



INTELLECTUAL PROPERTY IN THE DIGITAL AGE

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Abstract

The advent of the digital age has revolutionized the creation, dissemination, and consumption of intellectual property (IP), presenting unprecedented opportunities and significant challenges. This article explores the evolving landscape of intellectual property rights (IPRs) in digital technologies, focusing on key areas such as copyright, trademarks, and patents. The rapid growth of digital platforms, social media, and artificial intelligence has reshaped traditional IP systems, creating a tension between protecting creators' rights and ensuring public access to knowledge. Issues such as digital piracy, streaming technologies, and the global reach of digital content have intensified the need for robust and adaptable IP laws. This article examines the adequacy of existing legal frameworks in addressing these challenges, emphasizing areas like the protection of AI-generated works, fair use policies, and the impact of blockchain on IP enforcement. A comparative analysis of international regimes highlights the disparities in legal approaches and underscores the importance of harmonizing global IP standards. The article also delves into the ethical considerations surrounding access to essential digital resources, particularly in developing economies, where equitable access remains a pressing concern. The article concludes by proposing a multidimensional approach to reforming intellectual property laws. It advocates for international cooperation, the adoption of flexible legal instruments, and enhanced public education to balance economic incentives, technological advancement, and societal interests. In doing so, it underscores the need for a dynamic IP regime that fosters innovation while ensuring inclusivity and fairness in the digital era.

Keywords: Intellectual property, digital age, IP protection, innovation, technology, legal instrument.

1.0 Introduction

Intellectual property protection remains a contemporary issue, especially with the dynamic nature of society. In Nigeria, the law grants some basic rights to owners of both moveable and immovable property.¹ Intellectual Property (IP) is property (such as an idea, invention, or process) that derives from the work of the mind or intellect.² It deals with the protection of inventive efforts, commercial reputation, creative works, and intangible creations of the mind. Essentially, it covers a broad range of issues relating to literary and artistic works, creative performance, scientific and technological

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¹ Constitution of the Federal Republic of Nigeria 1999 (as amended), Cap C23, Laws of the Federation of Nigeria 2004, as amended, s 43.

² Merriam Webster Online Dictionary, World Intellectual Property Organization (WIPO), 2014.



innovations, designs, goodwill, symbols, names, images, photographs and broadcasts, models, trade secrets, service marks, geographical indications, etc. It grants exclusive control over the use, distribution, and reproduction of these assets to promote innovation and economic growth. The Court in *Adeyemi v. Lan & Baker Nigeria Ltd*³ held that the advertisement of the song without authorization constituted an infringement. The main categories of Intellectual Property Rights are Patents, trademarks, copyrights, trade secrets, and industrial designs, which ensures that creators and innovators can reap the benefits of their work and investments exclusively and can leverage them to monopolize and commercially exploit them. However, the digital age has ushered in an era of unprecedented change, transforming the way we create, distribute, and protect intellectual property.⁴ From the rise of the internet and social media to the advent of blockchain and artificial intelligence, the landscape of intellectual property law is continuously evolving. Our traditional notions of copyright, trademarks, and patents are being challenged and reshaped by these technological advancements.

2.0 History of Intellectual Property Rights in Nigeria

The evolution of Intellectual property Rights in Nigeria dates to the colonial era when Nigeria's initial intellectual property legal framework was heavily influenced by British colonial rule.⁵ British laws and conventions were transplanted into Nigeria, thereby creating the foundation for the country's Intellectual Property legislation.⁶ The first significant legislation was the Copyright Act of 1970, modeled after the UK Copyright Act of 1911, which was made applicable to Nigeria by an order-in-council under Section 25 of the Act of 1911 of Great Britain.⁷ The 1970 Act was passed as a Decree on the 24th day of December 1970⁸ under the General Yakubu Gowon-led military government of Nigeria. This Act marked the beginning of formal Intellectual Property protection law in Nigeria. However, it became obvious over time that updates and reviews were needed to address the country's unique cultural and economic context, the Patents and Designs Act 1970 and the Trade Marks Act 1973 were enacted to strengthen the protection of industrial property rights, thereby providing clearer guidelines and legal frameworks for patents and trademarks.⁹

