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Assessing the Knowledge, Adoption, and Application of Information and Communication Technologies in Select Broadcast Stations in the Federal Capital, Abuja

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Abstract

This study investigates the knowledge, adoption, and application of information and communication technologies (ICTs) in selected broadcast stations within the Federal Capital Territory, Abuja. Employing a survey research design, data were collected through questionnaires administered to a cross-section of respondents. The findings indicate that ICTs have been integrated to a very high extent in the operational activities of broadcast stations. Respondents reported that the application of ICTs in Channels TV, NTA, and FRCN is particularly effective in news gathering, followed closely by satisfactory application in news processing. The study concludes that there is a high level of ICT knowledge, adoption, and application in Nigerian broadcast media, reflecting the sector's responsiveness to technological change. It recommends continuous training of broadcast personnel in the use of modern hardware and software tools to enhance service delivery, alongside policy interventions by the National Broadcasting Commission to implement 21st-century ICT standards as advocated by the International Telecommunication Union,

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thereby facilitating Nigeria's transition from analogue to digital broadcasting.

Keywords: Information and Communication Technologies; Broadcast Media; Adoption; Digital Transition; Nigeria

INTRODUCTION

The revolution in Information Communication technology is pervasive in every aspect of the media industry. ICT has revolutionised communication in diverse ways making it much interesting and participatory than ever courtesy of social media platforms. Several benefits accrue in virtually every mainstream media (television, radio, newspaper, magazine) as a result of these technological advancements. In its use in broadcasting, Samadar (1995) perceives ICT as an integral part for enhancing timely news delivery in the broadcast industry; he opined that ICT is a tool for facilitating the creation, storage, management and dissemination of information by electronic means. This it has been able to achieve by breaking down the time and distance barriers. Events can be reported as they happen in real time regardless of if the journalist is live at the event or monitoring the event from the studio or at home.

Heath and Luff (2000) predicted the impact of technology on news reporting; an impact that has led to a new enfranchisement for citizens. Before the advent of ICT, there was a significant time lag separating the point when an event occurs, and the time when the public becomes aware of such information as news. ICT has helped bridge the time lag between when an event takes place and the time it is made available to the public. The most significant impact of ICT on news is that it allows immediate feedback; the audience can respond to news stories instantly and immediately if they want to.

This led Adigwe (2012) to boast that "ICT in the 21st century is a force to be reckoned with because it has caused and continues to cause major changes in the way we live. The ICT revolution is a revolution changing all modes and patterns of communication and hence is bound to lead to dramatic changes in TV broadcasting and how information communication technologies are applied in television broadcasting. Adigwe (2010) further states that ICT not only facilitates and enhances the creation, processing, sharing, production and dissemination of information in the broadcast industry but the immediacy

and timeliness of news is of a high priority. With ICT news gathering has become faster, cheaper and readily available to anyone connected to the internet using any devices such as mobile phones, laptops, tabs, Palm tops etc.

Broadcasters in Nigeria in the past were employing manual and analogue technologies in their programming, news gathering, processing and dissemination which in a way delayed delivery to the targeted audience. However, with the advent of ICT devices and digital equipment which are now being employed in the production, recording, programming, gathering, processing and transmission of news events by television broadcast stations in Nigeria, there has been an enhanced or improved delivery of broadcasting services. This invariably will mean a radical departure from the ways of broadcasting and the skills required to master the various ICT components.

Statement of the Problem

ICT has revolutionised communication in diverse ways making it much interesting and participatory than ever courtesy of social media platforms. Several benefits accrue in virtually every mainstream media (television, radio, newspaper, magazine) as a result of these technological advancements. These information and communication technologies have been envisaged by some people as the threshold of globalizing the world. Information and Communication Technology acts as a great facilitator in globalizing, uniting the disintegrated world and enabling people to gain access to knowledge and services. There is no doubt that the world is becoming homogenous and shrinking into a global village as predicted by the Canadian Scholar, Marshall McLuhan. Sequel to the deadline given by the International Telecommunication Union (ITU) on the world wide switch over from analogue to digital broadcasting, most developed countries have complied with that(ITU, 2020). Although, these new technologies have been adopted and are being utilised in Broadcasting among other aspects of Mass Communication in other parts of the world, the level of knowledge, adoption and application in developing countries like Nigeria is still poor. It is against this premise that this study seeks to assess the knowledge, adoption and application of Information Communication Technology in select Broadcast organisations in the Federal Capital Territory, Abuja.

