

# **The Role of Technological Advancement in African Cinema: A Case Study of Nollywood**

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## **Abstract**

The advancement of technology has created new opportunities for amateur and auteur in filmmaking. The technological innovation is continuously transforming the film industry, thus enabling the application of re-imaging and re-engineering in the films to enhance the quality of films. Nollywood, a Nigerian film industry, is heavily being impacted by the technological advancement which is using digital technologies and High-Definition cameras. This has led to film studios and film companies mushrooming across the country and its borders. Presently, Nigeria is considered as one of the most competitive film industry in the world, and thus has become an African icon. For Africa, this has greatly resulted in a shared commodified culture. This paper discusses the role of technological advancement in the film industry and investigate all viable prospects for today's tech-savvy filmmakers for the development of African cinema.

## **Keywords**

Nollywood, digital, technology advancement, African cinema

## **1. Introduction**

Film is an artistic product of science and technology that brings out the filmmaker's story and fantasies in a motion picture. The history of film is based on the technological advancement for quality. According to Wang (2011), the Lumière Family is considered as the inventor of film - develop from silent film to sound film, black and white to color, followed by wide-screen, digital, huge-screen, and 3D films, even the revolutionary VR film. All these are the products of technology in the field of film. Technological developments have revolutionized the film industry - how digital technology shaped the movie from the 1960s is the most impressive one as it has also introduced filmmakers to globalization which has opened up new markets and strengthened the idea of forming partnerships with other countries.

Nollywood, a Nigerian film industry, is currently recognized as the second largest film producer in the world (UNESCO, 2009). The revolutionary potential of the technology (Buckingham et al., 2007) has played a key role in facilitating the growth of the film industry through low cost digitalized equipment and multiple distribution platforms. In 2013, Nollywood produced about 1844 movies making it a \$3.3 billion sector, thus becoming a lucrative industry (Bright and Hruby, 2015). The increase of film productions in Nigeria has established the Nollywood as a global African powerhouse of cinema (Larkin, 2000). The Nigerian filmmakers are considered as the first and quicker to adopt the new technological instruments in Africa, such as video cassettes to produce multiple films at a very low cost. The affordability of the new advanced technological filmmaking tools gave Nigerian filmmakers an opportunity to produce films that showcased a glimpse of Africa, culture and beliefs to other continents (Onuzulike, 2007).

Whilst Nigeria has developed its film industry and managed to create its own identity by exhibiting its culture to the world, the technological advancement has also facilitated piracy in the distribution phase which has disrupted the traditional distribution forms. The availability of internet has exacerbated piracy through illegal websites that releases films to audience at low cost or even free. Internet has empowered unauthorized persons to access and stream films illegally through online platforms. This has increased the number of pirates in Nollywood who have taken advantage of the disorganized distribution and marketing spheres. The piracy has resulted in the loss of revenues, even though it operates on a low-budget for as little as ten days to produce a film, unlike in Hollywood or Bollywood

### **1.1 Background**

Nigerian film industry can be traced back to their culture - Yoruba. Even today, their culture lives on in their films. Most of Nigerian films are characterized with Nigerian riddles and wise sayings, ceremonies, music and dance. Nigerian film industry offered an exceptional genre of films that every African can relate to, and thus gained its popularity for representing Africa. The Federal Unit recorded and screened the first motion picture in 1903 at the Glover Memorial Hall in Lagos during the colonial rule to distribute their political and colonial ideologies (Mgbejume, 1989). The Federal Film Unit also used mobile vans to broadcast their films in rural areas. However, due to unavailability of many vehicles, the majority of rural Nigerians in remote areas did not have the experience to watch these films. This kind of a historical background is also found in many, if not all, African countries like Rwanda, Tanzania and Zimbabwe.

The import of cheap digital cameras in the 1990s motivated the theatre practitioners to record their theatrical performances in a format of videocassette (Haynes and Okome, 2000). According to Screen Digest (1990), an estimated 277,000 videocassette recorders (VCR) existed in Nigeria by 1989, and every street was reported to have a video parlour where Nigerians would come to buy or rent films. The VCR sparked the need of home-grown entertainment and this led to the release of the film 'Living in Bondage (1992)' by Nnebue using lightweight videotape digital camcorder. Nnebue is considered as the Nollywood pioneer as he was the first one to use a full-colour printed jacket wrapped in cellophane in a Nigerian feature film on video, thus establishing what the world recognize now as Nollywood. This new technology unlocked new possibilities for most of unemployed Nigerians to utilize the lower production cost and ease of distribution across its borders (McCall, 2002). Even the non-professionals could easily enter into the film business with the continued technological advancements of videocassettes to DVDs, a digital video format which eliminated the high costs of film stock, film processing, or film-to-DVD transfers (Connelly, 2006). The advancement of film technology has facilitated the video-film explosion for Nollywood.

