

## **DEPLOYING MULTIMEDIA TECHNOLOGIES IN BROADCAST NEWS DELIVERY FOR SUSTENANCE OF AUDIENCE INTERESTS AND PARTICIPATION IN NIGERIA: A STUDY OF XL106.9FM-UYO**

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### **Abstract**

This study examined the deployment of multimedia technologies in broadcast news delivery for sustenance of audience interests and participation in Nigeria. The work focused on XL 106.9 FM, a private radio broadcast outfit based in Uyo, Akwa Ibom State, Nigeria. Some objectives of the study included: to find out the different multimedia platforms deployed in XL106.9FM; to ascertain whether the broadcast journalists and news presenters at XL106.9 FM have found the deployment of multimedia technologies functional. The study adopted mixed research method involving both qualitative and quantitative approaches. Data analysed from the questionnaire and in-depth interview showed that XL 106.9FM has deployed multimedia technologies reasonably in its news programme delivery. The study also found out that the deployment of multimedia technologies has enhanced audience participation and interest in the news programme of the station and also eased newsgathering, production and delivery. The study concluded that the major challenges of multimedia deployment at XL106.9 FM had been epileptic power supply, unpredictable network connections and lapses on the part of news personnel. The authors therefore recommended that the management of XL106.9 FM should organise regular training to update the staff members on news beats on the evolving technologies so as to eliminate ignorance and complacency.

**Keywords:** Audience, Deployment, Multimedia, News, Technologies

### **Introduction**

Just as technology has increasingly altered the way man lives, works, moves, eats, sleeps and communicates, technology has increasingly modified the dynamics of news delivery as well as audience involvement and participation in broadcast programmes across the world. And Nigeria is not spared this wave of innovation and transformation in the broadcasting industry.

As noted by Gaudreault, Dulac and Hidalgo (2012), the substantive development of journalism happened towards the end of the 19<sup>th</sup> century and was largely simplified by the use of cheap, vast quantities of wood pulp paper, automated printing presses, typewriting and typesetting machines.

From the invention of the printing press in the 15<sup>th</sup> century to the first global launch of the radio medium in the 19<sup>th</sup> century, the television medium in the first half of the 20<sup>th</sup> century and the Internet in the second half of the 20<sup>th</sup> century; technology has continuously altered the practice of print and broadcast media journalism in the world at large and in Nigeria in particular.

On the part of the media audience, access to the mass media and their programmes is now largely simplified due to the sophistication in technology especially the websites, social media applications, dedicated mobile news applications, weblogs amongst others (Igyuve, Inobemhe, Udeh &

Ugber, 2020). With various media forms converging now into one, allowing the news audience the luxury of listening, reading, watching and even interacting with and through the news media sometimes almost simultaneously. There is an increasing interplay of multiple, enabling media technologies, collectively described as multimedia technologies.

When users are allowed to control what and when the multimedia elements are delivered to them, it is interactive multimedia. When they are provided with a structure that links the elements through which the users can navigate, it becomes hypermedia. The amalgamation of multimedia and journalism results in multimedia journalism. According to Deuze (2004), multimedia journalism can be defined in two ways: first, as the presentation of news story package on a website using two or more media formats, such as spoken and written word, music, moving and still images, graphic animations, including interactive and hypertextual elements; secondly, as the integrated (although not necessarily simultaneous) presentation of a news story package through different media, such as a website, social media, Usenet newsgroup, e-mail, short message service (SMS), multimedia messaging service (MMS), radio, television, teletext, print newspaper and magazines.

Uwakwe (2017) posits that the incredible capacity to combine sound, text, voice, pictures and graphics in one content refers to multimediality. Osakpolor (2020) explains that multimediality is a unique feature of transformed broadcasting in which case news stories are published on the Web with complements of graphics, photographs, animations, audio streams and video footage. The convergence of the old and new broadcast media has enabled broadcast practitioners to use the new media in the editing, design and packaging of broadcast messages such that wider spectrum of the audience finds radio broadcast programmes interesting and participatory. It is against this backdrop that this study examined the deployment of multimedia technologies by XL106.9FM, Uyo for purposes of news delivery and sustenance of audience interest in the station. XL 106.9 FM radio station commenced broadcast service in April 2019 and the station prides itself as Uyo's premium urban news, music and talk radio. Out of the 12 radio stations currently operating in Akwa Ibom State, XL106.9 FM is often described as a full-service radio station offering listeners an exciting mix of news, music, talk, sports and entertainment.

