THE CHALLENGES AND PROSPECTS OF NIGERIA COPYRIGHT ADMINISTRATION IN A DIGITAL ARTIFICIAL INTELLIGENCE AGE

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ABSTRACT

Copyright is one of the several existent intellectual property rights which seek to protect original works of authorship fixed in any medium of expression known or later to be developed. While this form of protection exists, the influx of digital revolution also persists to cause a strain in copyright administration and protection due to evolution in means of replication, manipulation, reproduction, dissemination, access to copyrighted materials, etc. This work aimed at examining the approach of the Nigerian copyright system and her administrative structure in the face of digital and internet evolution, by extension Artificial Intelligence (AI) revolution which is an emerging technology. Is the new copyright system staller enough to meet the increasing requirements of protection for copyrighted materials, or capable to simultaneously evolve with digital and internet revolution? This work further seeks to examine the inherent weakness in the present copyright system despite the new enactment. The doctrinal methodology was employed in this work. It was discovered that despite the introduction of Copyright Act of 2022, which incorporates several multilateral agreements, expands copyright protection to online works, made provisions regarding technological protection, a practical overhaul of the entire gamut of the copyright system to reflect the intendment of this Act is strictly recommended. Conclusively, incorporation of technology and adequate manpower in the copyright administration will meet the technological requirements of providing protection against digital and online infringement which AI is now a critical tool.

Key word: Challenges, Prospects, Nigeria, Copyright Administration, Digital, Artificial Intelligence, Age

1.0 **Classification of Intellectual Property Rights**

Intellectual Property (IP) is simply referred to as property that is the result of intellectual activity.¹The several forms of IPprotectable under its unique framework are as follows:

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Copyright and Related Rights: This is the right of authors and related right holders to their work and related objects. In *Yemi Anikulapo-Kuti & Ors. v Iseli & Ors,*²which involved the issue of authorship and copyright subsistence in a musical work, must originate from its author who has expended special skill, and labour in producing it.³ In the narrow sense it refers to the right of authors to their work and in a broader sense it includes rights of performers, audiovisual producers, broadcasters, publishers, etc. This related rights⁴in broader sense referred to, is used in loose sense since the 2022 copyright Act has shattered the glass of any form of demarcation of any sort.

Patent Rights: The Patents and Designs Act⁵, the governing legislation does not proffer a definition of patents, however, it is the government grant of a right, privilege, or authority.⁶An exclusive right granted for an invention – a product or process that provides a new way of doing something, or that offers a new technical solution to a problem. According to WIPO resource, a patent is "a document issued, upon application, by a government office (or a regional office acting for several countries), which describes an invention and creates a legal situation in which the patented invention can normally only be exploited (manufactured, used, sold, imported) with the authorisation of the owner of the patent.⁷In other words, a patent is a bundle of monopoly authority granted to an inventor or his assignee for a stated duration permitting him to prevent other persons from exploiting his invention and control unauthorized access to the patented invention without his consent.⁸There are three types of patents: utility patents, design patents, and plant patents.

¹ E Bouchoux, Intellectual Property: *The Law of Trademarks, Copyrights, Patents and Trade Secrets* (Cengage

Learning, 2012) 3

² (2003-2007) 5 I.P.L.R. 53-73

³ D O Oriakhogba and I A Olubiyi, Intellectual Property Law in Nigeria Emerging Trends, Theories and Practice

⁽Benin: Paclerd Press Limited, 2021) 143

⁴WIPO, Intellectual Property Basics: A Q&A for Students (CNIPA and WIPO, 2019) 20

⁵ Cap P2, Laws of the Federation of Nigeria (LFN) 2004

⁶ Bryan A Garner (ed), *Black's Law Dictionary* (9th edn, West Publishing Company 2009) 1234

⁷ World Intellectual Property Organisation, IP Handbook, (2 Ed, Geneva: WIPO, Publication No. 489(E) 2004 13

⁸ J H Mike and G Uloko, *Modern Approach to Intellectual Property Laws in Nigeria* (Lagos: 2nd edn., Princeton &

Associates Publishing Co. Ltd, 2022) 146

Trademark Right: Trademark is a sign used for goods or services⁹ to identify the source of the good or service.¹⁰Trademark means, "except in relation to a certification trademark, a mark used or proposed to be used in relation to goods for the purpose of indicating, or so as to indicate, a connection in the course of trade between the goods and some person having the right either as proprietor or as registered user to use the mark, whether with or without any indication of the identity of that person, and means, in relation to a certification, a mark registered or deemed to have been registered under section 43 of this Act".¹¹Marks generally used to authenticate products, services and even businesses have rights of exclusivity attached to them. There are four types of marks: trademarks are used for goods; service marks are used for services;¹² and collective marks indicate membership in an organization.

New Plant Variety Rights: An emerging and cross-cutting IP trend, when a new plant is cultivated artificially or by cross-breed to produce new varieties, protection can be offered to it where it is novel, distinct, uniform and stable.¹³ Invariably, patent cannot be validly obtained in respect of plant or animal varieties, or essentially biological processes for the production of plants or animal (other than microbiological processes and their products).¹⁴

Geographical Indication (GI): This protects a specific product originating from a specific area that gives the product its unique features and characteristics.¹⁵Meanwhile, Nigeria is yet to establish sui generis legislation on GIs, the only legislation which, at present, could potentially protect GIs is section 43 of the Trademarks Act, which states that "A mark adapted in relation to any goods to distinguish in the course of trade goods certified by any person in respect of origin, material, method of manufacture, quality, accuracy or other characteristic, from goods not so certified shall be registrable as a certification trade mark in Part A of the register in respect of those goods in the name, as proprietor thereof, of that person".