### **1.2 Statement of the Problem**

Technology has played a crucial role in allowing Nigerian filmmakers to tell their story in their own way (Amanor, 2010). Nollywood currently falls within the top three filmmaking industries in the world, and is the only strong competitor representing the African society. However, lack of professionalism in the production and post-production activities may lead Nollywood out of the top three ranking because most films are being produced using poor quality cameras and laptops which results in poor quality films. In addition, the industry is facing major challenges from piracy as it is making the industry lose its revenues.

## **2. Literature Review**

Sound is the first and most important technological advancement that the film industry has ever experienced. The first film to be synchronized with audio was *The Jazz Singer* during the 1920s, followed by the invention of television sets during World War II. The popularity of television resulted in the increase of film studios and television productions with their own broadcasting services. The advancement of cameras at the beginning of 90s, from 35mm motion film cameras to digital camcorders, allowed a rapid and a low-cost production in the film industry. This development affected the African Cinema positively. The digital cameras offers better picture and sound quality, data reference for the post-production of film that quickens post-production editing, and are affordable, lightweight – which makes it easier for a filmmaker to carry these cameras compared to traditional motion picture cameras which were extremely heavy (Thursby, 2009). Today, even smart phones and tablets are equipped with digital cameras. The digital cameras are the new catalyst that makes the post-production faster and less expensive, and also provide filmmakers with an option to add special effects. The latest technological development includes 3D Virtual Reality (VR) live production cameras, dual Cameras and autonomous drones that seek to improve the 360° viewing and recording from places like

ceilings, open sky. The aim is to satisfy the audience and reach virtual realism in films. Hence, it will continuously evolve in terms of its technology.

Filmmakers have always been striving to create a computer-generated reality that replicates an environment, real objects to bring a sense of authenticity within its audience, create images and sounds using special effects such as Artificial Intelligence (AI), Sound Design, etc. Films can also provide artificially created sensory experience to audiences, which can include sight, touch, hearing, and smell (Zhao, 2016). The latest audience experience is found in a 4D cinema, for instance the technology has advanced so much that audience can experience the smell of smoke from the film *Avatar* and breezes of Pandora in their hair. Such unique experience has increased the turnover of cinemas.

The film industry has been evolving and developing which has increased a stiff competition within the film industries. Currently, the researchers at NYU have developed AI-Developer Screenplays which makes it easy for scriptwriters to write in a correct format. Editing has now become easier due to the development of editing software such as Algorithm Editing software MI which makes editing much less tedious. The introduction of computer graphics and animation have transformed the process of filmmaking such that many films are now relying heavily on computerized footage.

Most audiences now actively participate in the process of filmmaking (Sandstrom et al., 2008). This development started with media companies, such as CtrlMovie, which allows viewers to determine the outcome of the film using their phones and internet. Filmmakers can create a sustainable relationship with their audience and provide an online platform for crowdfunding - StreamSpace is a cyberspace where filmmakers interact with their fans and share their stories to secure funding. For instance, the Italian *Spiderman* (2007) secured a small grant from the South Australian Film Corporation using this online platform. This interactivity helps to advertise the film, increase sales and boost revenue. Internet has played a great role in enabling communication between filmmakers, multi- distribution platforms and consumers, such as youtube that offer different digital contents giving customers a wide variety of choices. Most customers can now watch films anywhere and at any time using their smartphones and other broadcasting devices. This development has resulted in live online streaming videos and Netflix, which has however negatively affected the DVD sales and rental shops. Though there are some negative impact of digital technology in the distribution channel, these technologies preserve and present the highest quality even after making multiple copies of the original content (Wang, 2011).

