



Prospects, Challenges, and Ethical Concerns in the Application of AI in Nollywood Productions

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Abstract

The advent of Artificial Intelligence (AI) has redefined the act of filmmaking worldwide, not leaving out the Nigerian *Nollywood*. This study specifically examined the extent of AI application and use in enhancing quality, the challenges, and the ethical issues in the utilisation of AI in *Nollywood*. The study was anchored on the Technological Determinism Theory and the Media Ecology Theory. It adopted a quantitative design with a population of 1658 and a sample of 168 respondents, drawn from *Nollywood* filmmakers. A self-designed structured questionnaire was administered online and analysed using mean scores with a decision point of 3.0 and above for acceptance and below for rejection. From the analyses, the study revealed that AI is significantly employed in movie editing, subtitling, costing, and movie distribution. However, adoption has not been common. This was seconded by the fact that AI helps in lowering the cost of production, boosts creativity and efficiency and encourages competitiveness of *Nollywood* films within and abroad. However, some of the challenges identified are poor infrastructure, cost of implementation, weak IP protection, and regulation. Among ethical issues identified are intellectual property rights, job displacement, socio-economic disparity and cultural erosion. From the above, the challenges of implementing AI in *Nollywood* are obvious, covering socio-economic readiness, institutions, and regulatory frameworks that need to be maximised to maximise the benefits of AI. Therefore, this study recommends AI policy, investment in digital infrastructure, provision of incentives to filmmakers, improvement of intellectual property rights, ethical guidelines, and industry cooperation for responsible and sustainable use of AI in the movie-making business.

Keywords: artificial intelligence (AI), ethical concerns, film, Nollywood, technological determinism

Introduction

AI technologies have become a part of film production and distribution processes, changing the way significant stages of the filmmaking process are carried out. Machine learning models and deep learning methods are applied in Hollywood studios and large-scale production companies to predict the financial performance of movies, helping producers forecast results and minimise possible risks related to big-budget movies (Ghiassi, Lio & Moon, 2015). In post-production, there have been advances in generative AI and computer-generated imaging, which have led to the development of automated visual effects, digital de-ageing, and hyper-realistic virtual worlds, which have decreased manual rendering and time consumption in the process (Russell & Norvig, 2021). Regarding distribution and screening, Netflix, Amazon Prime, and Disney utilise AI-based recommendation systems, which analyse large volumes of users' data, including time spent watching, interactions, and pauses, to provide a personalised experience to their users. These examples prove the overall digital revolution within the creative industries,



changing the ways of creating, financing, approval and commercialisation of creative output worldwide (Madumere, 2026).

Within the African continent, on the other hand, the use of artificial intelligence in filmmaking is being realised amid unequal technological, infrastructural, and creative landscapes. South Africa, for example, enjoys a well-developed technical infrastructure and is known to be engaged with AI-driven editing and automatic subtitling software that can make post-production easier (Krings & Okome, 2015). Similarly, elsewhere within the continent, digital technologies have facilitated shifts within the realm of production and distribution processes in efforts to link local films to larger audiences and markets (Nieborg & Poell, 2022). This shows an increasing participation of the continent within the global digital economy, yet the adoption of technologies in this process is limited due to a lack of sufficient infrastructure, unreliable electricity supply, and the costs of software licensing and regulation (Bello et al., 2025).

This issue is especially critical in Nigeria since Nollywood makes over 2,000 films per year and has an effective cultural influence abroad (Arinze-Umobi, 2026). The decentralised film production and resourcefulness of the filmmakers provide a space for experimenting with new AI technologies. As reported by Osakor (2026), almost 35% of practitioners use AI technologies, whereas the other 35% are trying out the potential applications of AI technologies. The tools may be employed in pre- and production to generate scripts, storyboarding, casting, budgeting, and shooting schedules. AI technologies may also facilitate the automation of some time-consuming post-production processes, such as dialogue editing, audio clean-up, multilingual subtitling, and visual effects of localisation. Besides that, the algorithmic classification, ranking, and promotion of Nigerian films by online streaming services like Netflix, Showmax, and Amazon Prime contribute to organising films on a platform level (Okwuowulu, 2025).

