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Ethical Implications of Deepfake Voices and AI-Created Performances in the Nigerian Music Industry

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Abstract

The rapid advancement of artificial intelligence has revolutionized the music industry, enabling the creation of deepfake voices and AI-generated performances that closely mimic real artists. While these technologies offer innovative opportunities for creativity, personalization, and accessibility, they simultaneously raise profound ethical concerns. This paper examines the ethical implications surrounding the use of AI to replicate vocal performances and produce synthetic artists. Key issues include consent, intellectual property rights, authenticity, potential misuse of deceased or living artists' likenesses, and the broader impact on artistic integrity. Furthermore, the paper explores the potential consequences for employment within the industry, fan trust, and cultural identity. By analyzing current case studies, legal frameworks, and stakeholder perspectives, this research aims to foster a balanced discourse on how the music industry can responsibly navigate the intersection of technological innovation and ethical responsibility.

KEYWORDS: AI, Copyright, music industry, ethics, technological advancement

INTRODUCTION

The rise of artificial intelligence (AI) and algorithms is impacting nearly every aspect of daily life due to technological advancements. One industry experiencing significant change is the music industry, where AI-driven tools are making it easier for musicians to produce high-quality music. AI is now being used to create and organize sound for various media platforms, such as the internet and video games. In the past, music was performed live, with artists hired to perform at events and gatherings. The invention of the phonograph in the 19th century shifted the industry toward recording, and record labels became prominent. As television and radio gained popularity in the 20th century, the entertainment industry expanded, with broadcast stations helping promote musicians and live concerts being televised. The introduction of digitalization, especially with CDs in the 1980s, revolutionized music with better sound quality and longer playtime.

Today, AI plays a crucial role in many aspects of music production, distribution, and consumption. AI helps generate data-driven insights, enhance creativity, and offer personalized music experiences. One of AI's main applications in music is in production. AI software can compose music, transcribe existing songs, and even play instruments using robots. AI can also analyze audio files to improve sound quality by adjusting settings like volume, equalization, and compression automatically. This enables producers to mix and master music more efficiently. Additionally, AI systems can recommend music to users based on their listening

history, as seen on platforms like Spotify, keeping listeners engaged with new songs.

AI also has the potential to revolutionize copyright and royalty management in the music industry. As digital content increases, tracking royalties and copyrights has become more complex. AI tools such as MuseNet, Jukedeck, AVIA, and Udio can generate entire musical compositions based on specific parameters like genre or tempo. However, these tools require large datasets for training, which often include existing music, raising concerns about copyright infringement. To avoid legal risks, AI models should use works in the public domain or licensed music, but obtaining proper licenses can be complicated, as multiple rights holders are often involved in a single song. Artificial intelligence violates the personal rights of performers by voice cloning technology

While AI opens up possibilities for creating music, it also raises concerns about its impact on traditional artists and the creative process. As consumers increasingly rely on AI-driven recommendations, there's a risk that musical tastes will become more uniform. Additionally, the growing use of AI in music production could threaten jobs, as some roles in the industry may become automated or outsourced to AI systems.

European Union has enacted the first comprehensive legislation to regulate Artificial intelligence also in the United States the first state to adopt such legislation is Tennessee to enact the ELVIS act (Ensuring likeness voice and image security act), this act is used for the protection of personal rights from the misuse of Artificial intelligence in the music industry. Whereas in the other developing countries there is no specific laws for Artificial intelligence regulation or to prevent its misuses and violations. In Nigeria, there are certain provisions under the amended Copyright Act, 2012 and Information Technology Act, 2000 which may regulate the impacts of Artificial intelligence. So, this study compares the laws of developed countries and developing countries with Nigeria. It also focuses whether the current Nigerian legislation is fully equipped to curb the violations of Artificial intelligence

RESEARCH PROBLEM

The research problem in our paper is finding out whether the Nigerian legislation is fully efficient in addressing the current legal issues brought by the Artificial intelligence especially those created by a branch of AI known as Generative AI in music industry like copyright infringement, violation of personal rights and other social issues which involves the end of human involvement in music production, composition and other creative works involved in it, which may lead to the loss of livelihood of people involved in the music creation and the authenticity in the music produced or generated by the Gen AI. This paper also involves a comparative study on the regulation of AI in different jurisdictions like European Union, USA, few developing countries and Nigeria.

RESEARCH OBJECTIVE

To find out:

1. To measure the efficacy of the existing Nigerian legislation in addressing the copyright violations and other legal issues posed by the Artificial intelligence in the music industry.
2. The extent to which the laws of the developed countries that can be adopted in Nigeria for the regulation of Artificial intelligence.

RESEARCH HYPOTHESIS

1. If the existing legislation for copyright protection is not updated with the rapid technological advancement, then it

would lead to severe copyright infringements in the music industry.

2. If the innovations of the AI in music production, composition etc. is not regulated then it will lead to the end of livelihood of people in the creation of music.
3. If Generative AI is not put under a legal scrutiny, it will violate the personal rights of the performers.
4. If the activities of the AI are not limited to a certain limit, it would lead to the loss of authenticity and uniqueness in the music composed.

