

## MEDIA DIGITISATION: PROBLEMS AND PROSPECTS IN NIGERIA

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### Abstract

In the media industry, digitisation has recently emerged as a widespread trend, including developing nations. It has been mandated by the International Telecommunications Union (ITU) that all broadcast stations worldwide must convert to digital operations by the year 2015. This study set out to examine the benefits and drawbacks of making the transition from analogue to digital technology. The method involved outlining the benefits of digitisation and then balancing them against the difficulties of putting digitisation into practise. As a result, recommendations were made to prevent or mitigate the effects of the identified difficulties. It was determined that the success of Nigeria's digitisation effort hinges on the meticulous application of existing policies in light of the proposed solutions.

**Keywords:** Prospects, challenges, digitisation, digital switchover and Nigeria

### Introduction

Over the past few decades, digitalisation has permeated nearly every facet of society. Globally, people's social lives, educational experiences, and professional vocations have been revolutionised by the proliferation of Internet access, mobile phone usage, social media, and other information and communication technology (ICT) services (Schelenz & Schopp, 2018). Digitalisation has the potential to aid the media in developing nations in a number of important ways. For such progress, it is necessary for the media in third-world countries to take steps toward a digital future, to facilitate a digital enabling environment, and to enhance learning, discussion, and exchange platforms about the opportunities, engagement, and challenges of digitalisation in third-world countries (Banga & Velde, 2018). These networks can serve as a solid foundation for any digitalisation-related actions or projects that may be undertaken (Schelenz & Schopp, 2018).

On June 3, 2008, in Abuja, the country's capital, a gathering of broadcast industry stakeholders emphasised the necessity for Nigeria

to embrace the new technology so that the country would not be used as a dumping ground for antiquated analogue-equipment (Dokpesi, 2012). According to reports, Nigeria had scheduled the transition from analogue to digital terrestrial broadcasting on June 17, 2010. That was three years before the global deadline of that was established by the International Telecommunication Union (ITU) following its 2006 summit in Geneva, Switzerland (Kombol, 2014).

Additionally, it is not obvious that everyone has the same interpretation of what digitisation actually means. Digitisation, as defined by Parviainen, Tihinen, Kääriäinen & Teppola (2017), is the action or process of digitising; the conversion of analogue data (especially in subsequent use photos, video, and text) into digital form. In a broad sense, digitalisation refers to the widespread adoption of computing and networking technology throughout societal sectors. The unique impact of digitalisation on the media is frequently highlighted. The media's transition to digital is

then the primary emphasis of digitalisation. The purpose of this study is to provide a high-level overview of the difficulties and potential benefits of digitalising the media in developing nations. None of these issues will be exhausted in this discourse. However, the article will provide a broad overview of the potential far-reaching consequences of digitalisation on media in developing nations. In order to provide some up-to-date insights into actual digital development, the case of Nigerian media will be emphasised at the end.

### **Theoretical Framework**

Much of the research on communication digitalisation has been driven by specific questions; specifically questions about the implications and uses of digital media and how it affects people's behaviours in terms of message transmission. In the past, several studies: Doresa (2014) and Schelenz & Schopp (2018) have focused on the central themes of interaction, multimedia, and hypertext. By analysing Roger Fidler's Mediamorphosis theory concepts, this study helps to close the knowledge gap brought forth by the aforementioned research.

In 1997, Roger Fidler proposed his media metamorphosis theory. Mediamorphosis, here refers to the transformation of communication media typically brought about by the complex interaction of perceived demands, competitive, political forces, social and psychological development. He claims that the transformation of traditional media into digital forms was not an accidental but rather a deliberate process. Roger Fidler, interestingly enough, thinks that the prominent characteristics of the many new forms of communication media may be traced back to the older media. Effective mass communication in the twenty-first century requires a multimedia system that integrates many media types such as text, graphics, sound, video, and animation, as he argued (Anaeto, 2012). The effect of messaging on multimedia platforms is expected to include crisp signals, undistorted audio and unblemished visuals. To put it another way, these are the most notable results of digitisation.