While these tools may increase efficiency and allow for greater cost reduction and possibilities of creativity, their increased adoption raises some major issues about the future of creative labour and cultural production in Nollywood. As the industry values efficiency in production and low budgets, AI subtitles will provide more accessibility to the multilingual audience of Nigeria, while AI editing will save time and help producers make use of their available resources. Nonetheless, alongside these advantages lies the issue of ethics, including ownership of the work produced by AI algorithms, displacement of creative labourers like writers, voiceovers and editors, and even questions about originality in cultural production. Scholars and cultural critics have also pointed out that unthinking application of AI trained mainly in Western storytelling could undermine the tradition of oral storytelling, distort the representation of local vernacular languages and further marginalise the human workforce that powers the film industry (Sanogo, 2026; Ndu, 2023).

The challenges outlined above become even more intricate considering that the infrastructural constraints and regulatory framework of Nigeria might impede the ability of industry players to govern the integration of AI properly. Also, the informal production system used by Nollywood makes it challenging to develop uniform ethical standards and governance practices in the industry. Without active efforts made by state officials and industry gurus to solve the problem, current inequalities will only deepen due to the fact that costly AI software and related technology will be available mainly for elite and well-funded movie studios. Thus, grassroots and informal filmmakers, who cannot afford such products, will suffer even more (Okwuowulu, 2025). Hence, the issue is not only associated with access to innovative solutions but also touches on



matters of governance, creative work, representation of culture, and equality in the movie industry. However, the rapid transition from experimentation to implementation of AI leads to a significant research problem – the benefits of AI are clear, while institutional conditions are still unknown.

The lack of standards regarding data utilisation, authorship, intellectual property, employment rights and culturally acceptable content can leave filmmakers and consumers susceptible to harms that may not be able to be resolved by technological efficiency alone. Moreover, uneven access to infrastructure and digital know-how might influence whose side is served by the AI applications and who ends up being left behind in the process of new productions. As a result, the investigation of AI applications in Nollywood needs to take into account both the productive potentialities of technological advancement and the social conditions under which it takes place. The study addresses such a need by analysing the intersection between technological opportunities and productive and ethical conditions in Nigeria. In other words, this study is important to see whether AI will be helpful in making Nigerian film production more inclusive or will it reinforce the existing tendencies towards concentration and exclusion of actors as the industry becomes digitised within the Nigerian creative economy.

Research Questions

This study is aimed on addressing the following questions:

1. To what extent is AI being used in filmmaking in Nigeria?
2. How can AI be leveraged to enhance efficiency in the *Nollywood* industry?
3. What are the challenges encountered in adoption of AI in *Nigerian* film production?
4. What are the ethical issues arising in the application of AI in *Nollywood*?

Literature review

Artificial Intelligence (AI) is defined as the ability of computer systems, especially powerful ones, to imitate human intelligence processes such as learning, reasoning, problem-solving, and self-correction (Russell and Norvig, 2021). In other words, AI covers digital tools and machine learning algorithms which are designed to streamline, optimise and support various digital production. Within the context of film making, it includes scriptwriting, casting, post-production video editing, automated subtitling, and global film distribution among others. (Aondover, 2026). Under this deduced view, AI is a system designed to systematically increase the efficiency of an industry and the creation of innovative products, so the conscious use of AI should inherently lead to higher technical production value and global competitiveness in *Nollywood*. At the same time, this improvement is subject to conditions: building a strong domestic technological infrastructure and formulating comprehensive ethical protection measures to ensure the ecosystems of local industries.

The integration of AI has been shown to revolutionise film industries worldwide, as evidenced by numerous empirical studies. In the global context, many empirical studies have shown that AI integration has greatly improved film industries, particularly in the areas of operational cost reduction and predictive audience targeting. For example, Ilukwe and Ogaraku (2025) noted that most Hollywood studios have long been using AI for predictive analytics, financial forecasting, and in-depth computer-generated imagery (CGI) procedures, as streaming services such as Netflix make extensive use of their own AI-based recommendation systems to individualise content delivery for different audiences.