1.6. RESEARCH QUESTION

1. Whether the Nigerian legislation needs amendments for the regulation of AI to protect the copyright infringements in music industry?
2. Whether there is any threat as to livelihood loss of the people involved in music industry if AI is not regulated?
3. Whether there is any violation of personal rights by the Generative AI due to lack of legal scrutiny?
4. Whether the music losses its authenticity if the activities of the AI are not limited?

LITERATURE REVIEW

The paper 'Legal aspects of Artificial intelligence application in artistic activities' written by Vladimir Demidov discusses that the current civil legislation enforced does not adequately meet the requirements with rapid progress in technology. There needs to be certain changes in the civil code so as to determine how the artificial intelligence can be regulated. The paper 'Artificial Intelligence and law: An overview' written by Harry Surden talks about the need for the formal regulation of Artificial intelligence in law in order to bring some harmonized rules and policies across countries for Artificial intelligence deployment'. In the paper 'Artificial intelligence and Musicking: A philosophical inquiry' written by Adam Eric Berkowitz it is said that Generative AI trained on music is misappropriated by developers and is present in the training data of the AI user. The author calls for the need of acting on the philosophical and ethical discussions on AI and promote research and education to ensure ethics in the music space. The paper 'Intersection of Artificial intelligence in the entertainment sector' written by Radhika Nautiyal discusses about the current and the potential consequences of AI in the entertainment industry including the music industry through examples and case studies. It gives a perspective on the social and ethical consequences of AI integration in the entertainment industry. The paper 'Intelligent music applications: Innovative solutions for musicians and listeners' talks about the incorporation of AI and machine learning in the music expression and gives and aid for collaboration. It suggests that further research to enhance AI and ML and unlocking new innovations in the music fields.

The paper 'A Comparative Study of the Copyright Laws for Artificial Intelligence in the UK and Korea' written by Byungun Yoon, finds out that UK and USA have well-equipped laws for the regulation of new technology whereas Korea has no such law for copyright protection and it also highlights how the emerging countries are mitigating the regulations on copyright. Another relevant paper found 'Does Pakistan's Copyright and Antitrust Law Protect Creators of AI-Generated Content? A Comparative Study with European Union Jurisdictions' written by Shahzada Aamir Mushtaq, Khurram Baig, Syed Wajdan Rafay Bukhari and Waqas Ahmad compares the Pakistan's legal

system with the EU's to find out the weaknesses in and to seek opportunities for further development in its existing legal structure. It also examines how the anti-trust laws affect the AI generated content. The research found that Pakistan's copyright and antitrust laws don't yet have rules for dealing with new issues around infringement so people affected by infringement still have to use the old legal system to get justice. The paper 'Enforcement of copyright in the music industry : A critical analysis of the legal and institutional framework on enforcement in Sub Saharan Africa' written by M. Ouma, the author based on an analysis of four subSaharan countries—Kenya, Nigeria, Senegal, and South Africa—shows that even though these countries have modern copyright laws, stresses that they still face high levels of unauthorized commercial use of music and critically examines three key questions from political, social, economic, and technological angles. Firstly, why is copyright enforcement difficult in sub-Saharan Africa. Secondly, why has the current legal system failed to enforce copyright effectively. Third, what would a successful copyright enforcement system look like. The paper, 'Reforming Copyright Law in the Digital Age: a Comparative Study of the Legal Resolutions on P2P Transmission Between Taiwan and the United States' written by Chiu, I-Hsien finds out that copyright laws are severely affected due to abuse of technology in Taiwan. The author also proposes suggestions for Taiwan Government in amending its copyright law protection. The paper 'Intersection of generative artificial intelligence and copyright: an Nigerian perspective' written by Shinu Vig states that Generative AI technology has raised several challenging issues in intellectual property that need to be addressed through policy changes. According to the findings of this paper, Nigeria's copyright laws are not sufficient to handle the rights related to AI creations and outputs. Countries like the United States, the European Union, and China have each taken different approaches to regulating and protecting AI-generated content under copyright law.

RESEARCH METHODOLOGY

We have adopted the doctrinal method of research for our paper which includes both primary sources and secondary sources

- PRIMARY SOURCES such as Art 11 & 12 of WCT, Art 18 & 19 of WPPT, Sec 1201 of DMCA and Sec 65A and 65B of the Copyright Act.
- SECONDARY SOURCES such as thesis, research papers, research articles, journals etc.

IMPACT OF AI

This paper discusses about various laws across the world for AI regulation in the music industry and specifically focusing on the stand taken by Nigeria in this aspect as well as the impacts of AI in the music field.

EU law on AI regulation

Generative AI, while capable of boosting creativity across industries like music, literature, and film, often raises copyright issues by using existing works without permission. It analyzes and reproduces aspects of these creations on a large scale, creating new content such as images, music, and videos. This leads to concerns over intellectual property, authenticity, and the potential devaluation of original works. To balance innovation with artists' rights, lawmakers and industry representatives are working together to establish ethical guidelines and ensure transparency in AI's use.

On March 13, 2024, the European Union passed groundbreaking AI legislation,

aiming for implementation by year's end. The law, a global first, seeks to regulate AI technology by balancing innovation with protection of fundamental rights, democracy, and environmental sustainability. It classifies AI systems into four categories: prohibited, high-risk, limited risk, and minimal risk. High-risk sectors like health and education face strict oversight, while limited risk systems require informed consent. The law also prohibits AI models that exploit human vulnerabilities and mandates compliance with EU copyright laws for AI training.