 $^{^9}$ Insights on the Business Facilitation Act 2023, 6 < www.doa-law.com> accessed 25 November 2023

¹⁰WIPO, *op cit*, 51

¹¹ Cap T13, LFN 2004, section 67 (1) interpretation section

¹² Ibid, section 43

¹³WIPO, *op cit*, p 64

¹⁴Patents and Designs Act, section 1(4)(a)

¹⁵Ibid

Unfair Competition: This is an act of competition contrary to honest practices in industrial or commercial matters.¹⁶

Trade Secret: Also known as undisclosed information is a secret unknown to the general public and has commercial value because of its confidentiality and commercial importance; and of which the legitimate controller of the information has taken reasonable confidentiality measures.¹⁷ Although not falling within IP statutory protection in Nigeria, emerging too, it subsists at common law, and therefore part of the body of Nigerian laws.¹⁸

Industrial Design: section 32 of the Patents and Designs Act provides that "a design means an industrial design". This indeed delimits the scope of its application. However, it is the shape, configuration, pattern, or ornament applied to a finished article of manufacture, often to distinguish the product's appearance.¹⁹ Patent are rights granted to the ornamental or aesthetic aspects of an article or product. A design may consist of three-dimensional features, such as the shape or surface of an article, or two-dimensional features, such as patterns, lines or color.The legal protection of industrial design is "granted in many countries, pursuant to a registration system, to protect the original, ornamental and non-functional features of a product resulting from design activity.²⁰

Traditional Cultural Expressions (TCEs): Also called "expressions of folklore", TCEs may include music, dance, art, designs, names, signs and symbols, performances, ceremonies, architectural forms, handicrafts and narratives, or many other artistic or cultural expressions.²¹

2.0 Concept of Copyright Protection

Copyright is a legal safeguard that crucially protects the creations of authors and artists from unauthorized reproduction, distribution, performance, or

¹⁶ Article 10(2) Paris Convention for the Protection of Industrial Property

¹⁷WIPO, *op cit*, 66

¹⁸ Terrapin v. Builders' Supply Co (Hayes) Ltd, Taylor Woodrow Ltd & Swiftplan Ltd. [1967] R.P.C. 375 at 391

¹⁹Bryan A Garner (ed), *Black's Law Dictionary* (9th edn, West Publishing Company 2009) 845

²⁰J H Mike and G Uloko, *Modern Approach to Intellectual Property Laws in Nigeria* (Lagos: 2nd edn., Princeton &

Associates Publishing Co. Ltd, 2022) p 238 citing WIPO, Understanding Industrial Property (WIPO, 2016) 13

²¹ WIPO, Traditional Cultural Expressions <https://www.wipo.int/tk/en/folklore/#:~:text=Traditional%20cultural%20expressions%20(T CEs)%2C,other%20artistic%20or%20cultural%20expressions.> accessed 10 October 2023

display, all of which could diminish their income and deter future creative endeavors. Importantly, works are automatically given copyright protection as long as they meet the requirements for such, without any formality required.²²

To qualify for copyright protection, a creative work must meet several criteria: it must be original, exist in a tangible form, and qualify as a "work of authorship."²³ Originality doesn't require novelty but rather independence in creation.²⁴ Common subjects of copyright protection encompass literary, musical, and dramatic works, as well as visual arts, audiovisual works, sound recordings, and architectural creations.²⁵ However, certain materials are ineligible for copyright, such as useful articles, facts, ideas, titles, and works produced by the government.²⁶ In some cases, non-copyrightable content, like factual information, may still gain protection if its arrangement or compilation displays creativity, like organization of facts within a book of lists, for instance.²⁷

Over time, copyright protection has adapted to accommodate advancements in technology, extending protection to creations like computer programs, websites, and digital forms and currently now evolving to protect artificially generated contents. This evolution ensures that modern forms of expression receive the same level of protection as traditional works.

2.1 Meaning and Concept of the Internet

The Internet connects computers worldwide, allowing us to share data and access information. Tim Berners-Lee's invention of the World Wide Web in 1989 made it easier to navigate using web pages and links. This transformed the Internet into a vast ecosystem, changing how we communicate, learn, shop, and entertain ourselves. Email, messaging, and video calls have revolutionized personal and professional communication. Social media connects us globally. Search engines like Google provide instant access to a

²² Sec 4, Nigerian Copyright Act, 2022 (NCA)

²³ Sec 2(2) Nigerian Copyright Act, 2022; *Donoghue v. Allied Newspapers Ltd.* [1938] Ch. 106

²⁴University of London Press v University Tutorial Press [1916] 2 Ch. 601

²⁵ Sec 2(1) NCA; Yemitan v. Daily Times (Nig.) Ltd. [1980] F.H.C.R. 186, (1977-89) 2 I.P.L.R 141, where it

washeld that "copyright belongs to the author, who is the one that actually expended the work, labour, knowledge and skill."

²⁶ Sec 3 Nigerian Copyright Act and Secs 20-27 Nigerian Copyright Act

²⁷Feist Publications Inc. v Rural Telephone Service Co. [1991] 499 U.S. 340

wealth of information. Online platforms offer education through resources like *Coursera* and *edx*. Shopping online with *Amazon* and *Jumia* is common, and streaming services like *Netflix* and *YouTube* have changed how we watch movies and shows.

While the internet facilitates the widespread distribution of digital content, it also poses risks of infringement through unauthorized sharing, reproduction, distribution, reproduction, exclusive use, performance rights, and a plethora of other associated and related IP rights. Issues like digital piracy, file sharing, and streaming platforms have prompted copyright holders to adapt their strategies for protecting their works and seeking fair compensation. Furthermore, copyright law has evolved to address emerging digital forms of creative expression, including blogs, social media, and digital art, ensuring that the rights of creators are upheld in the digital age. Also, internet revolution, leading to emergence of frontier technologies like AI, has significantly reshaped the landscape of content creation and distribution.

Copyright, crucial in this evolving digital and internet ecosystem, must seek to protect the IPof creators amid new challenges and opportunities in the online world.