According to Madumere (2026), the varied and unequal uptake of AI technologies in the different regional hubs of Africa has been highlighted more and more in scholarship on African



cinema. More and more, the scholarship in African cinema has focused on the selective, even fragmented, adoption of AI technologies in the various regional hubs of Africa. Amongst other countries, UNESCO (2021) reported that South Africa had been using AI subtitling tools as a precursor to generalisation, and Kenya was exploring the use of data-driven AI distribution tools for expanding the local audience. Arinze-Umobi (2026) also pointed out the progressive and localised usage of AI technologies in *Nollywood* post-production studios and in adding subtitles to films. The South African film industry, however, has developed better technical systems and institutional channels, whereas Nigeria's film industry is beset by certain structural problems, including the prevalence of economic informality and the limited institutional control over the market.

Empirically, recent research in Nigeria indicates that there is a duality in the attitude of strong optimism and deep structural anxiety towards the digital transition. In a groundbreaking survey titled 'Feedback from *Nollywood* stakeholders on the use of AI tools in creative processes', Okwuowulu (2025) revealed that 35% of all stakeholders in the *Nollywood* industry are already using AI tools in their creative processes, while 35% are actively considering its implementation in the near future. In addition to this, Osakor, (2026) reported that the use of AI operations can save local producers substantial amounts of time and money but that there are great ethical concerns, particularly the risk of the robotisation of labour. What these domestic studies have in common is their acknowledgement of the potential for AI to shape the future, but the differences come in their thematic focus: some emphasise the potential of the technology to boost efficiency, and others the potential of the technology to improve the economic and labour ethics situation. This polarisation highlights that there is significant research to be done: multi-dimensional (cross-disciplinary) studies that consider both the potential of the technology and the socio-economic risks.

The digitalisation of African cinema, however, has quickly sparked a debate in the academy and in the arts, one in which ethical issues have been central. Bello et al. (2025) pleaded to beware of the danger of AI-generated scripts unconsciously overhauling indigenous stories, and Sanogo (2026) historically pointed out the significance of maintaining cultural authenticity and local agency in *Nollywood's* narrative practice. Continuing this critique, the present dangers of creative labour dispossession, a statement which rang a bell with anxieties globally about the risk of creative labour being displaced by automation.

Another common and unresolved issue in policy and academic discourse is regulatory issues. The African Union Commission (2024) strongly emphasised the importance of having coordinated continental policy frameworks to support responsible use of AI in the cultural and creative industries. Nigeria's weak IP protection framework renders the safeguarding of artists more difficult against data scraping by AI, and the World Bank (2020) highlighted Nigeria's macroeconomic issues affecting the country's digital economy. The parallel is that the two are both critical of the lack of adequate regulation; the differences are that some of the analyses are quite specific to film copyright, while some are more general, to national digital policy. There is a huge lacuna; that is, a lack of legal studies in *Nollywood* that provide any practical solution to an informal film economy.

The progress and parity of AI's use in the movie industry are also significantly influenced by socio-economic factors. According to a report from Netflix Media Centre (2022), adapting a system of distributing films through AI and sophisticated algorithmic curation overwhelmingly



improves the chances of larger, well-capitalised studios, while independent filmmakers with limited budgets find it all but impossible to get exposure. Similarly, it has been noted that similar structural differences are emerging within *Nollywood*, threatening to push out the traditional and independent producers, as noted by Usman et al (2025). The only point of consensus across this literature is that digital inequality is growing; the differences are in how it happens to be operating: as an organic, grassroots phenomenon in the Nigerian marketplace, as opposed to operating in the global corporate stream. There is a critical lack in the conversation about the impact of AI use on grassroots filmmakers and nonprofessional production networks, leaving an important gap in the discussion.

In examining the technological transition in different ways, there is an uncoordinated effect of the use of AI tools on traditional business models of *Nollywood* using both disruptive innovation theory and technological determinism. Also, it is evident that modern research and discussion have established that AI has the potential to revolutionise *Nollywood* film production in multiple ways, including increased operational efficiency, cost savings, and global competitiveness, even as it poses significant challenges in terms of infrastructure, ethical issues, and regulatory gaps. The overarching commonalities of the literature are the extremely broad capabilities and potential hazards of AI, while the differences are in the disparate analytic focus of different authors, either on technical efficiency, cultural preservation, labour rights, or digital regulation. So, the biggest shortcoming in the existing cinema discourse is the lack of in-depth and comprehensive studies that are integrated to account for the opportunities, structural obstacles, and specific ethical issues in *Nollywood's* ongoing AI transformation.