New rules for the use of artificial intelligence (AI) in Europe, including the regulation of copyrighted music, have been approved by the European Parliament. The law, known as the Artificial Intelligence Act, was first proposed in April 2021 and will take effect in December. It is the first of its kind and covers a wide range of AI applications, such as biometric surveillance, predictive policing and the use of published AI models such as ChatGPT OpenAI and Claude 2 Anthropic.

The main provisions of the AI law:

1. Transparency requirements: AI companies operating in Europe must provide summaries of all copyrighted works, including music, used to train their models. This applies to all data, even if it is received outside of Europe. If a company uses copyrighted music from a country outside the EU, it must still provide a summary of the music used when the AI is deployed in Europe.
2. Watermark training data: Production AI systems that create music and audio functions need to watermark their training data sets. This allows copyright holders to track and prevent illegal use of their work.
3. Signature of AI-Generated Content: All AI-generated content, as opposed to human creators, must be properly signified as such. Companies must also ensure that their AI systems cannot be used to generate illegal or infringing content.
4. Penalties for non-compliance: Large technology companies that violate the rules will be fined up to 35 million euros or 7% of their turnover annual of the world. Small companies receive similar penalties.

The law clarifies that AI systems must respect copyright laws and secure prior authorizations from copyright holders, as well as follow understanding and licensing obligations. The purpose of this is to prevent companies from using copyrighted works without permission, which is important in the music industry.

Although some provisions of the AI Act won't fully apply for up to two years, existing AI models must comply within 12 months, and any new AI systems entering the EU market will be required to follow the regulations from the start. Other countries, including the U.S., Canada, China, and the U.K., are also exploring their own regulatory paths for the rapidly evolving AI sector.

At the moment, many tech companies are behaving like "glorified stream-rippers." They are collecting digital audio without proper regard for the rights of songwriters and artists. This new legislation is a crucial step in putting an end to such practices.

Under the new EU law, companies like OpenAI and Microsoft cannot legally access, train, or generate AIbased content using copyrighted material without obtaining permission from the rights holders. The legislation makes it clear that they cannot claim to be acting within the

bounds of exceptions like text and data mining or fair use.

Deepfakes and voice clones have become widely popular on the internet, but the legal framework around them is still unclear in most countries, as there are generally no specific rights protecting artists and celebrities (except in cases of false endorsement). The EU AI Act aims to address this by introducing a transparency rule that requires deepfakes, including voice clones, to be clearly identified. While this won't completely prevent their spread, it will help consumers recognize when they are encountering a deepfake. The EU's AI Act offers positive news for rightsholders, as it indicates that AI models trained on copyrighted materials will need permission from rightsholders. According to Article C of the proposed law, "any use of copyright-protected content requires the authorization of the rightsholder unless relevant copyright exceptions apply.

"This requirement is seen as a win for the music industry, which has been advocating for AI developers to license copyrighted content used in training their algorithms. However, there is a provision that introduces exceptions. The document references Directive (EU) 2019/790, which allows reproductions and extractions of works for text and data mining under certain conditions.

Rightsholders may opt to reserve their rights to prevent text and data mining unless it is conducted for scientific research. If they reserve this right, AI model developers must obtain authorization to perform text and data mining on those works. This opt-out clause may raise concerns within the music industry.

The EU AI Act classifies AI systems based on the level of risk they pose to society:

1. High-risk AI systems: These include AI applications that significantly affect human rights, privacy, or intellectual property. AI tools used for deepfake music or voice cloning would fall into this category if they infringe on copyright, violate personality rights, or misappropriate musicians' voices.
2. Unacceptable risk: AI systems that pose a severe threat to fundamental rights are banned under the EU AI Act. This could include AI-generated content that violates ethical norms, such as unauthorized deepfake music created without an artist's consent.
3. Transparency requirements: AI systems that generate content, including music, must meet clear requirements. Users should be informed when interacting with AI-generated content and help maintain integrity and protect against fraud.

US law on AI

Currently, there is no international regulation addressing these issues, making Tennessee the first U.S. state to pass a law aimed at clarifying the relationship between AI and music. The law, known as the ELVIS Act, was enacted on March 21 and is set to take effect on July 1. Its purpose is to establish clearer and more protective boundaries for artists, songwriters, and professionals in the music industry, including podcasters and voice actors.

The ELVIS Act amends the 1984 Personal Rights Protection Act (PPRA), which was originally designed to safeguard "publicity rights"—the distinctive rights of artists concerning their name, image, and likeness. The new legislation expands these protections to include the voice of artists residing in Tennessee, explicitly

prohibiting the use of artificial intelligence systems that impersonate individuals and facilitate the creation of unauthorized fake works using someone else's image and voice. The definition of an artist's "voice" has been expanded to include not only their "real" sound, but also what they imitate.

The ELVIS Act allows music companies to act on behalf of artists who represent them in the event of damages. Violations of the ELVIS Act may result in civil and criminal penalties, including injunctions and destruction of property created in violation of the Act.