2.1.1 Meaning of Digital

"Digital" signifies the representation of contents and data in electronic or computer-readable formats, enabling easy replication, distribution, and access to content through digital platforms and the internet. However, the widespread sharing of data and contents through digital means such as peer-to-peer file-sharing networks can however lead to a series of IP infringements, as these digital copies are often shared without the consent of creators and owners, thus posing challenges in enforcing copyright protection in the digital age.²⁸

2.1.2 Concept of Digital Piracy

Digital piracy involves unauthorized copying, sharing, or distribution of copyrighted digital content, e.g. software, movies, music, and more. The activities often facilitated through torrent websites,²⁹file-sharing platforms, peer-to-peer networks, artificial intelligence systems undermines the rights of data, content creators and leads to significant financial loss for industries.

²⁸A and M Records v Nasper 239 F.3d 1004 (2001) where the court held that prohibitive use of such networks can amount to infringement of the right of the copyright owners.

²⁹ Torrent websites are online platforms where people can freely download and share digital files, often without the permission of their owners, using a special kind of software.

Its far-reaching consequence affects both copyright holders and consumers, resulting in substantial financial losses for content creators, because pirated copies are readily available for free or at a fraction of the legitimate price. Digital piracy can also lead to decreased investments in innovation and new content creation, ultimately harming the overall quality and diversity of digital content. From a legal perspective, copyright infringement through digital piracy can lead to lawsuits, fines, and penalties for individuals or entities caught engaging in such activities. Combating digital piracy should be a significant focus for governments, organizations and creators and requires an efficient framework that combats the challenges faced by digital piracy. The copyright inspectors saddled with policing responsibilities of the NCC need to do more in this regard.

2.2 Artificial Intelligence and Digital/Internet Revolutions

The Digital/Internet and Artificial Intelligence (AI) revolution bear remarkable similarities, the former serving as a faucet for the emergence of the latter. Both have fundamentally transformed our world, offering significant parallels with the domain of copyright that shift our perspective to viewing data and content as driving forces that underscores their immense influence.

2.2.1 Similarities between AI and Digital/Internet Revolutions

Redefinition of Creative Industries: Similar to how the internet disrupted traditional publishing and distribution, AI is being harnessed to revolutionize content creation and copyright ownership. For instance, in the world of music, streaming platforms, born from the digital age, changed the music industry's dynamics, challenging conventional copyright models.³⁰ AI is now complementing these streaming platforms with tools for musicians, such as AI-generated compositions, DJs, personalized playlists, and recommendation engines.³¹

Copyright Protection in the Digital Age: The Digital/Internet revolution facilitated the sharing and dissemination of content worldwide, presenting an edge on the creative exercise as well as a challenge for copyright protection.³²

³⁰<https://dima.org/policy-priorities/tech-and-innovation/> accessed 18 October 2023

³¹<https://cubettech.com/resources/blog/ai-in-online-streaming-service/> accessed on 18 October 2023

³²C Nwabachili and N Udeoji, 'Digital Infringement and Administration of Copyright in Nigeria'[2019] 1 (1)

International Journal of Comparative Law and Legal Philosophy, 24 https://scholar.google.com/citations?view_op=view_citation&hl=en&user=SeyC5NcAAAAJ

The advent of AI can help creators identify possible copyright infringement through advanced content recognition and monitoring systems.

Enhancement of Distribution and Content Discovery: While the internet revolution connected creators with audiences, shrinking the world into a small global village and causing complications such as the exhaustion rule in distribution of online materials³³, AI makes it even more complicated: digital platforms allow authors, musicians, and artists to distribute their work to a broader audience while AI-driven recommendation algorithms on platforms like Netflix, Spotify, and Amazon Kindle enhance this by suggesting content tailored to users' preferences.

Content as Fuel for Innovation: The AI and Digital revolutions thrive on content as their core. Online content fuels engagement, from text to music as AI adds personalized experiences. For instance, in academic research, online platforms such as Google scholar store vast academic content, while AI algorithms such as CoPilot and SciSpace helps analyze, connect researchers, and speed up discoveries. This partnership underlines content's role in generating ideas and innovation. It all highlights the need for stronger copyright enforcement in our interconnected world.

2.2.2 Distinctions between AI and Digital/Internet Revolutions

The AI revolution revolves around the development of intelligent systems capable of learning and decision-making. In the context of copyright, AI has introduced advanced content recognition systems, such as YouTube's Content ID, which automatically identify copyrighted material in user-uploaded content like videos while monetizing same. AI's personalization capabilities can also be seen on platforms like Netflix and Spotify, where recommendation algorithms suggest content tailored to individual user preferences.³⁴ Nevertheless, the rise of AI content creation poses challenges related to identifying instances of copyrighted material, liability for AI-generated infringements, and ownership issues surrounding content produced by AI.

In contrast, the Digital/Internet revolution primarily centers on global connectivity and the ease of sharing digital content globally. However, this ease of sharing has given rise to significant copyright challenges, as users

[&]amp;citft=1&citft=2&citft=3&email_for_op=nn.udeoji%40unizik.edu.ng&citation_for_view=Se yC5NcAAAAJ:UeHWp8X0CEIC>accessed 3 November 2023

³³UsedSoft GmbH v Oracle International Corp [2012] ECDR 19 CJEU at 72

³⁴ Crossing Minds, 'What are today's top recommendation engine algorithms?' <https://www.acquia.com/blog/digital-rights-management> accessed on 18 October 2023.

frequently distribute copyrighted material on platforms like social media. The proliferation of shared content without proper authorization has raised concerns regarding copyright infringement and questions of what proper jurisdiction and laws apply at these instances.³⁵

3.0 Applicability of the Nigerian Copyright System to Digital and Internet Challenges

The Nigerian copyright system faces a crucial juncture as it adapts to the digital era, internet expansion, and the emergence of advanced technologies like Artificial Intelligence. This new landscape challenges traditional copyright norms and requires a nuanced evaluation to ensure the system effectively safeguards IP and encourages innovation.

3.1 The Nigerian Copyright Act 2022: New Provisions for the Digital Age

The Copyright Act shifted the rights of performers and cultural folklore expressions from 'neighboring rights' to Parts VIII and IX of the extant Act, aligning them more closely with traditional copyrights. This change addresses the limitations of failure to meet the criteria for a definite medium of expression requirement. Additionally, the Act now includes provisions for digital and internet use, the game changer, tackling online copyright issues which the Copyright Act did not envisage in the 1988 version.