Theoretical Framework

This study is anchored on two theories. The first among these theories is the Technological Determinism Theory which was propounded by Thorstein Veblen's Technological Determinism Theory (TDT) and advanced by Marshall McLuhan's (1964). The core tenet of the theory holds that technological innovations are one of the primary factors behind social, cultural, economic and institutional changes. The theory argues that technology is not a passive instrument, but an active force that shapes patterns of human interaction, industrial development and societal progress (Dafoe, 2015). To this regard, the development of new technologies changes the way people communicate, make things and even organise institutions, which in turn affects the direction of social change. While it is seen as a very solid theory, it has however been criticised by Smith and Marx (1994) and by Winston (1998) for its overemphasis on technology and its neglect of human agency and cultural values, policy frameworks and institutional influences (Obiaya, 2021).

In application, the Technological Determinism Theory helps understand how AI is revolutionising *Nollywood* film industry, impacting various aspects such as scriptwriting, editing, subtitling, budgeting, distribution, and audience engagement. According to the theory, AI can boost the creativity of Nigerian films, increase production efficiency, cut down on expenses, and boost the competitiveness of Nigerian films in the international market. The degree of this change, however, will be determined by contextual factors like digital infrastructure, regulations, funding and the technical expertise of the filmmakers.

Media Ecology Theory

The second theory of this study is the Media Ecology Theory (MET) as developed by Marshall McLuhan (1964) and expanded by Neil Postman (1970) (Stoeva, 2023). It considers communication technologies as environments which affect human perception, social relations and



culture. The theory focuses basically on the fact that media technologies are not just about information transmission, but also fundamentally change the way people think, interact and interpret reality. The coinage “The medium is the message” is a well-known quote from McLuhan that emphasises the importance of the characteristics of a communication medium on society rather than its content. In its criticism, Strate (2008) argued that Media Ecology exaggerates the influence of media technologies and minimises the influence of culture and the capacity of people to shape the impact of technology.

MET in the context of *Nollywood* implies that the use of AI is not just and merely altering the methods used to produce films, but likewise the media environment in which they are produced, disseminated, and consumed. AI editing, auto-subtitling, streaming algorithms, and recommendation systems are transforming the filmmakers-to-viewers, producers-to-viewers, and distributors-to-viewers relationships in the digital distribution landscape. The technologies influence the preferences of the audience, determine what is viewed, and provide a means for the Nigerian film to be disseminated internationally, while also raising issues of cultural authenticity, creative differences and equitable access to the technologies of the independent film-maker.

In terms of the theoretical integration, AI's impact on film production in Nigeria can be understood through the lens of two theories: the technological determinism theory and the media ecology theory. While Technological Determinism focuses on the power of AI to transform the landscape of *Nollywood*, fostering innovation, efficiency, and reshaping the filmmaking industry, whereas Media Ecology emphasises the impact of AI on the communication landscape, changing the way audiences watch movies, how they distribute them, and their way of expression. In all, both theories provide a comprehensive understanding of the adoption of AI, both from a technological and a communicative perspective. Thus, the synergy of these theories paints a comprehensive picture of the opportunities, challenges, and ethical considerations related to the use of AI in *Nollywood*.

Methodology

The study used a quantitative survey design to gather data. The study population consists of 1658 registered members of the Association of Movie Producers (AMP) in *Nollywood* (<https://amp.org.ng/members>). A sample size of 168 respondents was selected from this population using a multistage sampling method to obtain a representative sample of the population. According to Krejcie & Morgan (1970), for populations of 1658 the sample size is 313 valid at a 95% confidence level; however, the study adopted 168 (10.13%) of the population which according to G-Power analysis at 0.80 power, 0.05 significance level required sample is 138. Therefore, a sample of 168 exceeds the minimum threshold and is statistically adequate (Faul et al., 2009). This decision is due to limited time, financial resources, and the need to complete data collection within the manageable time frame. A structured questionnaire was used to collect data, which was designed based on the study objectives. The instrument was presented physically (film guilds and production houses) and also in an electronic way <https://forms.gle/4GMVhPLNXftbvzFU9>.