Recent advances in artificial intelligence have dramatically changed the way we create and listen to music. Many artists and business professionals have embraced the technology and see it as a powerful creative tool, but others remain cautious.

There are many legal challenges in using artificial intelligence tools to produce musical works, especially when it comes to intellectual property rights. Algorithmic or generative art is not new, as rule-based systems have been used in art for a long time. But with machine learning, AI tools can create creative tasks in real-time based on user input or requests.AI tools such as MuseNet, Jukedeck, AVIA and Udio can create entire music tracks based on parameters such as genre, time and style. These tools often use large datasets, including existing music, which raises concerns for copyright holders. Using copyrighted music without permission increases the risk of copyright infringement.

To avoid this, use proper license functions or music to train the AI models. However, getting paid for mu- sic is difficult and involves many parties such as songwriters, artists, publishers and record companies.

In addition to the music industry, tech companies and media organizations are making agreements to use copyrighted content for AI training. For example, OpenAI has signed similar agreements with media outlets such as the Financial Times and the Associated Press. Similar practices arise in the music industry, and may involve public licensing procedures operated by music collection companies.

The music industry is grappling with challenges from unauthorized content created by artificial intelligence on online platforms. Recently, Universal Music Group (UMG) expanded its partnership with Meta Platforms to license UMG's music on platforms such as Facebook, Instagram and WhatsApp. The goal of the collaboration is to address unauthorized content created by artificial intelligence and recognize its potential impact on artists and songwriters. As this trend continues to grow, expect more formal collaborations between publishers, labels and platforms to facilitate the use of music in AI operations.

South Korea laws

South Korea has taken steps to solve the problem of copyright infringement related to AI-generated content, especially in the music industry. The country's copyright law has been revised to regulate digital content and the effects of artificial intelligence. Under the current framework, works created by artificial intelligence are eligible for copyright protection when human intervention is essential. However, tasks performed by artificial intelligence alone are not protected without human intervention. As artificial intelligence plays a significant role in content creation, further changes to these laws are considered to clarify copyright and intellectual property rights.

The Ministry of Culture, Sports and Tourism is working together to develop guidelines for managing music created by artificial intelligence and to ensure that the

rights of human creators are respected. When artificial intelligence is used in composition, the main objective is to balance the moral and financial rights of creators - including attribution and protection from infringement. In addition, they will review how fair use requirements apply to AI-generated content, especially if AI tools are being trained using copyrighted music. One of the main issues is the use of copyrighted material for training artificial intelligence models. South Korean laws ensure that copyrighted music cannot be used to train AI without permission, except in certain circumstances.

This measure is intended to prevent unauthorized sampling or reproduction of music through AI tools. Moreover, the government is working closely with private companies and the music industry to create a balanced approach that protects the rights of artists while encouraging innovation in AI technologies. This collaboration includes organizations like KOMCA (Korean Music Copyright Association) to ensure that AI-generated works do not infringe on human creators' intellectual property. South Korea enforces civil and criminal penalties for copyright infringement, and AI-generated content falls under these regulations when it involves unauthorized use of copyrighted works.

The penalties can include hefty fines or even imprisonment for those who misuse AI to produce infringing content. Recognizing the global nature of AI and digital content, South Korea is also participating in international discussions and cooperating with other countries to establish a unified approach to handling AI-related copyright issues in the creative industries, including music. Additionally, there is an ongoing effort to raise public awareness about the ethical use of AI in content creation. Developers are encouraged to build AI systems that respect copyright laws, and public campaigns emphasize responsible use of AI tools. Through a combination of legislative action, industry cooperation, and ethical guidelines, South Korea is working to protect both creators' rights and promote responsible innovation in AI-generated content. Further legal adjustments are expected as the technology continues to evolve.

Pakistan laws

In Pakistan, the legal framework addressing issues related to AI in the music industry, particularly concerning voice cloning and the use of copyrighted inputs, is primarily governed by the Copyright Ordinance of 1962 and various intellectual property laws. The Copyright Ordinance provides protection for musical works, sound recordings, and performances, granting exclusive rights to creators and performers. This legal structure is significant in safeguarding against unauthorized use of copyrighted music for AI training and generating works without the consent of the rights holders. As AI technologies evolve, the existing laws may face challenges in adequately addressing new forms of copyright infringement, such as those arising from AI-generated music that mimics or uses the voices of artists without authorization.

The Personal Data Protection Bill, which is currently under consideration, aims to establish regulations surrounding data privacy, including biometric data. This bill is relevant in the context of voice cloning, as it seeks to protect individuals' rights over their personal data, including their voice. If enacted, it could provide a legal basis for performers to challenge unauthorized voice cloning, thereby reinforcing their personal rights in the digital realm. However, the bill's specifics

and how effectively it can address these emerging issues will depend on its final form and implementation. Moreover, the Pakistani legal system lacks specific provisions tailored to AI-generated content, which leaves a gap in addressing the complexities of AI in the music industry.

Stakeholders, including artists and legal experts, are advocating for updated legislation that encompasses the challenges posed by AI, ensuring that the rights of performers and creators are upheld. As the use of artificial intelligence in the music industry continues to grow, the debate and potential changes to copyright and data protection law will continue to create a legal framework that addresses these issues. law.