### **Statement of the Problem**

Today's mass media audiences are increasingly active, upwardly mobile, highly democratic, significantly sophisticated, unusually selective, more participatory and even more assertive than ever before. Similarly, the increasing adoption of contemporary technologies has significantly liberalized and democratized the Nigerian mass media ecosystem, with audiences now determining exactly what they want, when, where and how they want what they want. Media audiences now patronize only channels which offer what they (media audiences) consider best and most convenient for themselves.

Broadcast media houses are no longer satisfied offering media contents which appeal only to the ears. Riding on the back of the Internet and other multimedia technologies, they now create online channels which enable them integrate other media forms and reach out more to their audiences with interactive multi-sensory contents (voice, text, visual, graphics, animations, among others).

It has been observed that XL 106.9 FM Uyo is one of the private radio stations in Akwa Ibom State with the longest news belt tagged *XL 360 News Hour* that runs for one solid hour every day from 5.45pm to 6.45pm. In addition to this one hour news slot, the station has two other news slots at 6.45am and 11.45am every day outside the daily pidgin and vernacular news slots. These news slots are often followed by audience reactions session. This informs its choice for this case study. Hence the question: In what ways have XL 106.9FM Uyo deployed multimedia technologies to the task of news delivery? What challenges inhibit such deployment? These questions form the basis of this study.

### **Objectives of the Study**

The investigation sought to achieve the following specific objectives.

1. Find out what multimedia platforms have XL106.9FM Uyo deployed for the task of news delivery.
2. Examine whether the deployment of multimedia technologies has enhanced audience interest and participation in the news programmes of XL106.9FM Uyo.
3. Ascertain whether the broadcast journalists and news presenters at XL 106.9FM Uyo have found the deployment of multimedia technologies functional in news delivery.

4. Examine the challenges inhibiting the deployment of multimedia technologies by XL106.9FM Uyo for purpose of news delivery.

### **Research Questions**

1. What multimedia platforms have XL 106.9 FM Uyo deployed for the task of news delivery?

2. Have the deployment of multimedia technologies enhanced audience interest and participation in the news programmes of XL 106.9 FM Uyo?

3. To what extent have the broadcast journalists and news presenters found the deployment of multimedia technologies functional news delivery at XL 106.9 FM Uyo?

4. What are the challenges inhibiting the deployment of multimedia technologies at XL 106.9 FM Uyo for the purpose of news delivery?

### **Literature Review**

The mass media are originally the products of technological advancement in the human society. Just as technology shapes occurrences in our society so does it shapes the mass media and the mass media in turn help to popularize technology. Hasan (2013) notes that the latest technologies in media make the transfer of information faster and wider while Pavlik and McIntosh (2011) assert that multimedia was one of the four concepts that underlie digital media. Maku (2023) notes that the new media technology, enabled by the internet, has drastically revolutionized the mode of media contents production, dissemination and consumption as well as the media practice in general. The way that technology has influenced media practice and production as well as the influence that the mass media exert on a variety of phenomena in the society including news dissemination is called mediatisation (Bassey, 2021). There are plethora of studies on the effectiveness of multimedia technologies in newsgathering and journalism practice but this study is concerned with how the deployment of multimedia technologies in newsgathering and delivery has enhanced audience interest and participation in news broadcast in Nigeria with particular reference to Akwa Ibom State of Nigeria.

### **The Concept of Multimedia Technology**

Multimedia can be explained as the combination or integration of multiple digital media forms such as texts, sounds, images and videos, into a multi-

sensory and most times interactive presentation that conveys information to a person or group of persons. Osakpolor (2020) notes that multimodality characteristic of the media encompasses the use of various media platforms to disseminate broadcast information.

