widespread of the online piracy with unauthorized content present. This hinders the creator's rights and the development of the Nigeria's creative industry.

5. Criminal Liability for AI and Copyright Infringement: Who to Sue?

The basic enquiry of criminal legislation is the question of criminal liability, that is whether certain entity either a human or a company bears the criminal liability for a certain crime committed at a certain point in time and space.⁶⁶ Under the Nigerian law, an individual shall not be convicted of a crime unless that crime is described and such an act or omission is performed with intent⁶⁷ and the punishment therefore is prescribed in a written legislation.⁶⁸ Part V of the Copyright Act 2022 provides for the criminal liability for copyright infringement but did not provide for copyright infringement facilitated by AI. Applying the provisions of the Act to AI and copyright situation in Nigeria, one can opine that AI cannot be responsible for copyright infringement since the Copyright Act specifically addresses persons,⁶⁹ as such AI cannot be liable for a crime not existing under the Nigerian legislations.

When can an artificial intelligence model be said to have committed a crime so as to be liable? The answer can be derived from the liability models presented by Gabriel Hallevy, which he used to determine who the legislation recognizes as liable, so as to lay the to rest the curiosity on who bears responsibility.⁷⁰ Gabriel Hallevy propounded the imposition of the criminal liability on Artificial Intelligence entities making use of the possible models of liability: the Perpetration-via-another liability model and the Natural Probable Consequence liability model. The Perpetration-

⁶⁵ Harlem Solicitors, 'Copyright law and the Emergence of Artificial Intelligence: Emerging Legal Issues and Challenges' <<https://www.harlemsolicitors.com/2025/01/30/copyright-law-and-the-emergence-of-artificial-intelligence-emerging-legal-issues-and-challenges/>> accessed 28 July 2025.

⁶⁶ O Uguru, 'Artificial intelligence Entities and Criminal Liability: A Nigerian Jurisprudential Diagnosis' (2018) 3 *Kampala International University Journal of Jurisprudential Diagnosis* 6

⁶⁷ *ibid* at page 13

⁶⁸ Constitution of the Federal Republic of Nigeria 1999 (as amended), s.36(12).

⁶⁹ Copyright Act 2022, s. 44.

⁷⁰ Gabriel Hallevy, 'The Criminal Liability of Artificial Intelligence Entities - from Science Fiction to Legal Social Control', (2010) 4(2) *Akron Intellectual Property Journal* 171-199; see also Gabriel Hallevy, 'The Basic Models of Criminal Liability of AI Systems and Outer Circles' (2019) <<https://ssrn.com/abstract=3402527> or <http://dx.doi.org/10.2139/ssrn.3402527>> accessed 10 August 2025

via-Another liability model does not consider artificial intelligence to possess any human characteristics.⁷¹ According to this test, AI systems are deemed innocent agents. Under the eyes of the law, a machine is a machine and can never be a human. Nevertheless, the incredible abilities of AI systems cannot be set aside but these abilities are rather insufficient to consider the AI criminally liable for a crime.⁷²

Lawfully, when a crime is committed by an innocent agent (a child, an insane person or one who lacks the state of mind to commit a crime), the intermediary is deemed a sophisticated tool, while the individual arranging the crime is the real culprit as a principal and is held liable for the actions of the innocent agent.⁷³ The culprit's liability is considered to be the basis of the agent's conduct and his mental state. This parallel is similar to AI infringement as AI lacks a mind of its own like a child that it cannot be assumed to have knowledge of its infringement. The derivative question relative to artificial intelligence models is; who is the culprit-via-another? There are two suspects; first, the programmer of the software and second, the end-user. The burning question then is whether the programmer who creates the AI to commit a crime or an end user, who although did not create the AI model but uses it for himself commits a crime is responsible?

The perpetration-via-another liability model considers the action committed by the Artificial Intelligence entity to have been the programmer's or the user's action. No mental feature needed for the criminal liability that is ascribed to the AI system. When programmers or users make use of an AI entity instrumentally, the liability of a crime by the AI entity is attributed to them. The internal factor needed in the certain crime exists in their minds. Likewise, when an end-user uses an innocent agent to commit an offence, the end-user is deemed to be the culprit. This liability model does not attribute any mental ability to the AI model. There is no difference between an AI system and a hammer used instrumentally by a burglar to open a window pane for sinister reasons. The screwdriver is not responsible but its actions are basically that of the burglar. The perpetration-via-another liability model is not applicable when an AI model commits an infringement centered on its own collated data or information.

The Natural-Probable impact liability model is fully involved with the programmers or users in the Artificial Intelligence body's daily operations, without the *mens rea* of committing any crime through the AI body.⁷⁴ For instance, during the operation of its regular duties, if an AI system commits a crime, the programmer or users have no information of the crime until it has already been committed. In relation to this model, an individual might be held responsible for a crime, if the crime is a natural and probable consequence liability model. Programmers or users are not under any requirement to have knowledge about any forthcoming action of a crime, but they need to be aware that such a crime is a natural, probable outcome of their operations.

