Mikailalsys Journal of
Advanced Engineering International

e-ISSN : 3046-9694
p-ISSN : 3046-8914

Index : Harvard, Boston, Sydney University, Dimensions, Lens, Scilit, Semantic, Google, etc

https://doi.org/10.58578/MJAEI.v2i2.6555

Use of Communication Technology by Radio Stations in Benue State

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Article Info:

Submitted:	Revised:	Accepted:	Published:
May 19, 2025	Jun 16, 2025	Jun 28, 2025	Jul 3, 2025

Abstract

This study investigates the use of communication technologies by radio stations in Benue State, Nigeria, with a focus on identifying the types of technologies commonly employed in broadcasting. Anchored in the Uses and Gratification Theory, the research adopts a survey methodology, utilizing a questionnaire administered to a sample of 151 respondents. The findings reveal that various communication technologies are used by radio stations for functions such as news sourcing, processing, and dissemination. Nearly half of the respondents indicated frequent use of new technologies in these core broadcasting activities. However, the study also shows that the broader adoption of ICT tools remains at an emerging stage, with only 32% of respondents actively using ICTs for a range of purposes, including administrative functions. A key motivation for ICT adoption was the need for timely submission of news reports, acknowledging the time-sensitive and perishable nature of media content. The study concludes that while ICT usage in radio broadcasting is growing, it is not yet fully integrated across operational levels. It recommends greater investment in modern communication technologies, increased government funding, and the recruitment of ICT-savvy

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professionals to enhance the efficiency and cost-effectiveness of newsgathering and broadcasting processes in Benue State.

Keywords: Radio; Information and Communication Technologies; News Sourcing; News Processing; News Dissemination

INTRODUCTION

The advent of Information and Communication Technologies (ICTs) has brought tremendous innovations in all spheres of human endeavours. In broadcast media, there has been a new form of news gathering, processing and dissemination due to these ICTs. Adigwe (2012) and Olley et al. (2015) note that ICTs have indeed ignited and provoked radical and drastic changes that have revolutionized both the broadcast and the print media industry most especially in immediacy and timeliness of news. Before now, there was a significant time lag between when an event took place and the time when the news may be publicly made available. But ICTs have helped in bridging the time lag when an event took place and the time it is made available to the public.

The use of ICTs has brought about significant changes in the journalism and media vocation. ICT has led to the generation of more and well researched news. With the coming of mobile phones, you can call your news sources at any time and get news and moreover well-balanced and researched news (Veglis & Pomportis, 2014). When it comes to the Internet, news and program backgrounders are always available (Mugira,2007). ICT has also led to the generation of more and well researched news. With the coming of mobile phones, you can call your news sources at any time and get news and moreover well-balanced and researched news. When it comes to the Internet, news and program backgrounders are always available. ICT is revolutionizing the broadcast media particularly radio and television (Igyuve et al., 2020)

According to Carlson (2005, p.204), argues that, "the development of innovative information technologies and the ongoing processes of deregulation and concentration of ownership, have spurred the pace of globalization especially communications satellites and digitalization-not least the Internet-have had an enormous impact. Realistically, ICT has made reporters, editors and other news contributors closer. It has created a 'network 'that leaves reporters and editors in close contacts at any time. The editor can at any time call the

reporter who is situated in any place, as long as there is telephone network there, and get a story from him/her. Likewise, reporters file stories at any given time via the Internet. The Internet has surely transformed the newsroom to greater heights. Innovations such as the computer and internet gave an impetus to information and communication technologies, information access and dispersion (Tawanda, 2020)

One area where these technologies have made tremendous impact is in the area of communication, and mass communication in particular. Oyedokun (2022) highlights that internet streaming has become a common practice among Nigerian radio stations, enhancing accessibility and audience engagement. The mass media being a product of science and technology, are taking seriously the numerous opportunities afforded by the ICTs revolution for improved programme contents, greater speed, greater reach, clearer sound and vision, better quality output and better reception. Oyedokun (2022) and Dominick (2009) averred that the application of Information and Communication Technologies through the worldwide web provide access to worldwide media on a scale never before possible. Though the application of Information and Communication Technologies, happenings in our immediate environment and around the world are always brought to outdoor steps reducing the wide world to the size of the village as predicted by McLuhan (Nwabueze, 2014). Radio broadcast has over time being the widest of all the means (in terms of coverage) of communication, makes news of events available to the widest possible audience through Information and Communication Technology (ICTs).