Objectives of the Study

The main objective of this study was to assess the use of ICTs in the performance of Nigerian broadcast media. However, the specific objectives of the Study are to:

1. Assess the knowledge and adoption of Information and Communication Technology in select Broadcast stations in Abuja.

2. Ascertain the level of adoption of Information and Communication Technology in select Broadcast stations in Abuja.

3. Evaluate the application of Information and Communication Technology in select Broadcast stations in Abuja.

Review of Concepts

This section reviews key concepts that make up the subject of research in order to set the coordinates right in studying the concepts within defined context.

Information and Communication Technologies (ICT)

Information and Communication Technologies is basically a term that is used for all technologies which are used for the communication of information. It includes all the technologies that are used for recording, broadcasting and communicating information through sound and picture. There is no specific date or time for its evolution as it was produced gradually overtime. As technologies evolved, the information and Communication Technologies also evolved and took its present form (WWW.b/ucom/q.953537.ntml). The term "Information and Communication technologies" is also used when referring to the merging (convergence) of audiovisual and telephone networks with computer network through a single cabling or link system.

It can also be said to be the general name given to all kinds of technologies which enable users to create, access and manipulate information. Information and communication Technology is the term used to cover a whole range of hardware and software. Information Technology (ICT) system processes, stores, and/or transfers (communicates) information. ICT merges computing with high-speed communications links carrying data, sound and video. Examples include personal computers, telephones, television and various handheld devices (Williams and Sawyer, 2005).Information and Communication Technology (ICT) can be defined as a "diverse set of technological tools and resources used to communicate, and create, disseminate,store and manage information" (Blurton 2005). This technology includes computers, the internet, broadcasting technologies (Radio and Television) and telephony. Technological change is a process that has accelerated over the past fifteen years

and has created a new national economy "powered by technology, fueled by information and driven by knowledge" (U. S Dept. 2005).

Information and Communication Technology (ICT) is a technology such as computers, software, peripherals and Internet connections infrastructure required to support information processing and communication functions (UNDP, 2001). Sesan (2001) cited in Aruma (2009) defines ICT as the convergence of microelectronics, computing and telecommunications which has become a global phenomenon of great importance and concern in all spheres of human endeavour, spanning across education, governance, business, market share, labour, productivity, afroculture, trade, commerce and others.

Review of Related Literature

ICTs and News Gathering

To many, ICT is seen as more of a convergence of technologies rather than a mechanism that can help transport, convey or disseminate timely information. One key impact of ICTs on news gathering is not only to improve quality news delivery but also facilitates the creation and dissemination of information, by electronic means. In this regard, Dugo (2008) maintains that Information and Communication Technologies have transformed the world in all spheres of life in time past. He further elucidates the potential of ICT in reducing manual operations in fostering the growth in the media has increased rapidly. For this reason, ICT bridges the constraints of distance and time by possibly bringing news sources closer than ever before to the news gatherers and reporters.

Mugo (2006) is of the view that the telephone has bridged the time between the reporter and the source, reporter and editor, saving costs such as travel logistics. As news can be reported from any location and at any given point in time. Still, cost is one of the immediate impacts of ICTs on news gathering, as the cost of gathering news has drastically and significantly reduced with the advent of information and communication technologies. In addition to improving the delivery of News, Computer and Telecommunication Technology serve as a medium for improving both the quality and quantity of information in broadcast media. This serves as a springboard to the fact that broadcast stations report live incidence of occurrence of any sort in real-time.