The programmers or users of an AI body, who should have been aware of the probability of the forthcoming operation of the infringement, are held criminally responsible for the infringement, although they were not aware about it. Reasonable programmers or users should have been able to

⁷¹ *ibid*

⁷² Ankit Kumar Padhy and Amit Kumar PadhNirma, 'Criminal Liability of the Artificial Intelligence Entities', (2019) 8(2) University Law Journal 15-20; see also, U.C Kalu and O.U Oduma, 'An Examination of Criminal Liability of Artificial Intelligence Entities: Nigerian Law in Focus' (2023) 11(4) International Business and Law Research 23-34

⁷³ Bridget Watson, 'A Mind of Its Own- Direct Infringement by Users of Artificial Intelligence' (2017) 58 IDEA 64.

⁷⁴ *ibid*.

foresee the possibility of copyright infringement occurring and should have made conscious effort to stop it from being committed by the AI model.⁷⁵

As a general rule in the matter of *Fawehinmi v Nigerian Bar Association*⁷⁶ it was held that only natural individuals and juristic individuals are able to sue or be sued in Nigeria. An individual who brings about an action in court must be an individual that is recognized by the law. Also, it was held in the matter of *Management Enterprise Ltd v Otusanya*⁷⁷ that the plaintiff as well as the defendant should be a juristic individual or natural individual existing or living at the time of the institution of the action. The name of the plaintiff or defendant must be a living individual or its corporate name in the case of a non-natural legal body. In Nigeria, the Artificial Intelligence entity cannot be sued hence, the writers of this paper are of the view that it would either be the programmers or users who had the mens rea and actus reus that should be sued.

It is a fact that AI cannot be responsible for any civil or criminal liability as it is being considered an entity with no legal personality and cannot be personally accountable for its actions.⁷⁸ Thus, the company that produces the AI may be responsible under the law of tort or corporate liability. This was in line with the decision of the court in an American Case *Nelson v American Airlines*⁷⁹ where the operators of autopilot aircraft were held responsible for the accident caused by an auto pilot structure.

When applying the natural-probable-consequence liability model to the programmer or user. It brings about two distinct types of the factual cases. The first type of matter is when the programmers or users were not attentive while programming or making use of the AI body but there was no criminal intention to commit any crime. The second type of matter is when the programmer or users that is programmed or made use of the AI body intentionally and willfully in line to commit one crime through the AI body, but the AI body moved away from the plot and went ahead to commit some other crimes, in addition to what is planned.⁸⁰ The painstaking analysis of this model can assist the courts to distinguish and determine who should be criminally liable for the crime committed by AI.

6. Conclusion

Artificial intelligence has exposed the grey areas in copyright laws particularly in the area of determination of liability for infringement. Current legal frameworks do not provide clear legal guidelines to address the ambiguity surrounding AI-generated works. Existing copyright legislations rely primarily on human authorship which makes it a herculean task to directly apply these laws to AI. Liability, subject to the circumstances of each case, may lie in the user, the developer, the operator or the entity that created the system, but the lack of clear legislations to

⁷⁵ Jessica L. Gilotte, 'Copyright Infringement in AI-Generated Artworks' (2020) 53 UC Davis Law Review 2657-2674. See also, Joris M. Roos, 'Artificial Intelligence: Copyright and Consequences', (LL.M, Dissertation, Utrecht University, 2023) 38

⁷⁶ (1989) 2 NWLR at 595.

⁷⁷ (1987) 2 NWLR 179.

⁷⁸ Aisha Morohunfola, 'Legal Liability of Artificial Intelligence (AI) in Nigeria' <<https://www.linkedin.com/pulse/legal-liability-artificial-intelligence-ai-nigeria-aisha-morohunfola-nepqf>> accessed 15 August 2025.

⁷⁹ 626 F. Supp. 512 (D. Colo. 1986).

⁸⁰ Michael P. Goodyear, 'Who is Responsible for AI Copyright Infringement' (2024) 41 Issues in Science and Technology 31-33; see also, O Uguru, 'Artificial intelligence Entities and Criminal Liability: A Nigerian Jurisprudential Diagnosis' (2018 3) KIU Journal of Jurisprudential Diagnosis 13

enforce this poses a great challenge. This lacuna in the law across various legislations related to copyright and information technology in Nigeria can easily be resolved with sufficient amendment. It requires more nuanced legal frameworks and careful deliberation on coherent legal principles to address the issue of artificial intelligence and copyright infringement. This study underscores the need for legal reform to address copyright infringement by artificial intelligence systems in Nigeria.

7. Recommendations

The inadequacy of the current legal framework to cater for AI in copyright infringement poses a serious challenge. Hence, the following recommendations are proffered as solutions.

- i. Considering how AI is revolutionizing the creative process, the Nigerian Copyright Act and other legislations on copyright should be reviewed to adequately address AI-generated works and AI infringement and provide clear guidelines to determine who is criminally liable for AI copyright infringement.
- ii. Courts should apply the rule of strict liability to artificial intelligence in terms of infringement and where AI itself is considered to be the infringer, the developers or users can be found secondarily liable for their own actions.
- iii. In order to curb AI infringement, it is crucial that contractual agreements be implemented by AI service providers, developer and the users to explicitly defining ownership of generated work, terms and permission of usage to avoid potential copyright infringement.
- iv. Disclosure of the use of AI for works, creativities and contents should disclose source of their work to avoid deception, manipulation in order to promote transparency and sanctity of the law against copyright infringement.