A significant milestone was the enactment of the Copyright Act No.47 of 1988, which was later amended in 1992 and 1999. This Act was a comprehensive overhaul aimed at addressing contemporary issues in copyright protection and aligning Nigerian laws with international standards. The Act established the Nigerian Copyright Commission (NCC), which is primarily responsible for the administration and enforcement of copyright laws in Nigeria. Nigeria became a member of the World

³ (2007) NWLR (Pt. 663) 33.

⁴ Prasanna S and Lavanya P, Navigating the Digital Age: Challenges in India Intellectual Property Rights Laws, (1) (1) (2023), *Ile Lawletter*, 35.

⁵ C. J Ubanyionwu, Historical Evolution of Intellectual Property Laws in Nigeria, (3) (1) 2023, *Department of International Law and Jurisprudence, Chukwuemeka Odumegwu Ojukwu University*, 113.

⁶ *Ibid.*

⁷ Femi Atoyebi, An Overview of the Intellectual Property Rights and Production Framework in Nigeria, <https://femiatoyebi.com.ng/an-overview-of-the-itellectual-property-rights-and-protection-framework-i-nigeria/> accessed on 6th December, 2024.

⁸ Copyright Decree 1970 (1970 No. 61).

⁹ Oladiran A. Ayodele and Falade O. Damola, Patentability of Inventions Under the Nigeria's Patent and Designs Act: An Examination (NAUJILJ 8 (2) 2017, (ABU press, Zaria, 2000) 53.



Intellectual Property Organization (WIPO) in 1995, which signaled its commitment to the international Intellectual Property community.¹⁰ The country has also adhered to key international treaties, such as the Paris Convention for the Protection of Industrial Property 1883 and the Berne Convention for the Protection of Literary and Artistic Works 1886, which set to ensure that Intellectual Property Rights (IPRs) are recognized in every country that participated in the Conventions.

In recent times, the Intellectual Property space in Nigeria has witnessed several developments that are critical to note. On 17 March 2023, Former President Muhammadu Buhari signed the Copyright Bill 2022 (now the “Copyright Act”) into law.¹¹ The Copyright Act seeks to protect the rights of authors and ensure adequate reward and recognition for their intellectual efforts; provide appropriate limitations and exceptions to guarantee access to creative works; facilitate Nigeria’s compliance with obligations arising from relevant international treaties and conventions; and enhance the capacity of the Nigerian Copyright Commission for effective regulation, administration, and enforcement of the provisions of the Act.¹² However, the advent of the digital age posed new challenges for Intellectual Property enforcement, particularly in combating digital piracy and protecting digital content. However, the Nigerian Copyright Commission (NCC) has launched various initiatives and campaigns to raise awareness about Intellectual Property Rights and curb infringement, including collaborations with other governmental agencies and international bodies and to foster a culture of respect for Intellectual Property Rights.

3.0 Impact of Digital Technologies on Traditional Intellectual Property Rights

The advent of digital piracy and technologies has significantly impacted traditional intellectual property rights. Copyright law, for instance, has faced immense challenges due to the proliferation of digital content. The ease with which digital works can be copied, shared, and distributed online has led to widespread copyright infringement. This has necessitated a reevaluation of how to define and protect copyright in the digital age.¹³

The music industry has been at the forefront of this transformation. The shift from physical media to digital downloads and streaming services has fundamentally altered how music is consumed and monetized. While digital platforms have democratized access to music, they have also made it more challenging to control and protect copyrighted works. Legal frameworks such as the Digital Millennium Copyright Act 1998 in the United States have been implemented to address these issues, but they are often criticized for being outdated and insufficient.¹⁴

Trademarks, too, have been majorly affected by the digital revolution. The global nature of the internet means that trademarks must now be protected in a much broader context. Online marketplaces and social media platforms present unique challenges for trademark enforcement, as counterfeit goods and

¹⁰ *Ibid.*

¹¹ Copyright Act, 2022 (Act No. 8 of 2022).