Uwakwe (2017) explains that multimedia tools include devices meant to perform the following functions: web design, photo editing, video editing, word processing, audio editing, slide shows and interactive media. Multimedia concept is an intrinsic feature of the digital media. According to Maku (2023), the term digital media refers to the media that are encoded in machine readable formats, explaining that such formats can be created, viewed, modified, communicated and preserved on digital electronic devices such as software, digital videos, images, social media, web pages, databases, digital audio and e-books. In his exposition of digitalization, Anim (2013) posits that the capacity of the computer to create, store and process information has made the computer the dominant medium of the digital age. He explains that the multimedia capacity of the computer also fostered interactivity, thus making it possible to customize the converged media to highly refined audience segments or even to individual tastes.

### **News as Major Article of Trade in the Media**

The basic function of the media in any society is that of the provision of news, information and education. By providing information and creating awareness, the media help to educate the readers, listeners and viewers on the implications of events in the society (Akpan & Bassey, 2018). Many of the events occur the same day, sometimes simultaneously. It is the one that gets selected, gets written and reported through the mass media that is called news. According to Hasan (2013), people take media reports as things that affect their interest and use them to form attitudes, opinions and take decisions on issues in the society. Bassey (2016) asserts that it is through gathering, collating and disseminating of news that the press fulfils its crucial function of surveillance.

Kasoma 2010 as cited in Udoudo and Bassey (2011, p.42) note that “good reporters are essential to their communities and their nations as any professional or governmental person,” adding that the people need to be informed in order to be good citizens of their countries. Udoudo and Bassey (2011) argue that apart from the basic needs of

food, clothing and housing, human beings also need news or information to survive. Hence, it is expected that journalists as purveyors of news should give accurate and objective information to enable the public make sound decisions. Most news items are determined by their impact and the degree of human interest evoked by such news. Some news items touch directly the socio-economic rights of the citizens. According to Bassey (2016), news on socio-economic rights of citizens concerns issues of healthcare, education, employment, special protection for motherhood, children and the aged. Others include news about the unemployed, the homeless and the hungry, the community without potable water, electricity, access road, schools or hospitals with a view to drawing government attention to these denied rights.

Asemah (2011) notes that the mass media in carrying out their function scout around their environment and bring news of development, danger, threats to national stability and threat to public welfare of the people. According to Akpan and Bassey (2018), the media usually project the socio-economic rights of citizens by exposing government's neglect of the rural economy, harping on the need to develop micro, small and medium scale enterprises in the communities. Prior to the advent of the Internet, new media and multimedia; news items were traditionally delivered to the news audience through the mainstream media such as newspaper, magazine, radio, television, books and journals. For the broadcast media, the news delivery process before the adoption of the multimedia era was mainly on the linear system and non-integration of the equipment with the workplace. As Herbert (2015) explains, the traditional journalistic writing was based on linear storytelling. Once the story is written by the journalist, the script and the videographer's video clips are handed over to the video editor who takes out time to edit and synchronize the video with the script. The edited clip is transmitted to the news producer who performs the finishing and broadcast the news, usually using a newscaster. Today, broadcast stations as well as consumers can store contents on an array of cheaper, better and more powerful devices such as flash drives, CD-ROMs, DVDs, memory cards and personal digital video recorders which allows for storage of up to 140 hours of standard-definition video or video with audio (Osakpolor, 2020).

### **Demands of Multimedia on the Broadcast Journalists**

The advent of multimedia technologies has particularly transformed the broadcast media ecosystem in Nigeria. With the use of personal computers or mobile phones, reporters now can write news on the spot and transmit to the news editor right in the newsroom. Correspondents can even transmit news reports from sites and scenes far outside the country where the news story is to be aired. For those reporters from the regions without telecommunication networks, satellite phones come in handy as good alternative. Even globetrotting journalists can file their reports from anywhere in the world, just from the comfort of their Internet-enabled mobile phones. Today, manufacturers of television are developing WebTV for easy access to the Internet. Inobemhe (2018) in a study concluded that multimedia technologies were effective at newsgathering and news delivery and that the rate of adoption amongst journalists is reasonably high.

Given the adaptability and usefulness of multimedia to news broadcast, Osakpolor (2020) posits that broadcast practitioners are expected to develop multi-skills to be able to write reports for the broadcast stations, the cable TV, social media platforms and the websites. Other demands are: regular update of knowledge and skills; engagement in regular audience research in order to provide news that meets the interests of the diverse demographic and psychographic indices of the audience; the yearning for innovative and creative news programmes in order to remain relevance in the industry as well as embracing of hard work, discipline and patience given the tasks of packaging news for the different platforms simultaneously. The broadcast practitioners should do well to carefully check and cross-check the information obtained from online sources to avoid spreading fake news.