Chan-de Liu (2006) is of the notion that Information and Communication Technology improves News reporting. More so, news reporting refers to the act of conveying or relaying, or communicating the message to the audience. Meanwhile, Chan-de

Liu (2006) further elucidates that ICTs have made exchange of ideas, (which is a form of reporting) between communicators and receivers easy. He argues that "Participation which necessitates reasoning and moreover trust, will help reduce the social distance between communicators and receivers, between teachers and learners, between leaders and followers as well as facilitate a more equitable exchange of ideals."

Relevance of the technological era on Mass media activities

The ICTs are revolutionizing a lot of friends in the society including the media. There is currently a drive toward new media where the power of new technologies are opening and extending the frontiers of media land scope. Observing this trend, it is pertinent to note that the growth of industries and quoi-industrial establishment over the years. Have fostered significantly the emergence and diversification of technology in many countries.

The mass media are marked by high investments and competitions. The modern media are also in competition with that Dominick (2001) calls machine assisted mass communication. The internet has facilitated online services particularly with regards to television, newspapers and cable television. Dominick (2001:235), states that the internet has facilitated the sharing of communication at a faster rate by people across the world.

The arrival of computer has had enormous impact in the production process in the media industry. For instance, many of the newspapers adopting completely new programme that assist page layout on screen. The modern technology has helped to eliminate the need for compositors to set types, since correspondents have done the key stroking and the story already exists in an electronic form. When this has been done, Ufuhu-Biri (2006:235), observe that the new editor recalls them on his computers of video display terminals (VDT) and do their editing and all formatting right on the computer. The lithography sections recall then complete pages and do their work.

Theoretical Framework

Diffusion of innovation theory was chosen to serve as the theoretical foundation for this study due to its suitability and applicability to the current study.

Diffusion of Innovation

The study is anchored on the Diffusion theory propounded in 1962 by Everett M. Rogers who combined the information-flow research findings on the flow of information

and personal influence in a number of fields. The theory is in itself a vital expansion of Lazarfeld's original idea of two-step-flow. Diffusion, according to Rogers (2003, p.161), is "the process by which an innovation is communicated through certain channels over time among members of a social system". In other words, the study of diffusion of innovation is the study of how, why, and what rate new ideas and technology spread through cultures. This relates to the study in that technology, though has been in existence for a while but is still an emerging trend with new advancements and improvements adding up daily. These innovations are being disseminated via the media most especially via the broadcast media which have the glamour of communication sound, pictures and video.

Diffusion of innovation theory originated in communication to explain how, over time, an idea or product gains momentum and diffuses or spreads, through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behaviour or product. Adoption means that a person does something differently than what they had previously; purchase or use a new product, acquire and perform a new behaviour. The key to adoption is that the person must perceive the idea, behaviour or product as new or innovative. It is through this that diffusion is possible. The theory traces the process by which a new idea or practice is communicated through certain channels over time among members of a social system. The model describes the factors that influence people's thoughts and actions and the process of adopting a new technology or idea. Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system; diffusion is a special type of communication concerned with the spread of messages that are perceived as new ideas. An innovation is an idea, practice or object that is perceived as new by an individual. The characteristics of innovation as perceived by the members of a social system determine its rate of adoption. Thus, diffusion of innovation theory attempts to explain how an innovation is spread and why it is adopted at both the micro and macro levels of analysis. The four main elements in the diffusion of innovation process are: innovation, communication channels, time and social system. Individuals' innovativeness or psychological factors such as communication needs are analysed as micro-independent variables. At the macro-social level, this theory assumes that social systems, such as norms, can affect an individual's adoption or use of an innovation. In terms of communication channels, diffusion of an innovation involves both interpersonal channels (micro) and mass communication channels (macro). By utilising both mass and interpersonal communication

channels, people can get information about an innovation and perceive its usefulness. The theory can be successfully applied in many areas of research like: agricultural communication, public health, criminal justice, social work and marketing. In public health, diffusion of innovation theory is used to accelerate the adoption of important public health programmes that typically aim to change the behaviour of a social system

RESULTS

The data presented is presented in a clear, concise, and visually engaging manner to help facilitate understanding and comprehension.