Sub Saharan Africa laws

The emergence of AI tools in creative sectors, particularly music, has raised important copyright issues worldwide. In Sub-Saharan Africa, tackling copyright infringements linked to AI technologies poses distinct challenges due to varying levels of legislative development, enforcement capabilities, and digital infrastructure. Despite these challenges, there are ongoing efforts to enhance intellectual property (IP) laws and establish adaptable frameworks for the rapidly changing digital environment. Most nations in Sub-Saharan Africa possess existing copyright laws, often aligned with international agreements like the Berne Convention and the WIPO Copyright Treaty. While these frameworks lay a groundwork for creator rights protection, they were developed prior to the rise of AI-related concerns.

For instance, South Africa is amending its Copyright Act to address issues like digital rights management and fair use, while Nigeria is also reviewing its copyright laws to better fit the realities of digital technologies and the internet. However, these frameworks may need further modifications to adequately encompass AI-generated works and to safeguard original creators from potential misuse by AI systems. Countries such as South Africa, Kenya, and Nigeria are taking steps towards legal reforms aimed at making their IP laws more pertinent in the digital landscape. For example, South Africa's Copyright Amendment Bill aims to tackle digital media and AI issues through new licensing provisions and fair use exceptions, though it faces challenges in striking a balance between protection and open access.

Similarly, the Nigerian Copyright Commission is working to bolster legal protections against digital infringements, including those arising from AI technologies. Collective Management Organizations (CMOs) also play a crucial role in enforcing copyright laws by ensuring that royalties are distributed for music use, including AI-assisted applications, thereby enhancing efforts to manage licenses for potentially infringing content. While the region is engaging in discussions at the World Intellectual Property Organization regarding AI-generated content and copyright law, there is a notable absence of AI-specific legislation across Sub-Saharan Africa. However, countries like Rwanda and Ghana are leading the way in digital economy initiatives, indicating that as AI technology proliferates, more nations may adopt legal frameworks specifically targeting AI's effects on copyright. Despite these legislative efforts, enforcement remains challenging due to limited resources and technical capabilities for tracking digital and AI-enabled infringements.

As a result, strengthening enforcement mechanisms and raising public awareness

about copyright and AI issues will be vital in ensuring that creators understand their rights and can proactively protect their works. Sub-Saharan Africa has begun to address AI copyright infringement, with reforms and regional cooperation showing progress. Adapting copyright laws for the digital world, improving enforcement and increasing public awareness are important steps in developing the local digital economy. Addressing AIrelated copyright challenges is critical to protecting the rights of creators in the music industry as these technologies become part of the creative process.

Taiwan laws

In Taiwan, as in many other regions, legal challenges are related to artificial intelligence in the music industry, such as sound simulation and the use of copyrighted material to train the know-how, it's a hot topic. Taiwan's legal framework addresses these concerns through specific laws and regulations. Audio simulation raises important questions about copyright and human rights, including moral rights and the right to read. These rights are designed to protect the right of performers to use their image, especially the voice. Copyright law in Taiwan protects the moral rights of performers, including the right to decide how their performances are presented to the public. If the performer's voice is repeated without permission, these moral rights may be violated.

In addition, civil laws in Taiwan protect human rights and cover aspects such as language, appearance and character. When AI violates these unauthorized audio rights, performers can seek legal remedies such as damages or penalties. Although Taiwan does not have a separate copyright law, protection under civil law is similar, allowing performers to challenge unauthorized commercial use of their music through civil litigation. Using copyrighted material to train artificial intelligence models is another important issue. AI training often requires large datasets that may include music, lyrics, or copyrighted audio recordings. Under Taiwanese copyright law, original works, including music and sound recordings, are protected against the use of such materials to train artificial intelligence, reproduce or create a creative work. These actions must be approved by the rights holders. Although Taiwan's fair use laws provide limited protection, such as for research or educational purposes, commercial use of copyrighted music in AI training may not be fair use, especially for money. In Taiwan, research is ongoing to clarify these issues in the broader context of intellectual property reform. Although no explicit provisions currently exist regarding AI training on copyrighted content, it is anticipated that lawmakers will prioritize this as they modernize copyright law in light of AI advancements.

To address the challenges posed by the use of copyrighted inputs, Taiwan is exploring licensing models that would enable AI developers to legally access and utilize copyrighted music and media for training purposes. The music industry, in collaboration with government entities, is investigating new licensing frameworks. Collective management organizations (CMOs) have been established in Taiwan to oversee the licensing of music for public performance, broadcasting, and reproduction. These organizations could potentially offer licenses to AI developers, allowing them to use copyrighted music for training while ensuring that rights holders receive appropriate compensation. Additionally, claims of copyright infringement may arise when AI music is similar to copyrighted works. Although Taiwan's courts have yet to handle major cases involving the infringement of AI-

generated music, the current copyright framework allows legal action if a significant portion of copyrighted music is infringed.