These new media channels have further transformed media practice by influencing the process of information gathering, processing and dissemination to a more globalized but selective audience. Today, the new ICTs have fused radio, TV and print into on cyber space, making unique differences between the media to appear on the web. Idemili and Maama (2007) puts it this way: on the web, newspapers and magazines are no longer primarily text medium, radio an aural medium, and television a visual medium. Information and communication technologies with the internet have revolutionised even the traditional media to online platforms bringing about media convergence (Ridwanullah & Bala, 2022). The result of these new changes in media practice, new standards in the nature of doing journalism have emerged. Despite the enormous benefits highlighted on the used ICTs, scholars still argued strongly that the developed countries of the world can be said to have fully embraced these technological innovations, and integrated them in their media, the less developed countries like Nigeria are still left far behind in their adoption and application.

Statement of the Problem

Information and Communication Technologies (ICTs) have become powerful weapons not only in the economic, industrial and academic spheres of life, but have also pervaded and virtually transformed the world from what we know barely few years ago. With the launching of communication satellites into the orbits, news has become almost instant. With satellite TV stations such as the CNN, the BBC World, the Sky News, etc, events are now reported almost simultaneously and instantly (Adamu, 2007; Nwabueze, 2014).

However, a report by Fact Bound Research in February 2012, (Media and Marketing Communications Company), revealed a dismal low level of Internet and ICT utilisation by broadcast organisations in Nigeria, in spite of the growth the sector has witnessed over the years in the country(Adamu & Yakubu, 2008). The research revealed that as low as 31 per cent of broadcast houses in Nigeria have websites and over 70 per cent of their staff did not have access to company email services, while only 49 per cent of the staff have access to or can use computer. Tawanda (2020) noted that the employment of ICTs in the newsroom and in news reporting and processing activities will increase cost, as money would have to be invested into acquiring both hardware and software. Be that as it may, ICTs have altered traditional news consumption patterns due to cheap, easy and faster access of digital content that do not have geographical barrier.This study assesses the use of communication technology by radio stations in Benue State.

Objectives of the Study

The broad objective of the study is to assess the use of communication technology by radio stations in Benue State. The specific objectives of the study are to:

1. Identify the kinds of communication technologies in broadcasting by radio stations in Benue State.
2. Examine the applicability or uses of these communication technologies in broadcasting by radio stations in Benue State.
3. Ascertain the factors that necessitated the use of communication technologies in broadcasting by radio stations in Benue State.

Review of Concepts

The following concepts are been reviewed namely; information and communication technologies, radio news reporting.

Information and Communication Technologies

Information and Communication Technologies (ICTs) are improved means of transmitting and retrieving information. Several authors and scholars have presented what ICTs entail in many ways. Amina (2010) defines ICTs as infrastructure which brings people from various parts of the world together, linking them with multi-media devices that help analyse data, transfer information and manage knowledge in order to expand the capability of human effort. Defined as the new social morphology of the society, ICT is both a structure and a process that enables the exchange, the redirection, and the reception of information, on a global scale, without restraints of space or time. Distance is rendered irrelevant, allowing direct, simultaneous, decentralized, and expanding relations of collaboration, advocacy, trade, production, and innovation, generating new forms of power constellation and distribution (Castells, 2000).

As tools that allow immense exchanges of information, ICT's impact on many realms. The use of Internet in the quest to promote and defend human rights, international law, and democratic governance, is well documented and is perhaps the strongest asset for civil society struggles around the world today and one of the most positive examples of the space of flows. Expressed both locally and internationally through ICTs, people's sense of self is increasingly generating a shared sense of experience, beyond the confines of geographic space. Greig (2002) cited in Kuyoro, Awodele, and Okolie (2012, p.6) have opined that, through ICTs, people are experiencing increased exposure to external influences which have deep impacts on culture and identity.

Radio News Reporting

The use of Information Communication Technologies (ICTSs) by radio stations has produced repercussions on radio itself, as well as on its basic functions as an information dissemination technology. Likewise, the emergence of private radio stations has had significant effects on the audiovisual landscape. According to Saidou (2002, p.13) as a technology, radio has moved from being merely an information and communication technology to an ICT, due to modern advances such as frequency modulation. Moreover, the telephone, the computer and its applications (particularly DAT) have allowed radio to modernize and become global. Besides the diversification and enrichment of the national audiovisual scene, the appearance of independent radio stations has engendered greater familiarity between radio and its listeners.

Moreover, new information and communication technologies (NICTs), particularly the telephone, make it possible to establish rapport with listeners, giving these new media a role in radio that makes radio more local. In addition, the use of computers has enhanced the technological performance of radio, inaugurating the era of digital radio broadcasting (DAT). As noted by Saidou (2002) this technological innovation has many advantages. In addition to allowing for mass programming, DAT makes radio production more reliable. This is particularly true of live programming, making it possible to provide acoustic tracking, thus breaking with the analogue and mechanical transmission that characterized radio broadcasting previously.