### **Digital Migration – An Overview**

Until the 1990s, broadcasting primarily involved sending analogue signals across the airwaves (or, in some developed nations, through cable as well)

to transmit audio and video streams. Each piece of the content stream would transmit after its predecessor in a sequential order (Okpanachi, 2008). The only drawback was that this method of transmitting signals through wireless electronic frequencies required a lot of bandwidth, which is to say, a lot of capacity. Specifically, radio was like this. The situation was the same with televisions that operated on UHF and VHF channels; there was only one station broadcasting on those frequencies. The effect of few frequencies was to restrict the total number of broadcasting outlets. However, digital electronics have brought forth many changes in this area. Thanks to these advancements, not only text and still images but also audio and video may be encoded as a series of binary digits and broadcast across long distances (Adeosun, 2011).

On June 16, 2006, a resolution on digitisation for broadcasters was agreed for countries in Europe, Africa, the Middle East, and the Islamic Republic of Iran, bringing the topic of digitisation of the broadcast media to the forefront (Adeosun, 2011). At a meeting in Geneva, Switzerland, hosted by the International Telecommunication Union (ITU), this decision was made. The widespread implementation of broadcast media digitisation was expected to begin in 2015 (Kombol, 2014). The resolution only called on the ITU to set a timetable for the digitisation of television broadcasting; no such date was specified for radio. In addition, many African nations, including Nigeria, were being given an additional five years until 2020 thanks to the ITU agreement (Orunsola, 2019). At the end of this resolution, representatives of 120 countries including Nigeria sat, agreed, adopted and signed the digitisation treaty hence making it obligatory on these countries.

Each nation was given a 10-year window in which to implement the shutdown. While some nations, like the United States, switched all of its broadcasting operations to digital on the same day; others, like the United Kingdom and India, staggered the dates for different areas and cities within their borders. With high hopes, the Nigerian broadcasting sector settled on June 17, 2012 as the date to make the transition. The late President Umaru Yar'adua gave his blessing to this particular occasion. This approval set the date for the complete transition to digital broadcasting as June 17, 2012 (Nwanne, 2016). A little over a

year after the strategy was established, the Netherlands completed the transition to digital broadcasting first. Andorra, Finland, Sweden, Switzerland, Denmark, Germany, Norway, etc., were among the countries that quickly followed suit.

There was no way for Nigeria to meet the 2012 deadline. An entirely new timetable to make the transition from analogue to digital broadcasting was set after this setback in Nigeria. The revised due date was June 17, 2015 (Nwanne, 2016). Several measures were made by the federal government to guarantee that the target date would be met. Establishing the Presidential Taskforce on Digitisation and launching Digiteam Nigeria are two examples of these measures. Digiteam is staffed by experts that have not only made significant contributions to the field, but also have worked in the field for many years. In coordination with the National Broadcasting Commission, this team of experts was assembled.

The Director General of Nigeria's broadcast regulatory body, National Broadcasting Commission (NBC), had assured Nigerians of the actualisation of the digital switchover (Ibulubo, 2018). Despite the assurances, Nigeria missed the second ITU deadline. The NBC Director-General claimed that Nigeria has successfully digitised 20% of its media. A score of 20% is very low and indicates that Nigeria has not done well in this area of digitalisation. A third and final deadline for the sub-region to make the switch from analogue to digital broadcasting was set for June 2017, after Nigeria missed two previous deadlines (Ibulubo, 2018).

### **Digitisation in Media Production**

Digitisation has drastically altered every step of the newsgathering process. It has opened up unprecedented possibilities for journalists in terms of the volume, frequency, and velocity of their work (Doresa, 2014). If only the typing process were taken into account, it would be widely agreed that digital devices would generate a more accurate and correct document than a typewriter, which would duplicate the operator's mistake. Therefore, the human operator may benefit from the precision of the machine and quickly produce documents (Prakash, 2019). By extrapolating from just one characteristic of digital technology to the many others, one can see

the vast improvement digital technology offers over analogue and the reason why so many content creators choose it (Choi, 2015).

Journalism in developing nations is facing a number of challenges as a result of digitalisation, with varying conclusions being drawn as to the causes and solutions. There are those who regard this as a step forward for the industry and a blessing, while others who believe it to be the end of journalism as a career in developing nations (Roger, 2011). Online Encyclopedias, public records databases, and other sources of information are now readily available to journalists. But in today's climate of intense international rivalry, traditional concepts of trustworthy, high-quality journalism are under intolerable strain.