Table 1: I have knowledge about Information and Communication Technology used in Broadcast media.

Responses	Frequency	Percentage
Yes I do	188	48.2%
I partially know that	142	36.4%
I don't know	60	15.4%
Total	**390**	**100 %**

Source: Field Survey (2023)

Table 1 above shows respondents' have knowledge about Information and Communication Technology used in Broadcast media as seen in the 188 respondents represented by (48.2%) who said they have knowledge about Information and Communication Technology used in Broadcast media whereas 142 respondents represented by (36.4%) said they partially have knowledge about Information and Communication Technology used in Broadcast media. This shows that majority of the respondent have knowledge about Information and Communication Technology used in Broadcast media as shown by 188 respondents represented by (48.2%) of the entire population.

Table 2: Are you aware about the adoption of Information and Communication Technology in Abuja?

Responses	Frequency	Percentage
Yes, I am aware	231	59.2%
I am moderately aware	97	24.9%
I am not aware	62	15.9%
Total	**390**	**100 %**

Source: Field Survey (2023)

Data on the table above shows respondent are aware of the adoption of Information and Communication Technology in Abuja as evidenced in the 231 respondents represented by (59.2%) who stated they are aware of the adoption of Information and Communication Technology in Abuja while 97 respondents represented by (24.9%) said they are moderately aware about the adoption of Information and Communication Technology in Abuja. This implies that a good number of respondent are aware about the adoption of Information and Communication Technology in Abuja as shown by 231 respondents represented by (59.2%) of the entire respondent.

Table 3: I am aware of the adoption of software technologies in Channels TV, NTA and FRCN in Abuja.

Responses	Frequency	Percentage
Strongly Agree	182	46.7%
Agree	91	23.3%
Neutral	21	5.4%
Disagree	44	11.3%
Strongly Disagree	52	13.3%
Total	**390**	**100 %**

Source: Field Survey (2023)

Data on the table above shows that respondents are aware of the adoption of software technologies in Channels TV, NTA and FRCN in Abuja as evidenced by 182 respondents represented by (46.7%) said they strongly agree and 91 respondents represented by (23.3%) who also said they agree that they are aware of the adoption of

software technologies in Channels TV, NTA and FRCN in Abuja. This implies that a good number of respondents say they strongly agree that they are aware of the adoption of software technologies in Channels TV, NTA and FRCN in Abuja, as shown by 182 respondents represented by (46.7%) of the entire respondents.

Table 4 Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news gathering

Responses	Frequency	Percentage
Strongly Agree	98	25.1%
Agree	171	43.8%
Neutral	29	7.4%
Disagree	63	16.2%
Strongly Disagree	29	7.4%
Total	**390**	**100 %**

Source: Field Survey (2023)

The data on the table above shows that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news gathering as shown by 98 respondents represented by (25.1%) said they strongly agree and 171 respondents represented by (43.8%) who said they agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news gathering. This implies that a good number of respondents agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news gathering, as shown by 171 respondents represented by (43.8%) of the entire population.

Table 5 Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news processing.

Responses	Frequency	Percentage
Strongly Agree	99	25.4%
Agree	213	54.6%
Neutral	14	3.6%

Responses	Frequency	Percentage
Disagree	34	8.7%
Strongly Disagree	30	7.7%
Total	**390**	**100 %**

Source: Field Survey (2023)

Table 5 above shows Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news processing as evidenced in the 99 respondents represented by (25.4%) who said they strongly agree and 213 respondents represented by (54.6%) who also said they agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news processing. This shows that majority of the respondents agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news processing as shown by 213 respondents represented by (54.6%) of the entire population.

Table 6 Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news dissemination.

Responses	Frequency	Percentage
Strongly Agree	86	22.1%
Agree	251	64.4%
Neutral	11	2.8%
Disagree	22	5.6%
Strongly Disagree	20	5.1%
Total	**390**	**100 %**

Source: Field Survey (2023)

The table above shows Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news dissemination as affirmed by 89 respondents represented by (22.1%) who said they strongly agree and 251 respondents represented by (64.4%) who also said they agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news dissemination. This implies that majority of the population say they agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja

for news dissemination, as shown by 251 respondents represented by (64.4%) of the entire respondents.