### **Advantages of Multimedia Technologies in News Delivery**

Some of the advantages that multimedia technologies have on the tasks of news delivery and retention of audience interests are enumerated below:

**Sophistication:** Until recently, most broadcast media stations could only serve poorly-packaged contents for about eight to twelve hours. But now

with the multimedia technologies, broadcast media now produce news and sundry other contents (in multiple media forms) with ease and sophistication and syndicate such across multiple platforms. News packages by broadcast stations can now be neatly delivered as podcast, live on stations' website or blog or social media accounts, as newsletters, as email news summaries, as picture stories, animations or video clips across multiple platforms.

**Elimination of Time lag and spatial distance:**

With the adoption of multimedia technologies in the news production and delivery processes, there is a significant elimination of time lag that existed in time past between the time of news coverage and the time of news delivery. Video Display Terminals (VDT), digital editing suites, webcasting, Video News Release (VNR), broadcast stations now have the capacity to deliver news promptly or instantly, despite the physical distance between the reporter, the station and its audience members.

**Stimulation of audience participation and relations building:**

With multimedia technologies today, the broadcast media audiences in Nigeria are easily reached, are more involved and relate better with the presenters and producers of radio/TV news or programmes through the interactive opportunity created by the multimedia platforms. Audience members follow radio programme and participate through Facebook comments, tweets, YouTube. Radio stations are able to feel the pulses of the audience more through these multiple platforms. This fosters audience participation and relations building.

**Perpetuation of broadcast contents due to media convergence:**

Media convergence relates to the increasing combination, coordination, cooperation and collaboration of two or more formerly distinct media and the integration of their multi-sensory media outputs (text, sound, music, images, pictures, videos, audios, animations) to enhance improved media audience experience. Anim (2013) citing Deuze (2009) describes convergence as more or less reluctant collaboration and piecemeal integration of formerly distinct media operations particularly observable in print and broadcast efforts with an online counterpart.

**Improved interactivity and spontaneous audience feedback system:**

Interactivity is one of the characteristics of new media (Idiong, 2011; Bassey, 2020) because of the new media's ability to allow the decentralization of media messages for greater interfaces and interaction. Today, radio stations trend breaking news headlines on their multimedia channels, long before the detailed news is ready, thereby stimulating advanced interactions. Radio broadcasting, for instance, is no longer a one-way engagement. Radio presenters now freely interact with audience members and get real time feedback. Adamu (2013) notes that media convergence allows mass media audiences to interact with and even generate mass media contents; the audiences control when, where and how they access and relate to information of all kinds.

**Theoretical Framework**

This study is anchored on two theories of mass communication. These are Technological Determinism Theory (TDT) and Technology Acceptance Model (TAM). The term "technological determinism" was coined by Thorstein Veblen in 1962, and this theory revolves around the proposition that technology in any given society defines its nature (Asemah et al., 2016). Technology is viewed as the driving force of culture in a society and it determines its course of history. Technological determinism is a reductionist theory that assumes that a society's technology progresses by following its own internal logic of efficiency, while determining the development of the social structure and cultural values. The basic postulations of Technological Determinism Theory include: technology in any given society defines the nature of the society; technology is viewed as the driving force of culture in the society; and technology determines a society's course of history. The implication of above postulation is that the way people in the society think, feel, act, meet their needs and solve their problems, is determined largely by the technology available to them at a given time. This theory is apt to this study because it provides an insight into why multimedia technologies are adopted by Nigerian broadcast media stations such as XL106.9FM, Uyo for the task of news delivery and for the purpose of deepening audience interests and participation.