3.1.2. Digital Rights for Copyright Owners: The Copyright Act revisions granted owners exclusive rights to share their works publicly using wired or wireless methods.³⁶ The amendment recognizes the importance of digital platforms and aims to empower copyright holders by granting them control over their work's digital distribution, combating online piracy. Moreover, in cases where evidence of piracy surfaces, copyright owners can now enforce their digital rights to prevent such occurrences by issuing formal takedown notices.³⁷ The amendments now ensure that only copyright owners or

³⁵C Nwabachili and N Udeoji, 'Digital Infringement and Administration of Copyright in Nigeria' [2019] 1 (1)

International Journal of Comparative Law and Legal Philosophy, 19. https://scholar.google.com/citations?view_op=view_citation&hl=en&user=SeyC5NcAAAAJ & https://scholar.google.com/citations?view_op=view_citation&hl=en&user=SeyC5NcAAAAJ & https://scholar.google.com/citations?view_op=view_citation&hl=en&user=SeyC5NcAAAAJ & https://scholar.google.com/citations?view_op=view_citation&hl=en&user=SeyC5NcAAAAJ & scholar.google.com/citation for_op=nn.udeoji%40unizik.edu.ng&citation_for_view=SeyC5NcAAAAJ:UeHWp8X0CEIC>accessed 3 November 2023

³⁶ Nigeria Copyright Act 2022, Section 9 (i)

³⁷*Ibid*, Section 54

authorized representatives can upload works on platforms like YouTube, cementing creators' control over their content in the digital space.

3.1.3 Take down of Infringing Material and Suspension of Accounts: This rule empowers copyright holders to request platform providers to promptly remove identified infringing content. Once notified as per guidelines, providers must take swift action and inform the alleged infringers.³⁸ Alleged infringers can respond within seven days by submitting a written counter-notice if they believe they hold the copyrights to publish the work, ensuring fair hearing principles are followed.³⁹ The process involves the copyright owner, notifying the subscriber responsible, and resolving disputes through the NCC.

3.1.4 Liability Limitations for Internet Service Providers: The Act protects service providers from financial responsibility for copyright infringement by users.⁴⁰ This protection applies in specific circumstances such as when service providers lack knowledge of infringement and promptly remove the infringing material upon becoming aware of it.⁴¹ The provisions aim to balance copyright holder rights and service provider immunity, requiring swift response to reported infringements. This encourages innovative platforms for user-generated content while limiting exposure to copyright claims.

3.1.4 The NCC's Administrative Power to Block Infringing Online Content: The Nigerian Copyright Commission has also been authorized to block access to online content that infringes copyright.⁴² This provision intends to safeguard copyright holders' rights online by blocking access to infringing content through orders to internet service providers. Similarly, the United Kingdom (UK) Digital Economy Act uses court-ordered website blocking to prevent copyright infringement.⁴³ Likewise in the United States (US), the 1998 Digital Millennium Copyright Act (DMCA) permits copyright holders to issue takedown notices to internet service providers, disabling

³⁸*Ibid*, Section 55(1)

³⁹*Ibid*, Section 55(2)

⁴⁰*Ibid*, Section 58

⁴¹*Ibid*, Section 58 (a) – (d)

⁴²*Ibid*, Section 61

⁴³ United Kingdom Digital Economy Act 2017, Section 23.

access to infringing content. Although, unlike Nigeria, content blocking in the US typically requires a court order.⁴⁴

3.1.6 Redefinitions to Accommodate Digital and Internet Revolution: The Act introduced the term "Audio-visual works" in place of "Cinematograph works".⁴⁵ Additionally, the Act explicitly broadened the definition of "copy" to encompass digital copies.⁴⁶ This amendment significantly bolsters the protection of IP rights for digitized content, including music, videos, and e-books, within the legal framework.

3.1.7 New Exceptions to Copyright Protection for Computer Programs: The Act outlines scenarios where the copying or adaptation of software is exempted from copyright control.⁴⁷ These exemptions allow essential use, archival purposes, and activation of authorized software copies for machine maintenance while providing flexibility for software developers and users and ensuring legal use without violating copyright laws. However, there should be a more specific language that particularly addresses permissible use for developers to balance legal compliance and user needs.

3.1.8 Enhanced Anti-Piracy and Technology Protection Measures: The Copyright Act introduced stringent measures to combat copyright infringement, importation or illegal possession of piracy-related equipment without permission, and reproduction of anti-piracy tech devices. It specifically criminalizes tampering with digital ownership identification within copyrighted works and the use, importation, or sale of technology aimed at circumventing technological measures preventing copyright infringement.⁴⁸ These measures, in compliance with WIPO Copyright Treaty, safeguard copyrighted content via Technological Protection Measures like digital rights management. The provisions in the Copyright Act is TRIPS compliant, it maintains the minimum standards set by it.

3.2 Crucial Internet and Digital Challenges Confronting Nigeria's Copyright System

Nigeria's copyright system faces key challenges in the digital landscape, including IP protection, online piracy, emerging technologies like AI,

⁴⁴ United States DMCA, Section 512 (3) (i) (1) (scope of relief)

⁴⁵ Nigeria Copyright Act, Section 2(d)

⁴⁶Ibid

⁴⁷*Ibid*, Section 20(2)

⁴⁸*Ibid*, Sections 49 and 50

copyright enforcement versus fair use, and the evolution of digital platforms. We shall delve into some of these crucial challenges:

3.2.1 Digital Alteration and Manipulation: The seamless transformation of digitized content poses potential challenges in upholding moral rights, particularly concerning issues such as failure to attribute the correct author, false claims of authorship, and maintaining the integrity of the original work.⁴⁹ Addressing concerns about alterations to a work is complex, especially regarding preserving the original creator's integrity. The moral right against derogatory treatment is pivotal here.⁵⁰ Digital manipulation, while encouraging innovation, also holds the potential to harm an altered content's quality. In fact, Nwabachili and Udeoji⁵¹ likened this issue to the problems often encountered with inaccurate translations, which can render the translated work entirely useless if conducted inadequately.