¹² *Ibid.*, s 36.

¹³ A Unnikrishnan, Analyzing the Impact of Emerging Technologies on Intellectual Property Rights (IPR): A Comprehensive Study on the Challenges and Opportunities in the Digital Age, (10) (29) (2024), *Law and world*, 67.

¹⁴ J Wiser, The Digital Millennium Copyright Act: The Future of the Safe Harbor Provision, (10) (10 (2011), *Pace Intellectual Property, Sports & Entertainment Law Forum*, 68.



trademark infringement can occur across borders with relative ease. Professionals must navigate the complexities of international trademark law and develop strategies to protect their brands in the digital arena.

Patents are not immune to these changes either. The rapid pace of technological innovation means that patents must be granted more swiftly to keep up with new developments. However, this also raises concerns about the quality and scope of patents being issued. The rise of software patents and patents related to digital technologies has sparked debates about what constitutes patentable subject matter. Professionals in this line must stay abreast of these developments to protect their rights.

Moreover, the Copyright Act of 2022, in a bid to curb some of these challenges, incorporated detailed provisions for protecting digital works. It broadens the definition of "Copy" to include reproduction in any form, including digital copies.¹⁵ This means that online content creators are protected from copyright infringements because online content, including pictures, videos, sound recordings, and other productions, which are all forms of digital copy, cannot be used without the consent of the owner first and obtained. Where there is an infringement, the Act empowers the owner of the copyrighted work to issue a notice of the infringement, which may be transmitted electronically or by any other means to the relevant service provider or its designated agent to take down or disable access to any infringing content or link to the content, hosted on its system or network.¹⁶ Unfortunately, intellectual property rights violations in the digital space are still on the increase.

4.0 Challenges of Digital Content Distribution

The distribution of digital content presents numerous challenges for intellectual property protection. The ease with which digital works can be replicated and shared has led to rampant piracy and unauthorized distribution. This is particularly problematic for industries such as film, music, and publishing, where digital content is easily accessible and can be distributed globally with minimal effort. As digital platforms are becoming more sophisticated and user appetites for diverse content growth, how multimedia is disseminated is becoming increasingly complex and innovative. The lack of effective copyright protection is a major factor responsible for the continuous practice in Nigeria.¹⁷

Piracy websites and peer-to-peer networks facilitate the unauthorized sharing of copyrighted content, undermining the revenue streams of content creators and rights holders. Despite efforts to shut down these sites, new ones continuously emerge, highlighting the difficulties in enforcing IP rights in the digital realm. Legal practitioners and creators must be well-versed in the tools and strategies available for combating digital piracy, including takedown notices, litigation, and international cooperation.

Moreover, the rise of user-generated content on platforms like YouTube, Instagram, and TikTok has introduced additional complexities. These platforms often host a mix of original and infringing content, making it challenging to monitor and enforce IP rights. The implementation of automated content

¹⁵ Copyright Act, 2022, s 108 (1)(e).

¹⁶ *Ibid*, s 54 and 55.

¹⁷ Wiser (n 14).



recognition systems, such as YouTube's Content ID, has been a step in the right direction, but these systems are not foolproof and can sometimes result in false positives or missed infringements.

5.0 Role of Emerging Technologies

Emerging technologies such as blockchain and Artificial Intelligence (AI) are poised to revolutionize intellectual property protection and enforcement. Blockchain technology, with its decentralized and immutable ledger, offers new possibilities for tracking and verifying the ownership and provenance of digital works. This can be particularly useful in combating counterfeit goods and ensuring the authenticity of digital content.

For example, blockchain can be used to create a transparent and tamper-proof record of transactions involving digital assets, such as art, music, and literature. This not only helps in verifying the authenticity of the work but also facilitates the licensing and transfer of IP rights. Experts should brazen up and familiarize themselves with the potential applications of blockchain in IP law and consider how this technology can benefit their clients and society.