Kinds of communication technologies in broadcasting by radio stations in Nigeria

The broadcasting landscape in Nigeria has undergone significant transformations, primarily driven by advancements in communication technologies. Radio stations, in particular, have adopted various tools and platforms to enhance content delivery, expand reach, and improve audience engagement. This literature review delves into the types of communication technologies utilized by Nigerian radio stations, supported by recent scholarly insights.

The integration of internet-based technologies has revolutionized radio broadcasting in Nigeria. Many stations now offer live streaming services, allowing them to reach a global audience beyond traditional terrestrial boundaries. This shift not only broadens their listener base but also provides opportunities for real-time interaction through social media platforms and dedicated mobile applications. According to a study by Oyedokun (2022), the adoption of internet streaming has become a common practice among Nigerian radio stations, enhancing accessibility and audience engagement.

Digital Audio Broadcasting offers superior sound quality and more efficient use of the radio spectrum compared to analog systems. While the global transition to digital broadcasting has been gradual, Nigeria has made notable strides in this area. Research indicates that several Nigerian radio stations have adopted digital technologies to improve transmission quality and offer additional services such as multiple channels and data broadcasting (Oyedokun, 2022).

Satellite technology plays a crucial role in content distribution for Nigerian radio stations, especially in reaching remote areas where terrestrial signals are weak or unavailable. By leveraging satellites, stations can ensure nationwide coverage and maintain

consistent broadcast quality. This approach also facilitates the syndication of programs across different regions, promoting cultural exchange and unity (Ekeanyanwu & Obianigwe, 2011).

Factors that necessitated the use of communication technologies in broadcasting by radio stations in Nigeria

The broadcasting industry in Nigeria has experienced significant transformations due to the adoption of various communication technologies. Several factors have necessitated this shift, aiming to enhance content delivery, expand audience reach, and improve operational efficiency. This literature review examines the key drivers behind the integration of communication technologies in Nigerian radio broadcasting, supported by recent scholarly insights. The demand for superior audio quality and diverse content has propelled radio stations toward digital broadcasting technologies. Digitalization offers clearer sound and allows for the transmission of additional data, such as song information and news updates. Olley et al. (2015) note that the adoption of digital broadcasting in Nigeria has led to improved output quality and timely information dissemination.

To overcome the limitations of terrestrial broadcasting, Nigerian radio stations have embraced internet streaming and online platforms. This approach enables them to reach a global audience, catering to the Nigerian diaspora and international listeners interested in African content. Oyedokun (2022) highlights that internet streaming has become a common practice among Nigerian radio stations, enhancing accessibility and audience engagement.

The proliferation of mobile devices has changed how audiences consume media. In response, radio stations have developed mobile applications and SMS-based platforms to disseminate content and interact with listeners. This strategy caters to the on-the-go lifestyle of modern audiences and facilitates real-time engagement. Ekeanyanwu and Obianigwe (2011) indicate that mobile communication technologies have become integral to broadcasting operations in Nigeria.

Theoretical Framework

Uses and gratification theory was used s theoretical underpinning for the study.

Uses and Gratification Theory (UGT)

The theory was developed in 1974 by Katz, Blumler and Gurevitch (Wimmer and Dominick 2011, p.10). Uses and Gratifications theory is the study of the gratifications or benefits that attract and hold audiences to various types of media and the types of content that satisfy their social and psychological needs. It was developed to explain why audiences do not passively wait for the media messages to arrive, but actively and deliberately seek out forms of content that provide them with information that they need and like and use.

The theory describes the recipient as actively influencing the effect process since he selectively chooses, attends to and perceives and retains the media messages on the basis of his or her needs (Asemah et al., 2022). These uses (exposure to the media) and gratification (benefits) are determined by the needs of members of the audience. Such needs may include information, entertainment, self-esteemed and prestige. In other words, users select media based on how well each one helps them meet specific needs or goals. As in the case of news reporters, their choice is based on the importance and value which the use of ICTs may add to their activities.

This theory is relevant to this study since it has given proper insights to the use of ICTs among journalists in Benue State. The uses and gratification theory explains further, the role of ICTs towards news gathering and dissemination.