Technology Acceptance Model (TAM), which was propounded by Fred Davis in 1989, has its major assumption that the perceived usefulness and ease of use of a new technology will drive its usage. The implication of this assumption is that an individual's attitude towards new technology is determined by the degree of advantages derivable from using such technology. Willis (2008) explains that perceived usefulness of a technology, perceived ease of use and social norms like peer pressure to use or reject a technology, positively correlate with use intention. TAM claims that the perceived ease of use, that is the user's belief about the degree of easiness or unfussiness of using the technology, is a factor of efficacy or usefulness of such technology (Willis, 2008). This simply means that if the user perceives the technology to be difficult in usage, such technology will be inaccessible to that individual. Shittu (2013) posits that TAM also examines differences in usage context such as social norms as well as motivation, user organizational setting and profession. He notes that research on TAM has evolved two concepts of extrinsic and intrinsic motivations. "Extrinsic motivations to use a technology includes benefits expectations from using the technology such as getting employment, more profit or following organizational rules; these are external to the technology," (Shittu, 2013, p.223). According to Shittu (2013), intrinsic motivations include the quest to get entertainment, play games, explore skills, browse websites or express views online chats and other things contingent with the engagement with the product.

Any technology that proves useful to its users and the usage is easy is likely to receive speedy acceptance. The Technology Acceptance Model (TAM) is relevant to this study because it offers credible insight into why multimedia technologies are increasingly being deployed by media houses, including XL106.9FM, Uyo.

**Methodology**

The study adopted the mixed research method involving both qualitative and quantitative approaches. The universe of the study was XL106.9 FM, Uyo, with a total workforce of 42 staffers. Given the fact that not all staffers of the radio station had any business with the subject of the research, the study restricted itself to the relevant population of 33 personnel, which excluded the janitors, drivers and security personnel. In view of the small size of the population, a census of all the 33 staff members in the population was taken. A total of 33 respondents were drawn as the sample for study and the questionnaire administered. Quantitative data were obtained from the analysis of the questionnaire while the qualitative data were collected from in-depth interviews with the heads of operations, units and news presentations. A total of 30 copies of the questionnaire were retrieved and found useful for analysis while three unit heads were available for in-depth interviews.

**Result**

Data collected for this study through the questionnaire administered were computed and analysed in Tables using simple percentages.

**Objective 1: To find out what multimedia platforms have XL106.9 FM deployed for the task of news delivery.**

**Table 1: Responses on Multimedia platforms deployed by XL106.9FM for News Delivery**

Options	Frequency	Percentage (%)
<b>Mobile Phones</b>		
SMS		
<b>Internet/email</b>		
Voice Message, video clips/youtube		
<b>WhatsApp/ Twitter/Instagram</b>		
<b>Facebook</b>		
<b>Podcast</b>		
<b>All of the above</b>	30	100%
<b>Total</b>	<b>30</b>	<b>100%</b>

(Source: Field Data, March, 2023)

The data on Table 1 reveal that all the 30 respondents accounting for 100% of the surveyed population agreed that XL106.9 FM have been deploying multimedia platforms such as mobile

phones, internet/email, voice message, video clips, youtube, whatsapp, twitter, instagram, facebook and podcast in its news delivery.

**Objective 2: To examine whether the deployment of multimedia technologies has enhanced audience interest and participation in the news programmes of XL106.9 FM Uyo.**

**Table 2: Responses on whether Deployment of Multimedia Technologies by XL106.9FM has enhanced audience interest and participation in news programmes**

Options	Frequency	Percentage (%)
Yes	21	70%
No	6	20%
Can't tell	3	10%
<b>Total</b>	<b>30</b>	<b>100%</b>

(Source: Field Data, March, 2023)

Information computed on Table 2 shows that 21 respondents representing 70% of the surveyed population agreed that the deployment of multimedia technologies by XL106.9 FM has enhanced audience interest and participation in news programmes of the station; six respondents

accounting for 20% disagreed while 3 respondents representing 10% remained undecided. The implication of the information above is that majority of the audience finds the deployment of the multimedia technologies in news broadcast interesting and participatory.