The advent of digital media production in developing nations has placed the onus of accountability squarely on the shoulders of the content's creator. The Internet's ability to faithfully reproduce vast amounts of data in manageable chunks has given content creators the irresistible chance to provide readers with full text and links to supplementary details, original documents, and everything else that made the reporting process illuminating for the journalist (Doresa, 2014). Regardless of how one feels about the digitisation of the press, news agencies have no choice but to adapt to the growing demand for round-the-clock online access to the news as a means of survival in the face of the Internet. Because of this, news organisations now provide round-the-clock coverage and other perks like personalised reporting to keep their readers happy.

In a review of studies, Nwanne (2016) examined journalism and new media in Nigeria: issues, challenges and prospects. The study was built on postulations on the technological determinism theory which argues robustly that the communication technology prevalent in any age has a profound effect on the way the people think and believe. The paper highlighted some challenges of Nigerian journalists in using the new media to include poor finances, inadequate power supply among others. Despite the challenges, the media people have coped well, leading to what has been described as media convergence. Thus, the paper recommended among others things that the government should urgently and effectively address the power

situation in the country; provide a knowledge economy while employers and employees of the media industry should engage in constant training and retraining.

Similarly, Ihechu & Uche (2021) x-rayed the challenges of switching from analogue to digital technology in Nigeria. In the process, the benefits of digitisation were outlined and afterwards weighed against the challenges of actualisation of the digitisation. Consequently, suggestions were made to avert, or reduce the impact of the discovered challenges. It was concluded that a careful implementation of the established policies in relation to the suggested remedies, will make the digitisation process a success in Nigeria.

Across the continent, Desta (2018) undertook a broader discursive overview of the state of digitalisation and digital divide in some of the Horn of African (HoA) countries with a particular focus on Kenya and Ethiopia, from the media perspective. The research sought to find out the state or trend of digitalisation/media in Africa, and point out examples of digital divide from the perspective of the media. Accordingly, a secondary material review and key informant interviews were conducted with key informants within the digital media ecosystem, including trainers, researchers, journalists, developers and academics from Africa and Europe. The preliminary findings showed that the level of digitalisation/media development in the region has made commendable progress in a few countries but was largely at a low level of development, with the Kenyan experience faring better than the Ethiopian. There were many opportunities for and divides between digitalisation and digital media development in HoA but given the current state of politico-economic governance in the region, the digital divide related challenges look larger than the opportunities. The study offered suggestions on how digitalisation and digital divide could be better approached.

In Europe, Vyrkovsky et'al (2019) surveyed the newsroom correspondents and editors' working for the Russian news media, both in print and online. The survey results indicated that journalists had adapted to working faster with technology and social media, but the newsroom work had pivoted away from the production of audio and visual content and shifted focus more

towards the creation and packaging of content for varying platforms. The research confirmed that multimedia elements were included in the majority of media reports, though the overall level of 'multimediatiation' was low.

### **Prospects of Digitalisation in Media**

Whether you are a media consumer or a professional, digitalising your workflow will almost certainly improve your life. It is possible that improvements in areas like content creation, media integration, signal quality, and channel availability could fall under this category (Udeorah, 2008). There will be varying degrees of benefit for various groups in society. The potential benefits of digitisation are discussed below.

### **The Media Professionals' Perspective**

Digital broadcasting will usher in an era of unprecedented efficiency for the media industry. This is due to the fact that a station can broadcast on the same frequency for up to four channels. The creation of digital programmes also offers greater agility and speed than their analogue counterparts. Again, digitisation promotes equitable chances that lead to healthy competition, thus stations may generally rely on syndicated programmes. The result is clearer definitions of “content, multiplexing, and transmission” (Uzor, 2008, p. 56). Salary and maintenance costs will go down, though, as will those for the physical infrastructure supporting digital systems. And only a small crew is needed to operate the machinery. Dokpesi (2009) uses this reasoning to argue that digital broadcasting is more cost-effective. He explains, “We used to have approximately a dozen people working in the master control, but now it's only one person. New (digital) technology has reduced the number of required inputs for programme injection from four to two. The advent of digital radio has opened up new revenue streams for broadcasters” (p. 2-3)

### **Protection of the Interest of Content Providers**

The content providers benefit from not only more channels on which to screen their shows, but also greater demand for shows of all types to meet the burgeoning appetite for entertainment content (Udeorah, 2009). Demand for programming is expected to rise when existing broadcast stations begin expanding their channel lineups as a result



of digitisation. Therefore, content suppliers will be actively engaged in the race to meet the demand for programming from the multiple channels. Since this will spur competition, it will lead to better content delivery. Ultimately, the content creators will reap the most financial benefits.