Table 7 Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for corporate meetings and public relations.

Responses	Frequency	Percentage
Strongly Agree	76	19.5%
Agree	266	68.2%
Neutral	10	2.6%
Disagree	30	7.7%
Strongly Disagree	8	2.1%
Total	**390**	**100 %**

Source: Field Survey (2023)

The table above shows Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for corporate meetings and public relations as affirmed by the 76 respondents represented by (19.5%) say they strongly agree and 266 respondents represented by (68.2%) who also said they agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for corporate meetings. This implies that a good number of respondents agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for corporate meetings and public relations, as shown by 266 respondents represented by (68.2%) of the entire respondents.

Table 8 Application of Information and Communication Technology in Channels TV, NTA and FRCN in news gathering is satisfactory.

Responses	Frequency	Percentage
Strongly Agree	85	21.8%
Agree	274	70.1%
Neutral	18	4.6%
Disagree	10	2.6%
Strongly Disagree	3	7.7%
Total	**390**	**100 %**

Source: Field Survey (2023)

Data on table 8 above shows level of application of Information and Communication Technology in Channels TV, NTA and FRCN in news gathering is satisfactory as affirmed by 85 respondents represented by (21.8%) who said they strongly agree that Application of Information and Communication Technology in Channels TV, NTA and FRCN in news gathering is satisfactory and 274 respondents represented by (70.1%) who also said they agree. This implies that majority of the respondents agree that Application of Information and Communication Technology in Channels TV, NTA and FRCN in news gathering is satisfactory, as shown by 274 respondents represented by (70.1%) of the entire population.

Table 9 Application of Information and Communication Technology in Channels TV, NTA and FRCN in news processing is satisfactory.

Responses	Frequency	Percentage
Strongly Agree	90	23.1%
Agree	241	61.8%
Neutral	5	1.3%
Disagree	41	10.5%
Strongly Disagree	13	3.3%
Total	**390**	**100 %**

Source: Field Survey (2023)

The table above shows Application of Information and Communication Technology in Channels TV, NTA and FRCN in news processing is satisfactory as evidenced by 90 respondents represented by (23.1%) who said they strongly agree that Application of Information and Communication Technology in Channels TV, NTA and FRCN in news processing is satisfactory, and 241 respondents represented by (61.8%) who also said they agree. This implies that majority of the respondents agree that Application of Information and Communication Technology in Channels TV, NTA and FRCN in news processing is satisfactory, as shown by 241 respondents represented by (61.8%) of the entire population.

Table 10 Application of Information and Communication Technology in Channels TV, NTA and FRCN in news dissemination is satisfactory.

Responses	Frequency	Percentage
Strongly Agree	236	60.5%
Agree	92	23.6%
Neutral	23	5.9%
Disagree	35	8.9%
Strongly Disagree	4	1.1%
Total	**390**	**100 %**

Source: Field Survey (2023)

Data on the table above shows Application of Information and Communication Technology in Channels TV, NTA and FRCN in news dissemination is satisfactory as affirmed by 236 respondents represented by (60.5%) who said they strongly agree that Application of Information and Communication Technology in Channels TV, NTA and FRCN in news dissemination is satisfactory, and 92 respondents represented by (23.6%) who also said they agree. This implies that majority of the respondents strongly agree that Application of Information and Communication Technology in Channels TV, NTA and FRCN in news dissemination is satisfactory, as shown by 236 respondents represented by (60.5%) of the entire population.

DISCUSSION

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

Knowledge and adoption of Information and Communication Technology in select Broadcast stations in Abuja

This objective sought to ascertain the knowledge and adoption of information and communication technology in broadcast stations in Abuja. The study found out that 188 respondents represented by (48.2%) said they have knowledge and (36.4%) said they partially have knowledge about Information and Communication Technology used in Broadcast media. Additionally, 231 respondents represented by (59.2%) are aware while 97 respondents represented by (24.9%) said they are moderately aware about the adoption of Information and Communication Technology in Abuja; 182 respondents represented by

(46.7%) said they strongly agree and 91 respondents represented by (23.3%) said they agree that they are aware of the adoption of software technologies in Channels TV, NTA and FRCN in Abuja. This reveals that the select broadcast media stations are very much aware and knowledgeable on the use of information and communication technology in Abuja as shown by an overwhelming percentage of the respondents.