**Objective 3: To ascertain whether the broadcast journalists and news presenters at XL106.9 FM have found the deployment of multimedia technologies functional in news delivery.**

**Table 3: Responses on the functionality of Multimedia Technologies deployed by XL106.9 FM for News Delivery**

Options	Frequency	Percentage (%)
<b>Audience participation</b>	3	10.00%
<b>Immediate feedback</b>	2	6.67%
<b>Access to news in multiple forms (audio/text/pictures/videos)</b>	2	6.67%
<b>Perpetuation of news on multiple platforms, after airing on radio</b>	1	3.33%

<b>Delivers news to people outside coverage of XL radio frequency</b>	2	6.67%
<b>Helps to build large audience network multiple across platforms</b>	2	6.67%
<b>Makes news gathering, production and delivery faster and easier</b>	1	3.33%
<b>Helps XL106.9 FM to maintain good relationship with its audiences</b>	1	3.33%
<b>All of the above</b>	16	53.33%
<b>None of the above</b>	-	-
<b>Total</b>	<b>30</b>	<b>100%</b>

(Source: Field Data, March, 2023)

The data on Table 3 show that the deployment of multimedia technologies in radio news broadcast serves different functions and the audience members are attracted to these functions differently based on their differences in perception

and the gratifications they derive from these functions. All the respondents accepted one function or the other as regard the deployment of multimedia technologies in radio news broadcast at XL 106.9 FM.

**Objective 4: To examine the challenges inhibiting the deployment of multimedia technologies by XL106.9 FM Uyo for news delivery.**

**Table 4: Responses on Challenges inhibiting Deployment of Multimedia Technologies by XL106.9FM, Uyo, for News Delivery**

<b>Options</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Inadequate awareness of multimedia technologies by personnel</b>	2	6.67%
<b>Inadequate awareness of multimedia technologies by audience</b>	2	6.67%
<b>Low expertise in operating some multimedia channels</b>	5	16.67%
<b>Slow adoption of multimedia broadcasting by station</b>	2	6.67%
<b>High cost of multimedia apps, channels and technologies</b>	2	6.67%
<b>Threats of cyber-attacks</b>	4	13.33%



<b>Poor infrastructure (power/network/equipment/software, among others)</b>	<b>4</b>	<b>13.33%</b>
<b>Weak regulatory/legislative/policy support</b>	<b>-</b>	<b>-</b>
<b>All of the above</b>	<b>4</b>	<b>13.33%</b>
<b>None of the above</b>	<b>5</b>	<b>16.67%</b>
<b>Total</b>	<b>30</b>	<b>100%</b>

(Source: Field Data, March, 2023)

The information presented on Table 4 shows that the challenges of inadequate awareness of multimedia technologies among the personnel; inadequate awareness of multimedia technologies by the audience members; slow adoption of multimedia broadcasting; high cost of multimedia apps, channels and technologies recorded 6.67% respectively. Poor infrastructure and threats of cyber attacks got 13.33% respectively while low expertise in operating some multimedia channels recorded 16.67%. The implication here is that the major challenge to the adoption of multimedia technologies in news broadcast is low level of knowledge and expertise among the broadcast personnel and threats of cyber attacks followed by the poor state of equipment and infrastructure. From the Table, regulatory policy or legislative support poses no threat to the deployment of multimedia technologies in radio news broadcast in Akwa Ibom State of Nigeria.

The in-depth interview conducted on the Head of Operations, Head of News and Current Affairs and the Head of Programmes revealed that XL106.9 FM Radio station, Uyo has applied multimedia platforms reasonably to the task of news delivery. Such multimedia platforms include mobile phones, internet, emails, voice messages, video clips, youtube, whatsapp, twitter, Facebook, podcast and functional website among others.

The in-depth interview with the three personnel of XL106.9 FM radio station, Uyo on the functionality of the multimedia technologies confirmed that the various multimedia platforms have enhanced audience participation, immediate audience feedback, access to news in multimedia (or multiple media) forms, news delivery outside XL106.9 FM coverage, audience building across

multiple platforms, audience relations with management as well as fast and easy news gathering, production and delivery. The Head of Operations had revealed that XL106.9 FM radio station, Uyo has a big plan for multimedia deployment which would fully materialize upon completion of its currently reworked one-stop shop interactive multimedia website. The Head of News and Current Affairs said that many listeners to the news programme on the station had been following him on the social media platforms of Facebook, Twitter and Instagram. He acknowledged that multimedia platforms guarantee improved interactivity and spontaneous audience feedback system, as well as perpetuation of broadcast contents via media convergence.