## **2.1 The History of the Role of Technology in Nollywood**

The accessibility and affordability of new advanced cameras and other technological equipment has enabled every capable person to engage in any of the film process (Adesanya, 2000). According to Chowdhury et al. (2008), Nigerian film plays a significant role in the Arts, Entertainment and Recreation sector which produces more than 2000 movies a year, employs over a million people, and shows total sales of US\$ 200-300 million per year. In 2013, the entertainment industry contributed 1.4% to Nigeria's annual GDP, which increased to 2.3% (NGN 239 billion) in 2016. The 21<sup>st</sup> century unlocked the regional and international market for Nigeria through piracy. However, Nollywood just like Hollywood have successfully enlarged its markets through internet (Finney, 2015).

During 1930s and 40s in Lagos, that Yoruba speaking artists toured around the country establishing the indigenous performances. Practitioners like Ola Balogun and Hubert Ogunde are attributed by Nigerians for positioning the Yoruba-language cinema on the map and producing films like *Frog in The Sun* (1974) (Asobele-Timothy, 2003). These films were endowed with music, dance and acrobatics. This flourished and overlapped in the 80s, which paved a way forward for storytelling about indigenous traditions and aspirations, leading to productions of films like *Jaiyesimi* (1980). The performances were embedded in traditional art, rituals, religious objects and symbols, proverbs, beliefs and customs. This flourished country wide and by 1980 the audiences had been conditioned to Yoruba which had the genuine indigenous storytelling, traditions and aspirations of the artist. In 1990s, the availability and abundant supply of cheap digital technological film equipment replaced 35 mm film cameras with digital camcorders and celluloid with digital systems (Olayiwola, 2007). The low cost of disposed video technology from Asia led to the rise of video film producers in the early 90s (Amanor, 2010).

The year of 1992 marked the beginning of Nollywood. Kenneth Nnebue, an electrical equipment salesman in Lagos, is attributed for taking the initiative to dispose some of his thousands of blank Video CDs, DVDs, VHS players, VHS tapes and digital cameras that were in stock in his store which he had imported from Asia. He produced a movie called

'Living in Bondage' along with the Yoruba traveling theater artist and made thousands of copies of the film with blank video DVDs that were in his stock. Living in Bondage illustrates the exploitation of the poor, the unfairness of life in general and human sacrifices. The film became a hit and sold 500 000 copies, which is now accredited as the inauguration of modern Nollywood. By 2008, the industry was worthy \$320 million, shipping 600 000 DVD units per day to African countries and other continents (UNESCO, 2009).

Abati in Idachaba (2018a) noted that the Nigerian film industry is the fastest growing industry with a lot job opportunities, and substantial foreign exchange. In that same year, the Nigerian Finance Minister also affirmed that the industry has made over 30 billion Naira revenue for the country. The increase of film productions has increased the number of viewership across Africa and the globe, and the opening of new television broadcasting televisions and videos parlours. According to Chowdhury et al. (2008), Nigeria have over 200,000 unofficial video parlours and only 6,841 officially registered video parlours. The industry distribution sector is largely informal, as a result huge losses are incurred and the government loses revenues for unpaid taxes (Onyedika, 2007). Piracy is a huge challenge and will always be a threat if strong measures are not taken. Despite the use of advanced technological equipment, the lack of professionalism has resulted in the poor quality productions (Ebewo, 2007). These problems needs to be dealt with urgently.

### **3. Methodology**

Data for this paper was collected using secondary sources, such as previous research papers, articles, internet sources. The required information were collected relevant sources on technological advancement, film tools, digital equipment, Nollywood history, piracy in Nigeria, etc. The information were qualitatively analysed to identify and detect patterns, and develop explanations on the status and the role of technological advancement in African cinema, more precisely on the Nigerian film industry.

## **4. Findings and Discussion**

### **4.1 The Present Nollywood and Use of Technology**

Africa is the second largest continent in the world with a population of over 1.2 billion representing 16% of the world's population (UN, n.d.). Africa consists of over one thousand different languages making it the most linguistically and ethnically diverse continent. The technological advancement in film industry gave rise to Black Diasporic Writings. Adesokan (2005) noted that Nollywood depicted the Nigerian society, and the contemporary West African societies in the diaspora. Onuzulike (2014) identified the Nigerian films as a cultural and technological hybrid, an avenue to transmit Nigerian culture heritage. Gray (2003) echoed on the notion that Nollywood has a great impact in the diaspora and noted that:

*“These English-language Nigerian movies are gaining popularity among the nation’s fast-growing African immigrant population, offering their very Americanized children a glimpse of African life, particularly the clash of modernity and traditionalism. (p. 1)*

With the affordability of technological equipment, devices and network, Nollywood has produced movies that dominate the viewing of African immigrants in the United States and Europe. As a result, Nigerian films have become global and has become a voice of Nigerian people, Africa as a continent and the diaspora. The Nigerian video film industry has done well in the last two decades (Figure 1). The increase of Nigerian film productions is deeply rooted in their culture which they have successfully showcased through filming. According to Onuzulike (2007), Nigerian films are their 'home-grown video films'. They have a sense of ownership and identity which has helped it distinguish from other film industries.