3.2.2 Remote Linking: Known as hot-linking or inline linking, it involves directly linking to a web resource from another site without hosting the content. Although seemingly convenient, hot-linking raises significant copyright concerns. Although, this practice may pass off as fair use in instances where its use is transformative or educative, such as in *Perfect 10, Inc. v. Amazon.com, Inc*, it is however a serious issue of copyright infringement where it does not fall within any exception and occurs without permission of the owner.⁵² Hot-linking poses a challenge to copyright owners by displaying content without permission, affecting recognition, revenue, and content integrity.

3.2.3 Downloads and Uploads of Works: The digital and internet revolution has introduced a substantial challenge to copyright through the widespread practices of downloading and uploading content. **Downloading** refers to the act of obtaining digital files (which may be copyrighted) from the

⁴⁹C Nwabachili and N Udeoji, 'Copyright in Digital Format (Data Storage and Processing)' [2018] 5 (2) UNIZIK

Journal of Commercial and Property Law, 122. https://journals.unizik.edu.ng/jcpl/article/view/421/389

accessed 3 November 2023

⁵⁰ Nigeria Copyright Act, section 14; De Souza [2002] IPQ 265; Harding and Sweetland (2012) 7 JIPLP 565; Lea in

Pollaud-Dulian (ed), *The Internet and Author's Rights* (1999); Pessach (2003) 34 IIC 250 51 *Ibid*

^{52 (2007) 9}th Cir. 508 F.3d 1146

internet onto a personal device. Illegal downloading can severely impact the income and control of content creators, as their works are distributed without compensation or permission. Thus, in *A&M Records, Inc. v. Napster, Inc*,⁵³ the court ruled that a file sharing and download platform facilitated widespread copyright infringement and held the company accountable for contributory and vicarious copyright infringement. **Uploading** on the other hand, involves placing content from a personal device onto the internet. This process, while often associated with sharing personal content, can also lead to copyright violations when individuals share copyright materials without the permission of the original creators or copyright holders. Blog owners frequently upload various content such as pictures, music, videos, articles, and books, much of which may be copyrighted.⁵⁴Nwabachili and Udeoji highlighted exemplary copyright concerns on academia.edu resulting from insufficient source acknowledgment when researchers upload papers, also noting cases where works are shared via email attachments.⁵⁵

3.2.4. Derivation and Adaptation: The act of digitizing or transferring content, even if incorporating pre-existing works in their original or altered forms, constitutes reproduction within the right of copyright.⁵⁶ The digital domain complicates defining adapted and derivative works, impacting the balance between creativity and original creators' rights. Uncertainty arises due to the multifaceted nature of digital content, making assessments and tests for adaptations challenging within copyright laws.

3.2.5 Scanning: This involves converting physical documents or images into digital formats, potentially including copyrighted text, images, or content. While scanning itself is not copyright infringement, sharing or reproducing scanned copyrighted material without permission can lead to infringement. Unauthorized distribution or reproduction of copyrighted content obtained through scanning, especially when shared online or used without appropriate authorization, may violate the rights of the original creators or copyright holders.

Journal of Commercial and Property Law, 70. <https://journals.unizik.edu.ng/jcpl/article/view/421/389> accessed 3 November 2023

⁵⁶*Ibid* p 121

⁵³ (2001) 9th Cir 239 F.3d 1004

 ⁵⁴ C S Kian & R Y Meng, *E- Commerce Law* (Singapore: Time Book International, 2001) 45.
⁵⁵C Nwabachili and N Udeoji, 'Copyright in Digital Format (Data Storage and Processing)'
[2018] 5 (2) UNIZIK

3.2.6. File Sharing: Peer-to-peer file sharing involves the transfer of digital files between computers using the internet or data.⁵⁷ Earlier storage methods like floppy disks, pen drives, CDs, and DVDs offered various storage capacities. However, contemporary digital and internet file sharing networks allow direct exchanges among computers, enabling speedy copyright infringement via platforms like BitTorrent and LimeWire. Legal and technological efforts like Digital Rights Management (DRM) aim to curb this issue, but the evolving internet nature poses an ongoing challenge in balancing content access and creators' rights.

3.2.7 Buffering: Also referred to as caching, this is a method derived from the French word *"cacher"* meaning 'to hide', which is commonly used in computing to store and retrieve recently accessed information locally, minimizing the need for additional network access time and reducing the burden on network traffic.⁵⁸ Caches store data from web servers, including copyrighted content, raising copyright concerns by potentially duplicating and sharing protected works. This practice conflicts with authors' rights and the public's interest in maintaining the internet's functionality. In *Playboy Enterprises, Inc. v. Frena*,⁵⁹ the issue of file caching was raised when Playboy sued a BBS operator for storing and distributing copyrighted photographs, similar to how cache servers operate by storing and sending copied files to internet users, potentially leading to copyright infringement through public distribution.

3.2.8 Mirroring: This is a practice of improving service for internet users by duplicating a web site globally and across various servers, thus making available critical information and content to all users at all the times.⁶⁰ In computing and internet terms, a mirror site is an exact duplicate of another internet site used to provide multiple reliable sources of the same information, potentially raising copyright concerns when used for artistic and literary works.⁶¹

 $< https://scholar.google.com/citations?view_op=view_citation&hl=en&user=SeyC5NcAAAAJ \\$

⁵⁷ V Sharma, *Information Technology Law and Practice* (3rd edn., New Delhi: Universal Law Publishing Company, 2011) 466.

⁵⁸Ibid

⁵⁹ (1993) 839 F.Supp. 1552

⁶⁰ V Sharma, *loc cit*

⁶¹C Nwabachili and N Udeoji, 'Nigerian Copyright System in The Modern Age and Its Implications' [2021] 12 (1) *Nnamdi Azikiwe University Journal of International Law and Jurisprudence*, 60 – 74

3.2.9 Text Replication: The two forms of copying in copyright infringement through digital means involve directly reproducing content from one work into another (as in copying a CD to an iPod), and transforming content into a different form (such as pasting text or graphics into a document).⁶² Copying, whether direct replication or transformation into a new form, can breach copyright when done without permission. This includes reproducing or inserting content from one source to another without proper authorization, violating the rights of the original creator (copyright holder).