On the challenges inhibiting the deployment of multimedia technologies at XL106.9 FM radio station for news delivery, the three personnel were unanimous in acknowledging that the three topmost challenges were poor infrastructure such as network connections, lack of expertise or complacency on the part of the radio anchor, and cyber security threats. The Head of Operations, for instance, mentioned how fraudsters have created multiple fake social media accounts in the name of XL106.9 FM Uyo and have been swindling people through such platforms.

### Discussion of Findings

The objective one of this study focused on the multimedia platforms deployed by XL106.9 FM for the task of news delivery. The data on Table 1 and responses from the in-depth interview showed that XL106.9 FM Uyo applied multimedia platforms reasonably to the task of news delivery. Such multimedia platforms include a functional website among others. The implication of this

finding is that XL106.9 FM is complying with the current technology-driven media operations. This finding supports earlier postulations by Inobemhe (2018) and Igyuve et al. (2020) that broadcast media organizations in Nigeria have adopted multimedia technologies in their operations, to a reasonable extent, particularly in the areas of newsgathering and news delivery and that the rate of adoption amongst journalists is reasonably high. *The objective two of the study examined whether the deployment of multimedia technology has enhanced audience interest and participation in the news programmes of XL106.9 FM radio station, Uyo. Information computed on Table 2 and responses from the in-depth interview showed that the deployment of multimedia technologies in their news programming has gingered audience interest and participation in the news programmes of the radio station. Their responses also revealed that multimedia platforms have enriched news programmes such that each news slot has interview section with actuality, reactions reflections of diverse opinions and balancing of divergent views on controversial news items. The implication of this finding is that the deployment multimedia technologies has improved interactivity and spontaneous audience feedback system, as well as perpetuation of broadcast contents via media convergence as enunciated by Anim (2013). This finding justifies the application of Technology Acceptance Model (TAM) in this study which states that the acceptance of technology is a function of usefulness and ease of use (Igyuve et al., 2020).*

The objective three of the study sought to ascertain whether broadcast journalists and news presenters at XL 106.9 FM radio station, Uyo have found the deployment of multimedia functional in news delivery. The data on Table 3 and the in-depth interview revealed that XL106.9 FM radio station, Uyo on the functionality of the multimedia technologies confirmed that the various multimedia platforms have enhanced audience participation, immediate audience feedback, access to news in multimedia (or multiple media) forms, news delivery outside XL FM's radio coverage, audience building across multiple platforms as well as fast and easy news gathering, production and delivery. The implication of this finding is that multimedia platforms served various useful functions in the business of broadcast news delivery. This result justifies that application of Technology Determinism Theory in the study which basic postulation is that technology determines the way people in a society think, feel, act, meet their needs and solve their problems and

is particularly determining the way journalism is practiced at this time and clime.

The fourth objective of this study examined the challenges inhibiting the deployment of multimedia by XL106.9 FM radio station, Uyo. The information presented on Table 4 and the responses from in-depth interview with the three personnel of XL106.9FM radio station acknowledged that the three topmost challenges were poor infrastructure such as network connections, lack of expertise or complacency on the part of the radio programme anchor, and cyber security threats. This finding is an indication that deployment of multimedia technologies has its prospects and challenges. This result corroborates earlier studies by Adamu (2013) that most media organisations in Nigeria lack the requisite infrastructure for digitisation.

### **Conclusion and Recommendations**

Based on the data presented above, XL 106.9 FM radio station has deployed multimedia technologies reasonably in its news delivery and the application of multimedia platforms has enriched news programmes on the station and also enhanced audience interest and participation. It is hereby inferred that multimedia technologies have made newsgathering, production and delivery faster and easier; and have also enlarged station's reach through multiple platforms. The major challenges that deployment of multimedia technologies at XL106.9 FM radio station encountered are poor power supply, erratic network connection and possible threat of cyber attack. From the findings of this study, the following recommendations are made:

- (i) The management of XL106.9 FM radio station should organize regular training and retraining to update the staff members on news beats on the evolving multimedia technologies so as to eliminate ignorance and complacency.
- (ii) The Nigerian government should take deliberate actions to ensure regular power supply in the country in order to rescue broadcast stations, other businesses and citizens from the burden of epileptic power supply.
- (iii) Internet service providers should upgrade and make connectivity better and stronger than the current service rendered so as to assist media organizations making use of their services for multimedia platforms.

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