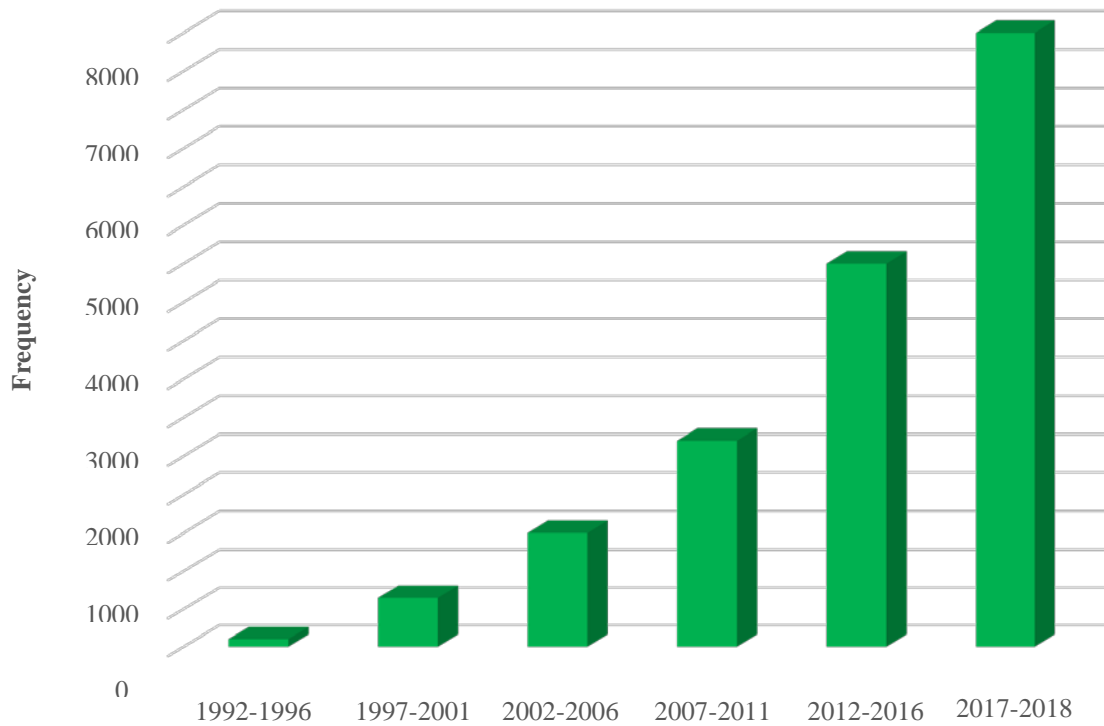


Figure 1. Number of films produced in Nigeria (Künzler, 2006; UNESCO, 2009; UNESCO, 2016)

Based on the quantity of films produce per year, Nigeria has jumped to second place as the world’s leading film producer by overtaking the United States, and only remains behind India (UNESCO, 2016). Figure 2 presents a comparison of Nollywood, Bollywood and Hollywood film productions. The evolution of technology in filmmaking resulted in low cost, effective and user-friendly film processing equipment. It also removes the barrier to entry for new filmmakers in the industry. The democratization of filmmaking by technology has resulted in the production of 50 new films per week by Nigerians, more than Bollywood (15 films/week) and Hollywood (10 films/week) (Economist, 2006; UNESCO, 2009).

Despite the high volume production of films in Nollywood, the remuneration is low. According to UNESCO (2016), a Nollywood film costs between \$40,000 and \$210,000 to produce and sell up to 120,000 copies locally, and more when exported on video or DVD. In 2012, the global box office of Bollywood and Hollywood stand at \$1.6 billion and \$9.8 billion, respectively, whereas Nollywood generates an estimate of \$600 million per year with most income generated from the African diaspora of over 30 million worldwide. African Peer Review report in Idachaba (2018b) indicated that Nollywood is estimated to have a captive habitual viewing audience of over 200 million.