Consideration of AI

In a broad sense, AI can be distinguished as autonomous and non-autonomous AI. Traditional artificial intelligence system requires explicit instructions and constant supervision, whereas autonomous AI system can comprehend the environment and make decisions and improve their strategies based on outcomes. There are many parties involved in an AI system like data provider, designer, manufacturer, programmer, developer, user and a system itself and liability is to be fixed on the right party by analyzing each case. for an example user is liable for damage arising in usage and the manufacturer is liable for damage due to lack of instruction for damages caused while the AI system is in still learning the developer or data provider is liable

The classification of generative AI (Gen AI) used in music production as either autonomous or nonautonomous largely depends on the level of human involvement in the creative process and the nature of the AI's operation. Here's a breakdown of the two categories: Autonomous AI typically operates independently, making decisions without direct human intervention. In the context of music production, an AI system would be considered autonomous if it can generate music compositions, melodies, or beats entirely on its own, based on algorithms and data it has processed. For instance, if an AI is trained on vast datasets of music and can create original tracks without needing human prompts, it may be deemed autonomous. On-autonomous AI, on the other hand, relies heavily on human guidance or input to function. In this case, an AI creation is classified as non-automated if it requires any instructions, requests or settings from a human user to produce music. For example, if a music producer uses AI to generate ideas or assist with composition, but retains control over the final creative decisions, AI has no exclusive rights in this regard.

Determining liability for copyright infringement related to proprietary and non-proprietary AI raises complex legal issues. Liability can be established in two cases: **Autonomous AI**

1. An artificial legal entity: If an AI system is classified as autonomous - that is, it can act independently, make decisions and generate innovation without human intervention Slow process - conflicting errors. to be considered a fictitious legal entity. This concept suggests that private intellectual property can be understood as a legal entity that can have rights and obligations, similar to a company. In this situation, if a specific AI violates copyright, it can be sued for such violations. However, it raises important legal and ethical questions, including the effects of legal personhood on non-human entities and the potential legal implications.
2. Owner's responsibility: Another important consideration is that the owner or developer of AI is responsible for copyright infringements resulting from its use. It is based on the principle of vicarious liability, where the actions of the agent (AI) lead to liability for the principal (principal). In this case, if a special AI produces music that violates copyright, the owner can be sued because he created the AI and uses the output. This approach is consistent with existing

legal frameworks that determine liability based on the jurisdiction and consequences of the infringer's actions.

Non-autonomous AI

1. Responsibility of the owner: In the case of non-autonomous AI, the responsibility lies with the operator or owner. Since non-autonomous AI relies heavily on human input and guidance, any deviations in performance can be attributed to the decisions of human users. For example, if a music producer uses a non-independent AI to produce music and infringes copyright, the producer may be liable for infringement because he is controlling the AI's actions.
2. Disclaimer of use: In addition, the user of the non-automated AI is responsible for ensuring that any input into the AI (such as copyrighted music samples) does not violate copyright laws. Failure to do so may result in user restrictions and reinforce the notion that the individual's involvement in the creative process is responsible for compliance with copyright laws. The issue of liability for copyright infringement related to artificial intelligence, whether proprietary or not, is still an area of legal development. While thinking of autonomous AI as an artificial legal entity provides an interesting theoretical framework, current practical considerations and legal principles favor human owners or operators. Finally, there is a need for clarity in the legal framework to address these issues and ensure that creators, developers and users of AI systems understand their rights and obligations in relation to copyright infringement in the context of AI-I activities as the technology continues to evolve. discussions will continue to evolve and potential changes to copyright law will be necessary to meet these new challenges.

Loss of livelihood

A recent study conducted by the French and German music societies Sacem and GEMA has revealed the growing concerns about the impact of artificial intelligence (AI) on the music industry that could affect musicians' livelihoods. With over 15,000 respondents participating in the survey, the study revealed that more than two-thirds of musician's fear that AI may render it impossible for them to sustain a living in the future. The survey highlighted that 71% of musicians expressed concerns about their financial viability, expressing apprehensions about the potential consequences of AI adoption in the music sector. Some 35% of those surveyed acknowledged already incorporating AI in various aspects of music creation. In addition to the survey, the study included market analysis and expert interviews, projecting a significant downturn in musicians' incomes by 27% by 2028.This equates to a loss of 2.7 billion euros ($2.9 billion).

These findings are a financial threat to artists and producers in this industry. Among the survey participants, 95 percent expressed a demand for increased transparency from companies developing AI tools. Also, that decline called for more attention from politicians to meet the challenges of the intersection of intellectual property and copyright in the music sector. "The statistics in this study show that there is a lot of damage for manufacturers. Using your right to publish, we hope to establish a clear and fair relationship between AI developers

and companies." From the end of 2022, indicated the study predicts that the market for artificial intelligence in music will grow from 3 billion dollars in 2028, which indicates the rapid growth of the industry.

AI Pay is an important factor in ensuring fair payments for creators whose work is created by AI databases, for the benefit of profitable companies in the digital space where streaming services face competition from AI music content. Despite the recognition of the potential benefits of AI, including its use as a creative tool, the survey found that there is no consensus among producers in the music world. About 64 percent of those surveyed believe that the risks associated with the use of artificial intelligence outweigh the opportunities and emphasize the need for strong laws to protect copyright.