### **Viewers' Interest**

Viewers will have "greater programming choice stemming from optimal spectrum utilisation" thanks to the advent of digital television (Udeorah, 2009, p. 7). Since digital broadcasting "has high receptivity, large reach, and efficiency," it "plays a significant role in information dissemination" (Bunshak, 2006, p. 9). In comparison to analogue broadcasts, digital broadcasts "promise television pictures that are as clear and crisp as a Cineplex feature," which means better picture quality for the viewers (Rodman, 2006, p. 268). If viewers can get several channels from a single station, then that station is being used to its full potential. Since there will be more to choose from, viewers will be more satisfied with their time spent watching television. Furthermore, digital broadcasting promotes media convergence, allowing viewers to combine TV viewing with other information and communication technologies such as the telephone, computer, and the Internet. In his synthesis of the arguments above, Duke (2001, p.1) states that: "The digital television technology has limitless potential. It has the potential to bring the features of the internet and interactive DVDs to television through the use of multicasting, which allows for the transmission of numerous programmes within a single digital signal, and signals for data connections".

### **Enhances Mutual Understanding**

The goal of strong media relations is two-way communication, which is made possible by digitalisation such as the Internet and mobile smart phones, among others. Third-world media outlets can benefit from online chat rooms by providing platforms for live, interactive audience participation during broadcasts. Almost instantly after being written into a chat room, a user's message will display on the screens of other users in the same chat room around the clock. Consequently, audience participation and comments are actively encouraged in digital

media. For instance, citizens now have the ability to communicate directly with reporters and provide timely input, all from the convenience of their own mobile smart phones (Rodney, 2005).

Moreover, Lievrouw and Livingstone (2012) claim that digital media enable users to develop, seek, and distribute content selectively and to engage with other individuals and groups on a scale that was previously impractical with traditional means. Digital media present a tremendous opportunity for public relations work because of the speed and social nature of their engagement.

### **Foster the Growth of Good Reputation**

Just having a website, especially one that is well-designed and regularly maintained, can do wonders for a media outlet's reputation. Having a website also boosts your chances of being recognised on a global scale (Uwaoma & Innocent, 2012). If a public radio or television station in Nigeria were to maintain a popular website, it would almost certainly gain international recognition. In general, people and other media outlets are more likely to connect themselves with firms that are held in high esteem internationally. Furthermore, given the internet's role in helping to open up and shrink the world, so reducing the world into a global village, there is a propensity for more individuals to come across the media station profile which has a website than the ones that do not.

### **Ease in Evaluating the Present State of the Company's Public Image**

There is a built-in system for audience input in digital media, and the media outlets can utilise this to explain their motivations and positions on certain issues (Adedina, Adeniyi, & Bolaji, 2008). The advent of digital media has made it much simpler for media companies to monitor public opinion of their brand, protecting them from the potentially disastrous presumption that their audience views them favourably. Since the majority of online platforms support this type of response, it may be utilised to tell businesses how their products are actually received by the general population. Thus, this can help prevent potential crises by clearing the air before they even start.

### **Challenges of Digital Media in Nigeria**

While digital media plays many important

functions, there are still obstacles to their widespread adoption and efficient usage, especially in developing nations. Therefore, it is crucial to investigate these obstructions. Many obstacles currently prevent Nigeria and other developing nations from making full advantage of the digital media's potential. Some of these issues are monetary in nature, while others stem from a lack of understanding of the various digital media technologies. A discourse on some of those challenges is presented below:

### **Uncertainty Caused by Lack of Regulation**

Many governments, both rich and poor, believe that keeping up with the rest of the world in today's global community requires investing heavily in cutting-edge information and communication technologies. Nigeria is presently investing heavily in the creation and implementation of such cutting-edge technologies. Despite the fact that this is stated in the Federal Government's Information and Communication Technology Policy, it has, unfortunately, never been implemented. While many countries are making strides to grow their ICT industries, Nigeria is still politicising her policy, despite the fact that ICTs have become a hallmark of global superpowers. It is unfortunate that the government of Nigeria has not yet articulated the vision, values, and principles that should drive the country's communications infrastructure. Perhaps this is why Stein and Sinha (2016) argued that a clear ICT strategy would enable for these social choices to be incorporated into technology and industry as it develops, rather than requiring costly and inefficient modifications later.