3.2.10 Frontier Technologies: Frontier technologies such as AI, blockchain, VR, and IOT are quickly reshaping the digital landscape but also introducing challenges for copyright infringement. These innovations, while transforming content creation and sharing, pose great concerns due to potential copyright infringement in the digital realm.

One pressing issue is determining whether AI should be patented or copyrighted. Additionally, there are problems encountered while addressing ownership challenges as identifying the owner of AI-assisted work—whether the data provider, AI model developer, or AI owner—is crucial. The concept of a "person skilled in the art" might also change due to widespread AI use. Therefore, current IP rights provisions must adapt to AI-generated inventions, especially concerning copyright duration when the author is AI. Another concern involves potential IP risks linked to data used to train generative AI, the AI's innovative process, and its outputs. For example, where these data were sourced online without proper copyright licenses or simply repurposing datasets for AI training, then such involves unauthorized copying of copyrighted works; such as in *Getty Images (US), Inc. v. Stability AI, Inc*⁶³ where Getty Images claims that Stability AI copied photographs from its website and used over 12 million images and associated metadata to train Stable Diffusion.

Generative AI users may also depend on an AI developer's training process, which can sometimes be flawed. In a noteworthy legal case involving Microsoft, GitHub (a Microsoft subsidiary), and OpenAI, the plaintiff

[&]amp;citft=1&citft=2&citft=3&email_for_op=nn.udeoji%40unizik.edu.ng&citation_for_view=Se yC5NcAAAAJ:9yKSN-GCB0IC> accessed 3 November 2023 ⁶²*Ibid*

⁶³(2023) D. Del 1:99-mc-09999 https://docs.justia.com/cases/federal/district-courts/delaware/dedce/1:2023cv00135/81407/1> accessed 3 November 2023

anonymous programmers collectively alleged that the defendants' AI system inadvertently replicated their code repositories during its operations.⁶⁴ AI-generated outputs produced in response to user prompts may also infringe upon intellectual IP rights, especially when trained on limited datasets. This risk is more pronounced when the output closely resembles specific input data. For example, if a generative AI system, trained on a small dataset of poems, generates a new poem that closely mimics an existing copyrighted poem, it could raise concerns of IP infringement.

3.2.11 Illegal Content Streaming: Illegal streaming is the unauthorized viewing of copyrighted material online without downloading the file. It involves accessing and sharing copyrighted content without permission, typically through unauthorized platforms or channels. This activity violates creators' rights and can lead to legal consequences due to the unauthorized distribution of copyrighted material.

3.2.12 Cyberlockers: A cyberlocker is a third-party online service that provides file-storing and file-sharing services for various types of media files and data.⁶⁵ Cyberlockers provide storage for copyrighted material, granting anonymity to uploaders and the service itself. Known for easy access to unauthorized content, they lack search features, making it challenging to trace shared infringing content. This contributes to digital and online piracy.

3.2.13 Media Sharing Groups: Content releasing groups that operate on private sites and platforms play a major role in copyright infringement. Sharing media files and books via various platforms like WhatsApp, Facebook, YouTube, LinkedIn, Telegram, and other social media greatly contributes to online piracy. Once uploaded to the web, a work—whether a book, image, or drawing—can be infringed upon across multiple countries simultaneously, facilitated by a few simple clicks.

3.3 Implications of Digital and Online Infringement Activities on IP Rights

These various digital copyright infringement activities discussed above have substantial implications for intellectual property (IP) rights. Transmission activities, including remote linking and media sharing, challenge ownership

⁶⁴<https://githubcopilotlitigation.com/pdf/06823/1-0-github_complaint.pdf> accessed 3November 2023

⁶⁵ Margret Rouse, 'Cyberlocker', *Technopedia* (15 February 2012) <https://www.techopedia.com/definition/27694/cyberlocker> accessed 3 November 2023

rights and obscure original creators' rights through digital alteration. Illegal downloading and streaming impact reproduction rights, while file sharing jeopardizes exclusive distribution and public display rights. Derivation and adaptation activities often violate derivative works, modification, and reproduction rights. Scanning, buffering, and mirroring actions may infringe on reproduction and display rights, and text replication directly infringes on authors' reproduction rights. These activities collectively challenge the fundamental principles of copyright protection in the digital realm by affecting IP rights related to transmission, ownership, production, reproduction, and reproduction rights.

3.4 Lapses and Inefficiencies in Nigeria's Present Copyright System for Addressing Internet and Digital Copyright Challenges

Despite the revision of Nigeria's extant 2022 copyright framework, there still exists notable gaps and criticisms in the way the framework addresses modern digital challenges. More so, relating to cross-border copyright infringement, there is need for unanimity on applicable treaty that binds countries over multi-jurisdictional infringements.⁶⁶These gaps will be further explored.

Poor Financing: Insufficient funding hampers the Nigerian Copyright Commission (NCC) in executing effective duties, impacting investigations, technology adoption, and combat against digital infringement, limiting its operational efficiency. The funding constraints impede the development of advanced systems required to counter emerging piracy methods, affecting investigation depth and scope, and hindering the adoption of modern technologies to track various digital infringements. Budgetary constraints limit the NCC's ability to acquire and employ advanced tracking tech. Consequently, in a case dealing with a site streaming copyrighted movies, their restricted resources impede swift action against such infringements. Hindered by funding limitations, the commission struggles to develop effective investigative tools, hampering their fight against digital piracy. Nigeria's nollywood arguably, is the third biggest in the world and the lucrative nature of Nigeria's music industry means the government needs to increase its budgetary allocation to the Commission to allow it act as regulator

⁶⁶ A Bennett & S Granata, When Private International Law Meets Intellectual Property Law:

A Guide for Judges (WIPO and the HCCH, 2019) p 15

in the creative industry, thereby creating conducive environment for entertainers to generate wealth, which the government can in turn tax.⁶⁷

Indirect Digital Infringements: Digital and internet infringements frequently occur indirectly because of the intricate and expansive nature of the internet. Users might not directly commit the infringement themselves but may facilitate it by sharing, distributing, or allowing unauthorized access to copyrighted materials, leading to indirect involvement in the infringement. Unfortunately, Nigeria's current copyright framework does not expressly make any imposition of crime on any person other than a direct infringer.⁶⁸

Lack of Recorded Progress in Combating Online Infringement: In Nigeria, little progress is observed in tackling online infringement, a notable shortfall in addressing digital copyright challenges. Despite efforts and laws, weak enforcement persists, and this is evident in widespread online piracy with unauthorized content available. This hampers creators' rights and the growth of Nigeria's creative industry. Actress Toyin Abraham stumbled on a movie titled 'Malaika' she shoot with close to N500 million on a social media platform shortly after it was released to the cinema on December, 2023. Imagine the trauma, and she was hospitalized owing to that ugly experience.⁶⁹

Tracing Digital Copyright Infringers: In Nigeria, the lack of tools to track digital infringers poses a significant challenge, hindering swift and effective action against online piracy. Operating virtually and anonymously, infringers make it hard to identify and enforce copyright laws online.⁷⁰For online copyright enforcement to be effective there should be a system in place to link

⁶⁷Genevieve Nnaji ranks the top richest Nollywood actress in 2024 with net worth of \$15 million, followed by

Funke Akindele's \$11 million net worth, made from their blockbuster movies in the cinemas and on Netflix.

⁶⁸ N Iguh and O Anyanor, 'The Impact of Technology and The Use of The Internet on Copyright Enforcement in

Nigeria' [2023] 14 (2) Nnamdi Azikiwe University Journal of International Law and Jurisprudence, 7

⁶⁹ https://www.scrollreport.com/2024/01/actress-toyin-abraham-landed-in-hospital-aftermovie-leaked-online/

accessed 24 March 2024

⁷⁰B Lehman *et al*, Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual Property Rights (Information Infrastructure Task Force, 1995) 131

each infringing account to a specific physical location or jurisdiction.⁷¹ This would aid law enforcement in acting against infringers and discouraging future violations, needing substantial collaboration between governments and internet providers. In legal cases on internet infringements, challenges arise in identifying infringers and gathering evidence to prove their involvement. Obtaining digital evidence is essential for court proceedings, although it usually stays in digital form until admissible in court.⁷²Traditionally, the movie platforms are the one that would usually take measures to curtail the movies from being pirated online.⁷³

The Problem of Digital and Electronic Evidence: The Evidence Act, 2011 requires a certificate of authenticity for computer-generated evidence to be accepted in court.⁷⁴ The certifier for digital evidence needs personal knowledge about the data fed into the computer. Both the accuser and accused often lack information on who uploaded the copyrighted content, making the Author or Publisher a crucial witness. Testifying becomes challenging if the Author resides in another country. The witness's physical presence is necessary, creating hurdles in proving cases based on evidence.

The problem with technological evidence subsists. In the case of FRN v Senator Ndume⁷⁵, the Judge ruled that DVDs, recorded from a device, are considered secondary evidence. This means that the usual rules for certifying public documents may not apply to electronic evidence like DVDs, as they are not ordinary documents. Also, the case of $FRN v Abdul^{76}$, highlighted the challenges in dealing with emails found in cyber cafes. The court acknowledged the complexity of email technology, emphasizing the need for an expert witness to explain how it works and concluded that traditional definitions of possession might not adequately cover situations involving electronic mailboxes and documents. Finally, in *Dr. Imoro Kubor & Anor v Hon. Seriake Henry Dickson &Ors*⁷⁷, the Supreme Court emphasized that to present a computer-generated document as evidence, it is necessary to provide

⁷¹ WIPO, 'The Impact of Technology on Copyright Enforcement' WIPO Seminar for Asia and Pacific on the Internet and the Protection of Intellectual Property Rights 1998

⁷² O Ayodele & O Uchechukwu, *Electronic Evidence and Digital Transaction Law* (Zaria: Ahmadu Bello University Press Limited, 2022) 87

⁷³HBO, Netflix, Amazon Prime and etc. take measures by themselves to "police" infringing actions online

⁷⁴ Nigeria Evidence Act 2011, Section 84

⁷⁵ [2022] LPELR-58272 (CA)

⁷⁶ [2007] 5 EFCLR 204 at 228

⁷⁷ [2012] LPRLR – SC 369/2012

detailed evidence on how the computer was used, aligning with the conditions specified in Section 84(2) of the Evidence Act, 2011.

However, concerning these challenges, certain provisions of the Evidence Amendment Act 2023 have taken care of issues related to Computer-Generated Evidence in that there are now inserted provisions into the Evidence Act 2011which introduces electronic records⁷⁸, digital signatures⁷⁹, electronic oath taking⁸⁰, electronic gazettes⁸¹ and also provisions on admissibility of digital records⁸². Nevertheless, there are lingering concerns regarding the practical enforcement of the outlined provisions. The ICT proficiency of Judicial Officers and public awareness, these pose potential obstacles to achieving the intended outcomes of the recent amendments. It is important to recognize that having a law in place is only one aspect; the critical factor lies in the capacity to effectively implement and enforce the stipulations it entails, though hopeful we are.

Poor Enforcement Mechanisms: Widespread access to unauthorized content, lack of swift action against infringers, and unregulated platforms continue to compromise creators' rights and stifle industry growth. In developing countries like Nigeria, law enforcement faces issues such as limited understanding, inadequate training, funding, and essential tools.⁸³ There is also a troubling perception among the public and sometimes within the judiciary and law enforcement agencies that piracy is a minor offense with few genuine repercussions. According to the International Intellectual Property Alliance (IIPA), the police show limited commitment, and the Economic and Financial Crimes Commission (EFCC) tends to view copyright issues as secondary to their primary mandates.⁸⁴ This apathy hampers further move into enforcement of digital anti-piracy measures.