This coincides with the study of Eludu, Sunny and Emeka(2016) who also found that ICTs have been widely applied in television broadcasting by broadcast professionals at Nigeria Television Authority, NTA, Channel 10, Port Harcourt. The benefits of using ICTs by broadcast professionals of NTA Port Harcourt include but not limited to ease of communication and easier access to information using the internet and shared network, amongst a host of other benefits. Similarly**,** Stella and Ndinojuo (2016) discovered in their study that media staff have responded positively to ICT in the work place although the younger professionals have shown more enthusiasm towards using ICT compared to the older staff. This clearly indicates that there is a high rate of awareness on information and communication technology used in broadcasting in Nigeria. Moreso, most of the broadcast media stations are knowledgeable about ICT tools and have embraced its usage for modern day broadcasting.

In the same vein, Ifeanyi, Williams, Chima and Martin (2016) also found out that 41% of broadcast media practitioners in Imo State were moderately knowledgeable about ICT tool used in broadcasting. There is a burgeoning awareness and knowledge on the application of information and communication technology for broadcasting in Nigeria. Most broadcast stations are coming to the realisation of the multifaceted advantages of the use of ICT and how it impacts modern day broadcasting practice. This has made the application of ICT in broadcasting to be desirable.

Level of adoption of Information and Communication Technology in select Broadcast stations in Abuja

The objective aimed at evaluating the level of adoption of information and communication technology in Channels, NTA and FRCN broadcast stations. Findings from the study revealed that 98 respondents represented by (25.1%) said they strongly agree and 171 respondents represented by (43.8%) said they agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news gathering; 99 respondents represented by (25.4%) said they strongly agree and 213

respondents represented by (54.6%) also said they agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news dissemination; 89 respondents represented by (22.1%) said they strongly agree and 251 respondents represented by (64.4%) also said they agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for news dissemination; 76 respondents represented by (19.5%) said they strongly agree and 266 respondents represented by (68.2%) said they agree that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for corporate meetings and public relations. A comparison of the different levels of adoption of information and communication technology showed that Information and Communication Technology is being adopted in Channels TV, NTA and FRCN Abuja for corporate meetings and public relations more than any other activity followed by the application Information and Communication Technology in Channels TV, NTA and FRCN Abuja for news dissemination. This apparently shows that information and communication technology is applied to a very high extent in the operational activities of broadcast stations.

This corroborates with the studies of Linus, Mkpofor and Idang (2023) who stated that the impact of ICT on news reporting has led to a new enfranchisement for citizens. ICT has helped bridge the time lag between when an event takes place and the time it is made available to the public. The most significant impact of ICT on news is that it allows immediate feedback; the audience can respond to news stories instantly and immediately if they want to. This shows the application of ICT in broadcast operation has significantly improve news processing and dissemination in broadcast stations as evidently seen in the speed at which news can be processed, disseminated and accessed by the journalists and the people respectively.

Also, Adigwe (2010), averred that ICT not only encourages and facilitates the development, processing, sharing, production, and transmission of information in the broadcast industry, but it also strongly emphasizes the immediacy and timeliness of news. Everyone having access to the internet and any internet connected devices, such as cellphones, laptops, tablets, Palm tops, etc., has found that news gathering is now quicker, less expensive, and simpler thanks to ICT. Nigerian broadcasters formerly collected, processed, and transmitted news using analog and manual technologies, which in some cases caused a delay in reaching the target audience. Nonetheless, there has been an

enhanced or better delivery of broadcasting services with the advent of ICT devices and digital technology, which are today employed in Nigerian television broadcast stations' development, recording, programming, gathering, processing, and transmission of news events.