METHODS

The study employed the survey method as research design, using questionnaire and oral interview as research instruments in collecting data on the use of Communication Technologies (ICTs) by radio stations in Benue State in news gathering and processing. The population of the study comprises of all journalist of Harvest, Radio Benue and Ashi Waves FM. Individually, Harvest FM has 39 practicing journalist, radio Benue has 104 practicing journalists while Ashi Waves has 17 journalists. In all, the above studied radio stations have 162 journalists which make up of the study population. These are the calibre of staff with knowledge about the research. This study adopts census sampling method in determining the sample size of the study. Census sampling entails adopting the entire population of the study as sample size, being that the total population is the study is not so large to be studied.

Therefore, data collected for the study was presented in tables and the level of occurrence of each response in the questionnaire was computed using simple percentages to determine the frequency of responses in relation to questions raised in the questionnaire.

RESULTS

Simple percentages and frequency tables were used for data presentation. On a final note, 162 questionnaires were administered and only 151 were returned and analyzed, findings from the data were presented and analyzed as discussed.

Kinds of communication technology used by radio station in Benue State

Response option	Frequency	Percentage
Mobile phones/recording	25	16.5%
Electronic Mails	33	21.8%
Digital Cameras	19	12.5%
Digital Transmitters	2	1.3%
All of the above	74	49.0%
Total	**151**	**100%**

Source: Field Study, 2024

Data on table above shows the kinds of communication technologies used by radio stations in Benue state. The implication of the data is that majority of the respondents said Mobile phones/recording, Electronic Mails, Digital Cameras and Digital Transmitters are all among the gadgets used by radio stations in Benue State as shown by 74(49.0%) of the entire respondents.

The Table below shows the Applicability and use of communication technology by radio stations in Benue State

Response option	Frequency	Percentage
The use of mobile phones to book and hold interviews with sources.	26	17.2%
Use of electronic mails to book appointments and also send in reports by reporters to the Chief-Editors Desk.	24	15.8%
The use of voice recorders to hold interviews.	29	19.2%
Use of software in news editing.	23	15.2%
All of the above.	49	32.4%
Total	**151**	**100%**

Source: Field Study, 2024

Data on table above shows the Applicability and use of communication technology by radio stations in Benue State. The implication of the data is that majority of the respondents said that they use all of the above gadgets as shown by 49 (32.4%) of the entire respondents.

Table below shows the Necessitating factors on the use of communication technology by radio stations in Benue State.

Response option	Frequency	Percentage
Rapid information relay.	34	22.5%
Wide range of coverage.	28	18.5%
A shift in media organization.	21	13.9%
Prompt submission of news reports from the field.	41	27.1%
All of the above	27	17.8%
Total	**151**	**100%**

Source: Field Study, 2024

Data on table 4.5 above shows distribution according to factors responsible for adoption and use of ICTs by radio stations in Benue State. The implication of the data is that majority of the respondents said that Prompt submission of news reports from the field was the main factor responsible for adoption and use of ICTs by radio stations in Benue State as shown by 41 (27.1%) of the entire respondents.

Showing Benefits gained from the adoption and use of ICTs.

Response option	Frequency	Percentage
Prompt editing of news stories	37	24.5%
Ease of gathering news	27	17.8%
Making programme production easy	30	19.8%
Saves time	33	21.8%
All of the above	24	15.8%
Total	**151**	**100%**

Source: Field Study, 2024

Data on table above shows the benefits gained from the adoption and use of ICTs. The implication of the data is that majority of the respondents said that Prompt editing of news is the major Benefits gained from the adoption and use of ICTs as shown by 37 (24.5%) of the entire respondents.

DISCUSSION

The findings of this study were discussed thematically in line with the objectives of the study.

What are the kinds of communication technologies used for broadcasting by radio stations in Benue State?

This question sought to decipher the kinds of communication technologies used for broadcasting by radio stations in Benue State. The study revealed that majority of the respondents said Mobile phones/recording, Electronic Mails, Digital Cameras and Digital Transmitters are all among the gadgets used by radio stations in Benue State. More so, the respondents also stated that the level of utilization of ICTs by the media organizations is very high since every respondent uses ICTs on daily affairs in news gathering. The study shows that different kinds of communication technologies are used for broadcasting by radio stations in Benue with almost half of the population of the respondents who have used new technologies for virtually every function in news sourcing, news processing and news dissemination. This is a clear indication that the use of ICTs is gaining traction in every facet of radio broadcasting in Nigeria due to the multifarious potentials they have in transforming radio broadcasting and facilitating different media tasks just like every other profession where such devices are used.

This partially aligns with Adamu and Yakubu (2008) who found out that although ICTs have brought about significant improvements on journalism practice and is potential instrument for efficiency; however, the extent of the application of computer, GSM, internet and satellite among others in Nigerian Newspapers is "deplorably low". This finding gives credence to the finding of the current study which also reveals that although ICTs have been adopted for radio broadcasting in the study the extent of adoption is still growing owing to a number of factors that are inhibiting the pace of technological innovations in Nigeria generally.