The questionnaire was expert-reviewed by mass communication and film studies scholars for content validity. A pre-test was undertaken with 20 *Nollywood* practitioners outside the sample to clarify and make it relevant. The instrument was tested for reliability with Cronbach's alpha coefficient, which was 0.82, showing high internal consistency of the instrument. Responses were rated on a 5-point Likert scale from Strongly Disagree (1) to Strongly Agree (5). Responses were aggregated using mean score weighting for analysis. A cut-off mean of 3.0 was used (Mean $\geq$ 3.0).



= Accepted and < 3.0 = Rejected). The standard deviation values were also computed to determine the variability of responses.

Data Presentation and Analysis

Table 1. *Extent of AI Adoption in Nollywood*

Statement	SA	A	N	D	SD	Mean	Std Dev	Decision
AI helps significantly in the aspect of scriptwriting.	42	51	28	31	16	2.98	1.12	<i>Rejected</i>
It is also helpful in film editing process.	55	47	22	29	15	3.05	1.09	<i>Accepted</i>
AI is also employed for subtitling.	48	52	26	27	15	3.01	1.07	<i>Accepted</i>
The use of AI in <i>Nollywood</i> is prevalent.	33	41	39	32	23	2.72	1.21	<i>Rejected</i>
AI plays significant role in casting decisions.	39	46	34	31	18	2.85	1.15	<i>Rejected</i>
AI is applied also in terms of budgeting and scheduling	44	49	29	28	18	2.93	1.14	<i>Rejected</i>
AI is being applied in distribution platforms and marketing decision making.	51	45	27	29	16	3.00	1.10	<i>Accepted</i>

The table 1 indicates that AI adoption in Nollywood is most evident in film editing (Mean = 3.05), subtitling (Mean = 3.01), and distribution and marketing decisions (Mean = 3.00), while its application in scriptwriting, casting, budgeting and scheduling, and overall industry adoption was not accepted. This suggests that AI is currently more established in specific technical and distribution-related functions than as a pervasive tool across the entire Nollywood filmmaking process.

Table 2. *Opportunities of AI in Nollywood*

Statement	SA	A	N	D	SD	Mean	Std Dev	Decision
AI cuts down on production costs.AI lowers production expenses.	57	46	24	26	15	3.06	1.08	<i>Accepted</i>
AI enhances creativity	52	48	28	25	15	3.02	1.09	<i>Accepted</i>
AI enhances the competitiveness of the world.AI makes the world more competitive.	61	44	23	25	15	3.09	1.07	<i>Accepted</i>
AI improves production efficiency.AI enhances production productivity.	58	47	22	26	15	3.07	1.08	<i>Accepted</i>
AI subtitles enhance accessibility.AI subtitles make things more accessible.	49	50	27	27	15	3.00	1.09	<i>Accepted</i>
AI enhances distribution systems.AI boosts distribution systems.	54	47	26	26	15	3.04	1.08	<i>Accepted</i>
AI improves audience engagement.AI is used to improve audience engagement.	47	48	30	28	15	2.96	1.11	<i>Rejected</i>

Table 2 shows that the most prominent perceived opportunity of AI is its ability to enhance competitiveness (Mean = 3.09), followed by improved production efficiency (Mean = 3.07) and reduced production costs (Mean = 3.06). However, the perceived use of AI for improving audience engagement was rejected (Mean = 2.96), indicating that respondents associate AI more strongly with production and operational benefits than with audience engagement.

Table 3. *Challenges of AI Adoption in Nollywood*

Statement	SA	A	N	D	SD	Mean	Std Dev	Decision
Limited infrastructure makes it difficult to use AI.	59	43	25	26	15	3.08	1.07	<i>Accepted</i>



High cost of AI tools is a barrier	62	41	24	26	15	3.09	1.08	Accepted
Weak enforcement of Intellectual Property rights impacts the use of AI	55	45	26	27	15	3.05	1.09	Accepted
The lack of funding is a constraint on AI adoption.	60	42	24	27	15	3.08	1.08	Accepted
The informal production networks make it difficult to integrate AI.	53	46	27	27	15	3.02	1.09	Accepted
The lack of technical expertise is a constraint in the use of AI.	58	44	25	26	15	3.07	1.08	Accepted
There are regulatory gaps that impact the use of AI.	56	45	26	26	15	3.06	1.08	Accepted

As shown in Table 3, the expensive nature of AI technologies emerges as the biggest challenge (Mean = 3.09), with poor infrastructure and lack of funding as the next biggest challenges (Mean = 3.08 for both). Acceptance of all seven challenges means that there are interdependent challenges to the adoption of AI technology in Nollywood in terms of financial, infrastructural, technical, regulatory, and organisational barriers.