Poor ICT Knowledge: Limited digital literacy presents a critical vulnerability in protecting IP. Judicial officers' lack of understanding in digital technologies complicates the adjudication of copyright infringement cases. Copyright

⁷⁸ Nigerian Evidence Amendment Act 2023, Section 10

⁷⁹Ibid, Section 10

⁸⁰*Ibid*, Sections 5,6 and 7

⁸¹*Ibid*, Section 9

⁸²*Ibid*, Section 3 (1)

⁸³ NCC, *Survey of Nigerian Copyright Piracy* (Abuja: Nigerian Copyright Commission & Food Foundation, 2008) 3

⁸⁴ International Intellectual Property Alliance (IIPA), *IIPA Report* (Abuja: Nigerian Copyright Commission, 2008) 51

owners also struggle with a lack of digital expertise, making them vulnerable to online exploitation and infringement of their content. Lack of ICT expertise in copyright commissions hinders efforts against digital infringement. This gap affects tracking online piracy, leading to difficulties in handling new platforms and cyber forensics, impacting their ability to counter copyright infringement effectively.

Inadequacy of Digital Anti-Piracy Implementation Tools: Nigeria's Copyright Act addresses digital piracy, but its implementation lacks effective technological tools to combat online infringement. Unauthorized sharing of a local artist's music on various platforms without proper licensing is an example of the system's limitation.⁸⁵ Current anti-piracy methods, while useful in some cases, are inadequate for the vast digital landscape. Strengthening digital tools is essential for better protection of creators and their work in the online sphere.

Liability of Service Providers: Nigeria's copyright framework largely shields service providers from liability, conditional upon their expression of good faith.⁸⁶ These places a significant burden on the copyright owner, as non-compliance by service providers carries few severe consequences or legal penalties. Furthermore, the prescribed procedure for reporting violations to the service provider, as outlined in the Act, is complex and discouraging, and would compel copyright owners to seek resolution through the legal system.⁸⁷ It has been advocated that creating a dedicated committee within the Commission or establishing a specialized agency under the Minister's oversight could proactively monitor service providers in the digital technology sphere.⁸⁸

4.0 Conclusion

Emerging digital infringements driven by technological advancements pose challenges to traditional copyright frameworks and its administration. Online piracy and unauthorized use of copyrighted material on the internet have intensified due to the ease of replication and borderless online environment. Copyright Act 2022 incorporates essential digital provisions, aligning the Act

⁸⁵Example is Actress Toyin Abraham experience, stumbling over her N500 million worth of movie over the internet

⁸⁶ Nigeria Copyright Act, Section 58

⁸⁷*Ibid*, Section 54 (2)

⁸⁸ N Iguh and O Anyanor, 'The Impact of Technology and The Use of The Internet on Copyright Enforcement in Nigeria' [2023] 14 (2) *Nnamdi Azikiwe University Journal of International Law and Jurisprudence*, 7

with international standards and contemporary measures to effectively tackle online related issues, and beefing up the administrative powers of the Commission. Despite improvements in the Nigeria's copyright Act, loopholes still persist, being that digital copyright challenges demand a comprehensive approach for swift administration.. The work scrutinizedthose measures taken to address it and explored persisting challenges that will endure despite these regulatory changes.

5.0 Recommendations

It is hereby recommended as follows:

Establishment of Special Intellectual Property Tribunal: Creating a specialized IP Tribunal with experts is crucial for handling copyright matters in the digital age. The complexity of IP law, especially with digital evolution, needs a dedicated tribunal to address nuanced challenges effectively in Nigeria. It is advocated for the expansion of the number of Federal High Court Judges with additional court rooms that would be exclusively reserved for IP matters across the federation.

Encouragement of Access Control and Copy Control Software: This software serve as essential tools that allow creators to actively monitor and curb the unauthorized use or reproduction of their work. These technologies act as digital gatekeepers, enabling creators to ascertain the legitimacy of the usage of their content. Notably, the WIPO Copyright Treaty (WCT) establishes that individuals who attempt to circumvent these protective measures may be held legally accountable for copyright infringement. This underscores the significance of technological safeguards in upholding the rights of creators and maintaining the integrity of IP in the digital landscape.

Education of Copyright Stakeholders: Combating digital copyright infringement in Nigeria requires more than robust laws; education is crucial. Prioritizing educational initiatives for stakeholders like authors, creators, judges, lawyers, and the public is key – a well-informed judiciary ensures fair decisions, legal experts provide informed counsel, content creators can successfully navigate copyright issues, and educating the public fosters respect for IP, reducing inadvertent infringement. Overall, educating stakeholders is vital for successful law implementation and tackling online copyright challenges in Nigeria.

Harnessing Technology to Combat Online and Digital Infringement: Embracing technology is key in fighting online infringement. Algorithms and

AI help detect and prevent unauthorized use of copyrighted content, acting as a proactive defence. DRM tools also let creators monitor distribution of their works in the digital space. Blockchain ensures transparent, tamper-proof records of ownership and usage rights. Technology also provides legal platforms for content distribution and monetization, like streaming services and digital marketplaces.

International Collaboration: Similar to terrorism, digital piracy is a crossborder issue, emphasizing the imperative need for collaboration among nations. Recent piracy surge in Nigeria is linked to tightened copyright policies in neighbouring countries. Given the borderless nature of digital infringements, addressing and curbing these challenges necessitate regional and international cooperation. Therefore, it is recommended to globally harmonize copyright policies as a crucial step in mitigating this menace.

Creation of Designated Department: There is need to establish a department focused on specific aspects of digital enforcement to work within the Commission. This approach ensures a specialized effort in addressing the multifaceted challenges posed by the digital landscape, and Nigeria can bolster its capacity by providing a robust framework for the protection of IP in the online sphere. Therefore, creation of a dedicated and well-funded departments within the NCC, exclusively reserved for policing infringement of digital contents may be a better approach.