Application of Information and Communication Technology in select Broadcast stations in Abuja

This research objective is focused on examining the application of information and communication technology. The study discovered that 85 respondents represented by (21.8%) said they strongly agree and 274 respondents represented by (70.1%) also said they agree that application of Information and Communication Technology in Channels TV, NTA and FRCN in news gathering is satisfactory; 90 respondents represented by (23.1%) said they strongly agree and 241 respondents represented by (61.8%) also said they agree that application of Information and Communication Technology in Channels TV, NTA and FRCN in news processing is satisfactory; 236 respondents represented by (60.5%) said they strongly agree coupled with 92 respondents represented by (23.6%) who also said they agree that application of Information and Communication Technology in Channels TV, NTA and FRCN in news dissemination is satisfactory; 100 respondents represented by (25.6%) said they strongly agree and 189 respondents represented by (48.5%) also affirmed they agree that application of Information and Communication Technology in Channels TV, NTA and FRCN in corporate meeting and public relations is satisfactory. Apparently, an overwhelming percentage of the respondents stated that application of Information and Communication Technology in Channels TV, NTA and FRCN in news gathering is satisfactory seconded by another high percentage who states that application of Information and Communication Technology in Channels TV, NTA and FRCN in news processing is satisfactory.

This corroborates the study of Ifeanyi, Williams, Chima and Martin (2016) who found out that 64% of the broadcast media practitioners moderately use ICT in their broadcast assignments. Further findings revealed that 55% of the broadcast media practitioners opined that application of ICT in broadcasting has been effective. Adigwe (2010), also added that with the advent of ICTs, which are currently used in the production, recording, programming, collecting, processing, and transmission of news events by

television broadcast stations in Nigeria, there has been an upgrade or improvement in the delivery of broadcasting services. As a result, traditional broadcasting methods will no longer be used, and the skills required to grasp the numerous IT components will no longer be used. The study examined how Technology has impacted broadcast journalism which showed that information and communication technology has enhanced news reporting and news processing. By selecting the relevant websites, journalists may now utilize the internet to gather local or even international news for forthcoming broadcasts. ICT makes it possible for the broadcast industry, notably in television, to reduce or perhaps eliminate the distance constraint. Information and communication technology has revolutionized every element of life on earth particularly its capacity to do away with manual labor and encourage media development has swiftly expanded.

Beyond every iota of doubt, the knowledge and adoption of ICT in broadcasting has greatly revolutionised the industry positively in news gathering news processing and news dissemination. ICT has eliminated prior existing barriers in broadcasting which include but not limited to distance, linear communication and it has enhanced multimedia, quality image and videos, limited coverage has now been replaced with satellite technology among others.

CONCLUSION

Based on the above findings, the study concludes that there is a high level of knowledge, adoption and application of information and communication technologies in Nigeria. Although, the country is far behind the deadline given by International Telecommunication Union for switch over from analogue to digital broadcasting globally, however, there is an impressive growth in the use of ICTs in the Nigerian broadcast media. In spite of the short period within which Nigerian broadcast media have adopted and applied the use of ICTs for broadcast operations, there are plethora of giant strides recorded courtesy of these new technologies which are evident in news gathering, news processing, news dissemination and public relations/general administration. The study concludes that there should be on the job ICT training for broadcast media staff in order to make them tech savvy.

Recommendations

Based on the conclusion of this research, the study recommends that;

1. There is the need for provision of alternative energy source in order to improve the stability of power supply in broadcast stations upon which ICT equipments highly depend on.
2. Broadcast media staff should be trained on how to use modern hardware and software technologies used for broadcasting to improve the quality of their service delivery.
3. There is the need for National Broadcasting Commission to work towards implementation of 21st century ICT policy/standard as recommended by international telecommunication union to enable Nigeria's switch over from analogue to digital broadcasting

REFERENCES

Aruma, E.O (2009). *The Role of Communication in Community Development*. Published by European Centre for Research Training and Development UK (Ed.) International Journal of Network and Communication Research.