Over 200 musical artists, including Pearl Jam, Nicki Minaj, Billie Eilish, and the estate of Frank Sinatra, have signed an open letter from the Artist Rights Alliance (ARA) condemning the irresponsible use of AI in the music industry. The letter urges AI developers, tech companies, and music platforms to stop exploiting AI in ways that "infringe upon and devalue the rights of human artists," calling it an "existential threat" to their art and livelihood. The ARA emphasizes that AI systems are being trained on copyrighted music without permission, potentially replacing human creators with AI-generated content. This protest comes amid growing concern across other creative industries, such as visual arts, writing, and filmmaking, following the rise of generative AI technologies. The artists' letter highlights that AI, when used irresponsibly, threatens their privacy, identity, and ability to earn a living from their craft.

They claim that powerful companies are using artificial intelligence to violate artists' rights and destroy the creative ecosystem. In a broader context, this reflects earlier fears in the music industry about new technologies, such as synthesizers in the 1960s and digital sampling in the 1980s. First reaction, the industry changed to these innovations. However, the ARA warns that unchecked AI development could harm many artists by depleting leading sources and reducing their work. They call it a "race to the bottom", and call for the protection of human art and the inclusion of artificial intelligence tools in the creative process so that the lives of musicians, composers and performer. The letter concludes by asking companies to agree not to use AI in ways that violate or replace human creators, and to demand fair compensation and respect for the rights of artist ARA recognizes the potential of AI to boost innovation and warns of the negative consequences of ignoring AI development.

Loss of authenticity

The use of AI in music creation is revolutionising the industry, bringing both thrilling advances and complicated ethical concerns. AI-generated music, which uses computers to analyse existing music and compose new pieces, broadens creative possibilities. However, its application raises questions about authenticity, as AI lacks human emotions and personal experience, both of which are necessary for artistic expression. The issue is to strike a balance between AI assistance and true human creativity, so that AI enhances rather than detracts from artistic distinctiveness.

Key ethical considerations include transparency, algorithm bias, copyright, and intellectual property rights. Questions are raised concerning whether AI should be viewed as a co-creator and how ownership of AIgenerated music should be handled.

There are also concerns regarding job displacement in the music industry as AI automates certain stages of the creative process. The balance between efficiency and the irreplaceable human touch in music remains critical.

Furthermore, the ethical landscape includes considerations for artistic aim and user perception. Transpare- ncy with listeners regarding AI's role in music production encourages informed appreciation and confidence. To promote ethical AI practices, legislative frameworks and industry-wide rules are required. Workshops, open debates, and AI literacy programs for artists and producers can all contribute to the responsible use of artificial intelligence.

Looking ahead, advances in AI may increase its impact on music, needing continual ethical vigilance. By embracing responsible methods, the music business can shape a future in which AI enhances rather than undermines human creativity.

CONCLUSION

The rapid integration of AI in the music industry poses significant legal challenges, particularly in areas such as copyright infringement, voice cloning, and deepfakes, which threaten the core of artistic integrity and originality. These issues also raise concerns about the erosion of musicians' livelihoods, as AIgenerated works disrupt traditional royalty systems and undermine the authenticity of creative expression. The inadequacies of the current Nigerian legal framework, particularly under Sections 65A and 65B of the Copyright Act, highlight a lack of preparedness to address the complexities introduced by AI technologies. The absence of AI-specific regulations creates a regulatory vacuum, leaving creators vulnerable and AI developers largely unaccountable. In contrast, other jurisdictions have started addressing these issues, with the European Union's AI Act and the U.S.'s proposed ELVIS Act offering frameworks to tackle the challenges AI brings to creative industries. Countries such as Pakistan, Taiwan, and Korea are also recognizing the need for AI regulation to protect creative rights.

A significant study revealed that 71% of industry professionals acknowledged AI as a substantial threat to the music industry, reflecting widespread concerns about AI's potential to undermine originality, authenticity, and fair compensation for creators. This highlights the urgent need for legal reforms and regulatory safeguards to address these concerns.

The open letter by the Artists Rights Alliance (ARA) to Congress underscores the immediacy of this issue. Signed by prominent artists, the letter advocates for stronger regulations around AI to protect creators' rights, ensuring that AI tools do not exploit human creativity or dilute the authenticity of artistic expression. The letter also emphasizes the need to fight against music created by artificial intelligence and false lyrics that violate copyright and human rights.

Nigeria's legal system, while prepared to handle traditional copyright disputes, needs to evolve to handle the growing impact of AI. Without legal action, the Nigerian music industry may face legal AI technologies, raising concerns about copyright infringement, loss of originality and financial security for musicians. Using international best practices, including those supported by the ARA and validated by industry research, Nigeria should have access to a strong regulatory framework that balances innovation with demand. innovation and economy.

SCOPE AND LIMITATIONS OF THE STUDY

This study focuses on the legal issues arising from the use of artificial intelligence (AI) in the music industry, specifically examining how AI technologies—such as voice cloning, deepfakes, and AIgenerated music—interact with copyright law and personality rights. The research primarily evaluates the implications of AI on copyright infringement, violation of personality rights, loss of authenticity in music, and the impact on musicians' livelihoods, such as royalty losses. The study is grounded in the Nigerian legal system and provides a detailed analysis of relevant laws under the Nigerian Copyright Act, particularly Sections 51, 65A, and 65B, assessing how these sections fall short in addressing AI-related challenges. The research also compares international legal frameworks, drawing on the EU AI Act, the ELVIS Act from the United States, and regulatory stances in developing countries such as Pakistan, Taiwan, Korea, and Sub-Saharan Africa. Through this comparative analysis, the study seeks to identify potential legal reforms that Nigeria could adopt to regulate AI's impact on the music industry effectively. In addition, this research addresses the concerns raised by industry professionals, including a study where 71% of participants acknowledged AI as a threat to the music industry. The study also considers the Artists Rights Alliance (ARA) open letter in the U.S., which calls for stronger regulation of AI to protect musicians' rights, highlighting the broader international concern regarding AI's influence on the creative sector.