Table 4. *Ethical Concerns of AI in Nollywood*

Statement	SA	A	N	D	SD	Mean	Std Dev	Decision
The scripts created by AI lack cultural authenticity.	41	47	32	30	18	2.86	1.15	Rejected
AI poses as a threat to the sustainability of creative work.	44	46	31	29	18	2.89	1.14	Rejected
AI also brings up Intellectual Property issues.	53	45	27	27	16	3.03	1.10	Accepted
There is danger of global companies exploiting AI.	47	48	29	28	16	2.96	1.11	Rejected
While AI has the potential to empower artists and creators, it could also end up excluding grassroots filmmakers.	42	46	33	29	18	2.87	1.14	Rejected
The use of AI may lead to a decline in traditional storytelling methods.	39	44	35	31	19	2.81	1.16	Rejected
AI is raising concerns about data privacy.	50	47	28	27	16	3.00	1.10	Accepted

As shown in Table 4, the ethical concern with respect to intellectual property (Mean = 3.03) and the ethical concern with respect to data privacy (Mean = 3.00) are the only two types of ethical concerns which are accepted by the respondents. The non-acceptance of other types of concerns implies that other ethical concerns are not sufficiently established within the context considered.

Discussion of Findings

The findings for the first objective on AI use in *Nollywood* showed that respondents reported the use of AI in editing, subtitling, budgeting and distribution. From the point of acceptance with a mean score of 3.05, 3.01, and 3.00, showed that AI has been utilised in film editing process, subtitling and distribution cum marketing of the movies. However, the prevalence of AI usage was rejected with AI not being used in script writing, role casting, budgeting and schedule with average mean of 2.98, 2.72, 2.85 and 2.93 respectively which are below the decision point of 3.0. This finding in concordance with Osakor (2026), who disclosed that only 35% of *Nollywood* production actually utilise AI tools in the operations. In terms of its adoption, similarities exist with Arinze-Umobi's (2026) whose finding submits that AI has increasingly found uses in subtitling and subtitle editing; however, unlike Arinze-Umobi, here it hasn't found wide adoption. Sanogo's (2026) report shows a hopeful future in the adoption of AI by content creators, with *Nollywood's* adoption story. However, there is no agreement with Russell & Norvig (2021) confirm that AI has started to have a real impact on scripting and scheduling, hence not supporting this study. Thus, this study indicates the discrepancy between theory and practice in adoption, which is not a universal adoption process. With a glance through the lens of



Technological Determinism Theory, we have established that technology (Artificial Intelligence) has begun impacting the *Nollywood* narrative creation through how filmmaking is done. In addition, from the Media Ecology theory perspective, technology's role has been influenced by several infrastructural and financial determiners, thereby confirming the social limitations to technology abilities in Nigerian films as a socially negotiated construct in the *Nollywood* film industry.

In line with the second objective which was on the potential of AI in *Nollywood*, it was found that with mean scores of 3.06, 3.02, 3.09, 3.07, 3.00 and 3.04 that AI can lower production costs, increase originality in films, improve global competitiveness and increase efficiency as the values were over 3.00. This is a strong indicated that AI is revolutionary and capable of altering the method of filmmaking in *Nollywood*. This finding is consistent with Osakor (2026) who asserted that AI is empowering creative industry, while Okwuowulu (2025) acknowledged optimism towards AI by filmmakers in Nigeria. They both noted the lowering of cost and enhancement of global competitiveness. Likewise, this is in tune with Bello et al. (2025) who submitted that AI provides opportunities for subtitling and distribution, implying increased access and reach for the audience, and Madumere (2026) who acknowledged AI strengthening existing distribution systems as well as expanding production aspects. In relation to the Technological Determinism Theory and the Media Ecology theory, this finding shows that technology is a significant contributor to efficiency, creativity and competitiveness in *Nollywood* as a social and cultural entity. The theories agree that AI helps the film industries change with respect to cost and global reach.