Asemah, E.S. (2010). *Public relations and democratic governance in Nigeria: Acomponential overview*. Lagos: Atsco Press.

Asemah, E. S. (2011). *Selected mass media themes*. Jos: University Press.

Asemah, E.S., Anum, V. &Ogwo, C. (2012).*Exploring the advantages of interpersonal communication in political campaigns*. Maiduguri Journal of Arts and Social Sciences, 10 (2), 56- 64

Asemah, E. S. &Edegoh, L. O. (2012).*Mass media agenda and conflict resolution in*

Jos,Plateau State, Nigeria. International Journal of Arts and Humanities, 1(4), 112-129.

Biri, E. (2007). *Influence of globalisation and ICTs on the Nigerian mass media*. In I.Nwosu & O. Soola (Eds.). Communication in Global ICTs and Ecosystem Perspectives-Insight from Nigeria. Enugu: Precision Publishers Limited.

Blurton, C. (2005): *New Direction of use in education* available online<http://www.unesco.org/education/echicprog/inst/edict.pd/>

Cabrera, A., and Cabrera, E. F. (2002).Knowledge sharing dilemmas. *Organization Studies*, 23(5) , pp. 687.

Communication Theory.(2016). *Technological determinism*. Retrieved from <http://communicationtheory.org/technological-determinism/>accessed on

Daramola, I. (2012). *Introduction to Mass Communication*.(3rd Edition). Lagos: Owonike Rainbow Press

Dominick, J. (2007). *The dynamics of mass communication in digital age*. New York: McGraw Hill Company.

Ferguson, C. J. (n. d). *Media violence, effects and violent crime: good science or moral panic?* Retrieved from <http://www.corwin.com/upm-

Folarin, B. (1998). *Theories of mass communication: An introductory text*. Ibadan: Stirling- Horden Publishers.

Griffin, E. M. (2000). *A First look at Communication Theories*. New York: McGraw Hills

Janssen, C. (2015). *Computer mediated communication*. Retrieved from <http://www.techopedia.com/definition/392/computermediated-communicationcmc>

Keghku, T. (2005).*Public relations and the Nigerian economy.*Makurdi: Aboki Publishers.

McLuhan, M. (1964).*Understanding the media: The extensions of man.*New York: McGraw- Hill.

McLuhan, M. (1967).*The medium is the message.* New York: Bantam

McQuail, D. (2005). *McQuail's Mass Communication Theory.* (5 th ed.). London: Sage

Odetoyinbo, A. (1998). *Principles of mass communication*. Abeokuta: Jedidiah Publishers

Oladele, V. I. & Asemah, E. S. (2022).*Digital democracy as panacea to Nigeria's ailing electoral and democratic institutions.*In E. S. Asemah., D. O. Ekhareafo& T. Santas (Eds.).Thoughts on Political Communication in Nigeria. Jos: University Press.

Olinya, N. (2013). *The Role of Information Communication Technology (ICT) in fostering National Unity in Nigeria.*

Orewere, B. (2006). *The mass communicator and the audience.*Jos: Karis Production.

Rogers, E.M. (2007). *Diffusion of innovations (5th Edition)*. New York, NY: Free Press.

Strovall, J.G. (2005). *Journalism, Who, where, why, and how*. Boston: Pearson.

Technological Determinism (2016).*Technological determinism*. Retrieved from <https://en.wikipedia.org/wiki/Technological_determinism>accessed

UNDP (2001) Human Development Report 2001.*Making Technologies Work for Human Development*. Washington, D.C.

University of Twente. (2010). Medium theory. Retrieved from <http://www.utwente.nl/cw/theorieenoverzicht/Theory%20Clusters/Media,%20Culture%20and%20Society/Medium_theory-1/>

US. Department of labour (2005):Future work Trend and Challenges for work in the 21st century quoted in engauge. 21st century skills North central Regional Educational laboratory from <http://www.ncrel.org/engauge/skills/21_skills.htm.>accessed on

Wimmer, R. & Dominick, J. (2000).*Mass media research: an introduction.* New York:

Wards Worth Publishing Company