- While the study offers a broad analysis of AI's legal implications in the music industry, several limitations exist:
- The research focuses primarily on the Nigerian legal system, with a comparative analysis of the EU AI Act and ELVIS Act. However, the study does not provide an exhaustive evaluation of AI regulations across all global jurisdictions, limiting its scope to select regions. The legal frameworks in other significant music markets, such as China or Latin America, are not fully explored, which could offer additional insights into AI regulation globally.
- AI technology is accelerating, and this study looks at the current state of AI in the music industry through 2024. As artificial intelligence technologies become more and more their application, may arise new challenges and legal models that have not been considered in this study. . The rapid pace of AI development means that some of the legal proposals in this article will need refinement in the near future.
- This research relies on legal analyses, case studies and a review of existing guidelines. While the research includes industry insights, including surveys and ARA's open letter, it does not conduct substantive research such as direct interviews with AI developers, musicians, or policy makers. A more intuitive approach can provide a deeper understanding of the practical challenges of implementing AI rules.
- This study will limit its scope to copyright infringement, human rights, and originality and compensation issues in the music industry. Although these areas are very important, this study does not delve deeply into other legal concerns related to AI in the music sector, such as contract law, licensing or data protection. Exploring these areas can provide a broader

overview of the legal landscape surrounding artificial intelligence in music.

- While this study focuses on the potential financial impact of AI on the lives of musicians, such as lost wages, it does not address the deeper economic models or wider social impacts of using AI in business. A more detailed study could examine the economic viability of the music industry in the context of artificial intelligence and its long-term impact on cultural formation.

RECOMMENDATIONS AND SUGGESTION

In the context of the Nigerian Copyright Act, it is very important to include sections related to AI under sections 51, 65A and 65B to meet the challenges posed by AI in the music industry. Section 51, which deals with copyright infringement, should be amended to include infringements by artificial intelligence. The onus should also be placed on AI developers and users to ensure prevention mechanism for any damage might be caused by their systems. A disclaimer should be included for AI systems, stating that AI tools cannot use copyrighted material illegally.

Strengthening sections 65A and 65B is also important. AI systems must be subject to technical protection measures (TPM) to prevent copyright infringement. This includes building safeguards into smart devices that prevent unauthorized access to copyrighted material. Section 65B, which deals with access to electronic documents, should be extended to include content created by intelligence. AI systems must provide a comprehensive view of the data and copyrighted assets they use in content creation. This adherence is important so that courts can properly assess claims of copyright infringement.

The application of the provisions of the EU AI Act will strengthen Nigeria's approach to managing AI in the music industry. Nigeria could adopt the EU's risk framework, in which AI systems are classified based on the risk they pose to intellectual property rights. High-risk AI applications, such as depth perception or voice simulation technologies, require more scrutiny. Transparency requirements should also be established, so that users can understand when interacting with AI-generated content. This prevents scams like artificial intelligence impersonating an artist or sound without verification. In addition, EU AI rules on data use and copyright provide a valuable example. AI developers in Nigeria should issue laws and license copyrighted music to train their AI systems and prevent unauthorized use.

The ELVIS Act, which deals with sound reproduction and human rights, provides important measures that Nigeria can adopt. A consent-based framework should be created to prevent unauthorized use of art or image by intelligent systems. Musicians must provide explicit consent before their voice or persona can be used by AI tools, protecting them from exploitation. This framework should extend to posthumous rights, ensuring that deceased artists' voices cannot be commercially exploited by AI without permission from their estate. Additionally, a royalty-sharing mechanism should be introduced to ensure musicians are fairly compensated when AI-generated content leverages their voice or style for profit.

To effectively regulate AI in the music industry, Nigeria could establish a specialized regulatory body under the Ministry of Electronics and Information Technology (MeitY) or Ministry of Commerce and Industry. This body would

ensure AI systems comply with copyright laws, monitor the use of copyrighted material in AI-generated content, and handle cases of infringement. Fair use and licensing guidelines for AIgenerated content are also important. AI systems often use large data sets, so decisions must be made when to use copyrighted material and when permission is required. Adopting an EU copyright-like framework for AI training data will help prevent unauthorized use of copyrighted content. Finally, there should be severe punishment for non-compliance. Developers of AI systems that violate copyright or fail to implement technical protections can face heavy fines and, if necessary, have their technology banned. Nigeria's copyright law needs to evolve to deal with AI's disruption to the music industry. By incorporating AI into sections 51, 65A and 65B and adopting legal provisions from the EU AI Act and the ELVIS Act,

Nigeria can create a strong legal framework that harmonizes creativity and protection of creative rights. These rules not only protect the financial interests of musicians, but also protect the originality and integrity of music in the age of understanding.

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