In its most recent report, UNESCO (2016) excluded Nollywood from its analysis of emerging film markets, which is widely attributed to the presence of semi-professional/informal productions and high levels of piracy. Piracy and informal economies are, however, syncretic with the formal economy of Nigerian film. It has both benefitted and suffered from their impact.

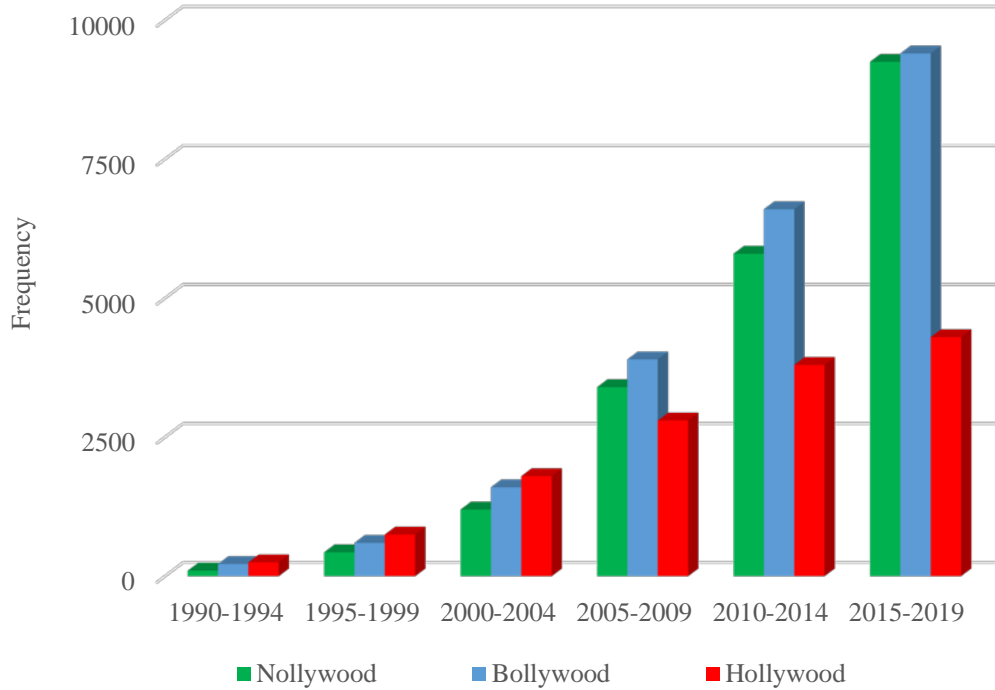


Figure 2. Comparison of film production (Künzler, 2006; UNESCO, 2009; UNESCO, 2016)

The rise of Nollywood is based on technology which have created employment, for instance there are over twenty-five plants in the country capable of producing over 500,000 optical discs (Video CDs and DVDs) every day. The Nigerian films have also been indirectly branding Nigeria through their productions, thus possibly motivating indirectly to indigenous and foreign tourism. Nollywood has created an influx of famous Ghanaian actors, such as Van Vicker, Jackie Appiah and John Dumelo. These partnerships have helped Nollywood to strike markets in Ghana and other countries, and utilize foreign locations such as Accra, Ghana to shoot their films. To reach huge audience base across Africa, the Nigerian filmmakers launched Africa Magic Channel on Digital Satellite Television (DStv) to 53 countries in 2003, increased more television broadcasting services and Silverbird Cinemas in 2004 in order to improve the distribution channels and revenue streams available to Nigerian filmmakers. The introduction of internet distribution channel resulted in the launch of iROKO tv’s video streaming platform in 2011 for a formal distribution of films to African diaspora.

#### 4. Conclusion

Nigeria stands second as the world’s highest film producing nation in the world. Nigeria has a great potential to grow and exceed its current performance. The fact that it has been utilizing all the technological equipment, devices or systems effectively shows that it is a very competitive industry. However, there are certain aspects that need to be immediately addressed, such as piracy which has resulted from lack of knowledge by filmmakers on international marketing skills and how to distribute films. The opening of formal internet websites like Iroko and Netflix that broadcast licensed films are some of the mechanisms used to address this problem. Nigerian film industry has the potential to develop positively in the future for a next generation of filmmakers.

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