### **Investment in Digital Media Technologies and its Price Tag**

One obstacle to employing new media in public service is the high cost of such tools. This significantly raises the price of making and airing commercials, which is a key barrier to the widespread use of new media technologies as advertising channels in digital television. Since the majority of these new media technologies originate in Europe and Asia, the high cost of exchange rate is having an impact on the price in developing nations like Nigeria. For instance, at the time of this writing, the parallel market exchange rate in Nigeria is approximately N900

to \$1, which is extremely concerning. The purchasing of cutting-edge media equipment is undoubtedly impacted by this terrifying rate.

### **Low Rate of Technology Adoption**

Technology, particularly digital media technology, is not widely adopted in developing nations like Nigeria, and even the bare necessities of such technologies are sometimes hard to come by in places like that country. Because of this, progress in the field of digital media technology has slowed significantly. For several reasons, for instance, digital television's revolution is taking longer to spread through Nigeria than it has elsewhere. Even though many modern television sets are advertised as digital, the reception of digital signals remains a problem for two main reasons. Fritts (2012) defines "over the air digital stations" as broadcasts that may be received without a subscription or other paid service. However, the great majority of digital TVs now on the market do not allow viewers to receive local stations. In addition, consumers who want to tune in to digital stations must either purchase a digital turning box for their televisions or pay a premium for a real digital receiving set (Baran, 2009).

### **Epileptic Energy Sources**

Despite the massive amounts of money poured in the industry, the epileptic power supply in third world countries remains a hydra headed monster that the governments have yet to tame. The unfortunate truth is that most digital media requires some form of constant electrical current, either to work or to be charged. Due to the unreliable nature of the power grid, broadcasting facilities must rely on power generators that require an ongoing supply of fuel and diesel. Continual power failures in developing nations are a major danger to the future of ICTs in the news industry (Danaan, 2006). Due to power outages, the public broadcasting sector occasionally has to quickly turn off its equipment.

### **Inadequate Knowledge**

With regards to ICT knowledge, many in the media industry fall short. The number of journalists who are comfortable using computers beyond their basic functions is still quite low. For this reason, it is not surprising that many media organisations are still using analogue technology. Attempts to ensure the widespread adoption and

use of digital media technologies are typically thwarted by the fact that many broadcasting station employees are still trying to get their heads around the difficulties these technologies provide.

If the many obstacles that remain impede the adoption of digital media technologies today by media houses are not investigated with a view to solving them, it is possible that media in third world nations will not live up to global standards in the near future.

### Conclusion

Digital technology has been shown to have numerous advantages. Digital television has been proven to provide superior picture and sound quality. As an added bonus, it allows for simultaneous reception of several channels. In addition, the signals are less likely to become distorted. Benefits are really extensive. Still, there are obstacles in the path of digitisation. Some people in the general public may be confused by the whole procedure. The cost is prohibitive for

everyone involved, from the broadcasters to the viewers. Further, uncertainty exists as to whether Nigeria can fully digitalised or not because of the political situation in developing nations. Still, when compared to even more developed nations like Australia and the countries of Europe, Nigeria and other third world countries cannot be claimed to be falling behind. Therefore, the path to digitisation will be smooth if the regulations are strictly adhered to and if governments provide aid to the parties concerned through funding and subsidies. Raising people's level of consciousness would provide an additional boost to the operation. In addition, the government needs to permanently address the power issue currently bedeviling the country. Power outages and digitisation are incompatible. The policy implementation strategies of other African countries, such as Ghana, should serve as models for Nigeria and other developing nations. Nigeria must advance digitally. It cannot afford to lag behind.

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