In response to the third objective, the findings on the challenges that are preventing usage of AI in *Nollywood*, with mean score of total acceptance of all items on 3.08, 3.09, 3.05, 3.08, 3.02, 3.07 and 3.06 which are all above the average mean of 3.50; thereby showing that infrastructural limitations, high costs, weak enforcement of intellectual property, lack of funding, limited technical expertise, and regulatory gaps are significant challenges. This shows structural and systemic barriers to incorporating AI in movie production. This finding resonates with Shaka (2024), who noted that lack of funds and poor infrastructure are among the major challenges of using AI in the Nigerian film industry. In line with this, Russell & Norvig (2021) observed that there are no infrastructure issues in AI adoption in Hollywood; instead, it is labour-and ethics-based. In relation to the Technological Determinism Theory and Media Ecology, the finding indicate that technology can cause a change, but it is limited in its impact due to the socio-economic and infrastructural conditions. In specificity to the media ecology, it shows that AI as a new technology will transform the film industry over time, but is still constrained by issues that limit the potential of the technology.

In line with the final objective, which addresses ethical concerns of AI in *Nollywood*, it showed with an affirmative mean score of Intellectual Property issues and data privacy with mean scores of 3.03 and 3.00 respectively, while others were rejected. This is in tune with Osakor (2026), who emphasised the issue of job displacement. It also agrees with Bello et al. (2025), who argued that AI-generated scripts may lead to the distortion of indigenous narratives as well as Arinze-Umobi (2026) who saw intellectual property and labour as major ethical concerns. Likewise, in the context of global viewpoints, Russell & Norvig (2021) emphasised the theme of authorship and labour displacement as significant concerns in Hollywood, while UNESCO (2021) pointed to cultural authenticity as another major concern in the African creative industry. These current



findings reveal alignment with global concerns regarding IP and labour, with differences in perceptions of cultural erosion, with *Nollywood* respondents not strongly agreeing that AI is hurting traditional storytelling. This difference could be attributed to the resistance of *Nollywood* to losing its indigenous stories despite the changes in technology, as Shaka (2024) submitted that *Nollywood* storytelling traditions are strong even in the era of globalisation. In relation to the theoretical framework, this finding show that technology can be an agent of change, but that the ethical implications of this are shaped by cultural and social factors. Therefore, the results corroborate that AI is a phenomenon that brings up ethical issues; however, its influence is not without limits, as *Nollywood's* cultural identity remains unaffected by technological homogenization.

Conclusion and Recommendations

Recent times have witnessed the involvement of Artificial Intelligence (AI) in the Nigerian film industry through production and distribution processes. AI can help make *Nollywood* more efficient, creative and competitive; however, at present, it faces many challenges such as a lack of proper infrastructure, budget constraints, regulatory gaps and ethical concerns. The findings showed that while AI was used in such activities as editing, subtitling and distribution, it is not yet widespread and faces structural barriers. While some filmmakers see AI as an opportunity to save money and access, others are worried about the problem of reducing socio-economic inequalities, job losses and violations of intellectual property rights. This research demonstrated that social, economic and cultural context played a significant role in the implementation of technology. This necessitates the following recommendations as put forth:

- i. The creation of AI guidelines and regulations for *Nollywood*, including ethical guidelines, data privacy, and IP rights protections.
- ii. There should be support for infrastructure to enable the use of AI such as digital tools, broadband, and technical training for film makers in Nigeria.
- iii. Furthermore, there is need for filmmakers to gain access to AI technologies through funding support, government grants and private-public partnerships.
- iv. Finally, there should be encouragement for filmmakers, policy makers and technology companies to work together for inclusive and sustainable use of AI in filmmaking and address subsequently ethical issues.

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AI Use Declaration:

The authors declare that Artificial Intelligence (AI) technologies were used in preparing this paper for limited purposes, such as improving the language, grammar, and overall clarity. AI technologies were not used to fabricate or alter the results of the analysis, data, references, or findings. All AI-assisted outputs were independently reviewed by the authors, and they remain wholly responsible for the content of the manuscript.