Artificial intelligence, on the other hand, raises complex legal and ethical questions. AI-generated content, such as music, art, and literature, challenges traditional notions of authorship and ownership. Who owns the copyright to a work created by an AI? How should we attribute authorship and assign rights in such cases? These questions are still being debated, and the legal framework surrounding AI-generated content is far from settled.

Furthermore, AI can be used to enhance IP protection and enforcement. For instance, AI algorithms can be employed to detect copyright infringement, identify counterfeit goods, and monitor online platforms for trademark violations. Professionals and creators should explore the potential of AI-driven tools to streamline and strengthen their IP enforcement strategies and techniques.

To overcome these challenges, content creators and distributors must stay adaptable, invest in innovative technologies, and develop effective strategies for protecting and monetizing their digital content. They must also be willing and ready to apply the relevant laws on intellectual property.

6.0 Digital Rights Management

Digital Rights Management (DRM) technologies play a crucial role in protecting digital content from unauthorized use and distribution. DRM encompasses a range of tools and techniques designed to control access to digital works and enforce usage restrictions. This includes encryption, watermarking, and access controls that prevent copying and sharing of protected content.¹⁸

While DRM can be effective in safeguarding digital works, it is not without its controversies. Critics argue that DRM often imposes undue restrictions on legitimate users and can be circumvented by

¹⁸ Vishal Sharma, What is DRM Protection Technology, its Working & Types for Media, <https://www.vdovipher.com/drm-technology/> accessed on 6th December, 2024.



determined pirates. The challenge confronting experts and practitioners is to balance the need for robust IP protection with the rights and interests of consumers. This requires a nuanced understanding of DRM technologies and the legal frameworks governing their use.

Enforcement of IP rights in the digital age also demands a multifaceted approach. Experts in IP must be adept at using both legal and technological tools to combat infringement. This includes issuing takedown notices under the DMCA, pursuing litigation against infringers, and collaborating with international agencies to address cross-border IP violations. Additionally, proactive measures such as educating clients about IP protection and advocating for stronger legal frameworks are essential for effective enforcement.

7.0 Conclusion

From the above, it is clear that the digital landscape will continue to evolve, presenting new challenges and opportunities for intellectual property law. Emerging technologies such as the Internet of Things (IoT), Virtual Reality (VR), and Augmented Reality (AR) are likely to introduce new forms of digital content and interactions that will test the limits of existing IP frameworks.

Professionals on IP must stay ahead of these trends by continuously updating their knowledge and skills. This includes understanding the technical aspects of new technologies, anticipating legal issues that may arise, and advocating for policies and regulations that protect IP rights while fostering innovation. Professional development and ongoing education are crucial for staying relevant and effective in this dynamic field.

The digital age has transformed the way we create, distribute, and protect intellectual property. Traditional IP rights are being challenged by new technologies, and experts must adapt to these changes. By understanding the impact of digital technologies, addressing the challenges of digital content distribution, leveraging emerging technologies, employing robust DRM and enforcement strategies, and staying attuned to future trends, we can navigate the complexities of intellectual property in the digital age.

Furthermore, raising public awareness and improving education on the importance of intellectual property rights will foster a culture of respect and compliance. Efforts must extend beyond the conventional courtroom experience to include robust public education campaigns and accessible registration processes to encourage local innovators and businesses to protect their intellectual property.

8.0 Recommendations

The rise of the internet and new technologies has revolutionized the way that intellectual property is created, distributed, and consumed. To curb the continuous peril of violators of IP in the digital age, this article recommends the following;

1. Registration of IP rights
2. Education and Awareness of IP creators
3. Collaborate with legal and technological experts.
4. The government should update IP laws and regulations in line with international best practices.



5. Monitor online activities
6. Conduct IP audit

By following these recommendations, we can promote innovation, creativity, and economic growth while protecting intellectual property rights in the digital age.