What are the uses of these communication technologies in broadcasting by radio stations in Benue State?

The crux of the research question here is to ascertain the applicability cum uses of communication technologies in broadcasting by radio stations in Benue State. Findings from the study revealed that ICT are used for several purposes in a typical radio station which include the use of mobile phones to book and hold interviews with sources (17.2%);

Use of electronic mails to book appointments and also send in reports by reporters to the Chief-Editors Desk (15.8%); The use of voice recorders to hold interviews (19.2%) and Use of software in news editing (15.2%). Furthermore, 49 (32.4%) of the entire respondents said that they use ICT gadgets for all the aforementioned purposes. Albeit, there are other technological devices that are yet to be adopted by most broadcast stations due to their high cost of acquisition. This implies that although information and Communication technology has been adopted and used for radio broadcasting in Benue state to a very high extent, the population of active users is still at an emerging stage as only 32% of the respondents use ICT gadgets for divergent purposes covering all the aforementioned in news sourcing, news processing, news dissemination and for administrative tasks.

This is in line with Amina, (2010) who opined that the benefits of using ICT innovations like the internet among others are many and they are used for easy collection of news stories, to facilitate effective processing and editing of news stories, enable effective storage and retrieval of news information, enhance daily meeting of deadlines and also enable the reduction of physical presence in news gathering.

Similarly, Nuhu and Waya (2014) averred that ICT is certainly an indispensable factor in realising effective news processing this digital age. The study revealed that ICT has positive effect identified its advantages such as is fast, makes work easy especially when compared to the old manual ways of news processing. They also identified an improvement in quality of production, ranging from video and audio quality. Other advantages identified are reduction of errors and easy correction of error, it ensures accuracy, it allows greater access to information and saves time. Suffice to say that the use of ICT in broadcasting increases efficiency and reduces cost and time taken using manual efforts.

What are the factors necessitating the use of communication technologies in broadcasting by radio stations in Benue State?

This research question focused on identifying the factors necessitating the use of communication technologies in broadcasting by radio stations in Benue State. The study found out that there are multifarious factors necessitating the adoption of ICT gadget for radio broadcasting in Benue State. Data from the study indicated that; Rapid information relay constitute (22.5%); Wide range of coverage (18.5%); A shift in media organization

(13.9%) and Prompt submission of news reports from the field also constituted (27.1%) being the foremost. Apparently, most of the media personnel adopt and make use of ICT gadgets because it enhances prompt submission of news reports from the field considering the fact that media products are time bound and easily perishable. This prompted the exploration of time saving approaches in order to meet the deadline given to the reporters.

This agrees with Balogun (2008) who stated that modern ICTs have made tremendous positive impact on the quality of the station's programmes, however, the extent of application is still grossly inadequate and needs to be improved upon. In the same vein, Olley et al. (2015) stated that the adoption of digital broadcasting in Nigeria has led to improved output quality and timely information dissemination. More so, to overcome the limitations of terrestrial broadcasting, Nigerian radio stations have embraced internet streaming and online platforms. This approach enables them to reach a global audience, catering to the Nigerian diaspora and international listeners interested in African content. Oyedokun (2022) also highlighted that internet streaming has become a common practice among Nigerian radio stations, enhancing accessibility and audience engagement.

CONCLUSION

Consequent upon the findings of this research, the study concludes that a good number of ICTs have been adopted for radio broadcasting in Benue state. Be that as it may, the level of adoption of the ICTs in various facets of radio broadcasting in Benue state is still at an evolving stage. This is primarily as a result of the fact that the cost of acquiring these modern technologies for radio broadcasting is astronomically high beyond what an average radio station can afford. In spite of these limitations, the broadcast stations are making every effort to use modern communication technologies in news sourcing, news processing and news dissemination to save time and cost. This clearly indicates that the use of ICTs is gaining traction in every facet of radio broadcasting in Nigeria due to the multifarious potentials they have in transforming radio broadcasting and facilitating different media tasks just like every other profession where such devices are used

Recommendations

Based on the conclusion drawn from this study, the following recommendations were given;

1. There is the need for versatility in the adoption and utilisation of modern technologies to facilitate news sourcing, news processing and news dissemination in order to save time and cost of production.
2. New communication technologies should be utilised judiciously to improve the quality of the output of radio programmes.
3. On-the-job training should be organized to train broadcast journalist on the effective use of Information and Communication Technologies.

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