EFFECTIVENESS OF THE USE OF ICT BY MEDIA PRACTITIONERS IN MODERN DAY BROADCASTING

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ABSTRACT

Gone are the days when analogue tools were the mainstay in broadcasting. The demand for quality broadcasting is on the increase as a result of sophistication in technologies. In recent times, audience clings to broadcast station(s) that appreciate technology and aesthetics in making their work outstanding. In achieving this, broadcast media practitioners employ ICT in their reportorial duties. Therefore, this study examined the effectiveness of the use of ICT by media practitioners in modern day broadcasting. The study was anchored on Diffusion of innovation theory. The survey research design was used with questionnaire as its instrument;. One hundred and fifty-six (156) respondents were studied from Imo Broadcasting Corporation, NTA Owerri, Heartland FM, Hot FM and One Radio. Analyses of data were presented in percentages and numbers. Findings of the study revealed that 41% of broadcast media practitioners in Imo State were moderately knowledgeable about ICT tool used in broadcasting. It was also revealed 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 ICT has been effective. Findings revealed that the challenges facing ICT in modern day broadcasting range from poor funding, poor training of broadcast personnel, poor supply <i power, high cost of ICTs tools, and internet aided plagiarism on the part of practitioners. The researchers recommended that broadcast stations should effectively use ICT in their broadcast activities. It was also recommended that broadcast management should make efforts in funding stations and practitioners should use internet professionally.

Keywords: broadcasting ICT, tools, effectiveness.

INTRODUCTION

Information and communication technologies have remained the key factor in broadcasting. They have changed the way we seek and receive broadcast information over the years. Broadcasting has benefited from contributions of several internationals scientists and inventors, whose ideas provided the base for the developments in broadcasting. The broadcast media have had its share of the new technologies in most of all its process (Nworgu, 2011).

Broadcasting in Nigeria ha\e been established over time as not only the popular means of communication and of disseminating information but also due to the oral tradition of the society, the preferred medium of cultural expression among people (Agu, 2011). As Omego and Nwachukwu (2013) notes the development of electronic media was one of the most important and greatest achievements that has brought great changes in the life of a man. Supporting their position, Daramola (1997, p.98) describes the broadcast media as one of the most ubiquitous, the most effective media of communication available to man, today.

The coming of information and communication Technologies (ICTs) has brought tremendous innovations in all spheres of human endeavours. The media of mass communication-radio, television has definitely not been spared from the great revolution. The satellite in particular has made news most instantaneous and simultaneous especially for broadcast media. The new technologies have therefore made the job of media practitioners very effective (Nwafor, 2010).

Idemili and Sambe (2007, p. 181) states that "the invention of some electromagnetic technologies such as micro-circuiting. Micro-graphics, holographic memory micro-electronics, optic-fibre-satellites, video disc, telex, view data, digital broadcast systems, facsimiles, videophones, computers and microprocessors etc. has no doubt revolutionalized information gathering process. Storage, retrieved and transmission, making information available ever more widely, rapidly and less expensive".

In recent times, broadcasting for instance has passed through a lot of transformation from the period of monochrome to coloured television broadcasting; from low quality VHS cameras Dvcan, Videotapes, Electronic News Gathering (ENG) and satellite News Gathering gadgets among others.

It is important to note that information and communication technologies (ICTs) have improved television and radio production and presentation. Gone were the days analog

audio-visual consoles, VHS cameras, linear editing is done digitally with different software such as Adobe premiere pro C5, Avid Liquid which is known as non-linear editing, HD cameras and digitally improved audio-visual console are now used to ensure effective broadcast production.

Also, there are state of the art studio facilities such as Teleprompters, special effect machines, digital studio cameras, digital playback machines, card reader, digital lights etc.

The radio on the other hand, are not left out in the ICTs induce revolution. The radio industry is introducing High Definition radios HD radio according to Dominick (2011) is a digital service that greatly improves the signal qualities of terrestrial radio stations. With HD radio an FM station sounds as good as a CD, while Am stations sound as good as current FM stations and are static free without atmospheric interference.

It is a known fact that information and communication technologies have change the face the broadcasting. To this end, Agu (2011) opined that as a result of internet and the satellite electronic broadcasting prototype, a growing number of broadcasters have been exploring new visual media in an attempt to conquer increasingly supranational virtual communities".

However, Nwafar (2010) argued that even in the presence of the numerous opportunity and benefits provided by the new ICTs for greater efficiency, better quality, fast production and delivery of more reliable and cost effective service yet most broadcast stations in Nigeria are yet to catch up with the trend. The essence of this study, therefore, is to examine the effectiveness of ICT in modern day broadcasting.

STATEMENT OF PROBLEM

The emergence of information and communication technologies (ICTs) has brought unimaginable change in the broadcast industry globally. The western broadcast media stop at nothing in adopting various opportunities provided by ICTs. On the other hand, broadcast Nigeria and media Africa arc not keeping pace as that of the western broadcast media. As Nwafor (2010) argued that only "very few countries in Africa have embarked on the ICT policy formulation process while in many, the machinist still falls short of the required standard". Based on his argument there is need appraisal.

As ICTs is new innovation in broadcasting the question is; do practitioners have knowledge of the use of ICTs tools such as microwave transmitter, microwave receiver, audio consul, teleprompter, outside broadcasting van (DBS) ENG camera, vinyl L. P

recorder, magnetic wire recorder etc. in broadcasting. Those broadcast media in Nigeria who even try to incorporate K' Fs in their production how effective is ICTs in their broadcast production.

OBJECTIVES OF THE STUDY

The study sought to:

- 1) Find out the knowledge level of broadcast media practitioners on the usage of JCTs tools in broadcasting
- 2) Ascertain the extent of usage of ICTs by broadcast media practitioners in broadcasting
- 3) Examine the level of effectiveness in the usage of ICTs by broadcast media practitioners in broadcasting
- 4) Identify challenges facing broadcast media practitioners in the use of ICT in modem day broadcasting.

RESEARCH QUESTIONS

The study is guided by the following research questions:

- 1) What is the knowledge level of broadcast media practitioners on the usage of ICTs tools in broadcasting?
- 2) What is the extent of usage of ICTs by broadcast media practitioners in broadcasting?
- 3) What is the level of effectiveness in the usage of ICTs by broadcast media practitioners in broadcasting?
- 4) What are challenges facing broadcast media practitioners in the use of ICT in modern day broadcasting

REVIEW OF RELATED LITERATURE

Womboh (2008) depicts ICT as a structure term which exemplifies three significant idea visdata, correspondence and innovation. He sees that to comprehend ICT, one must see all the three ideas.

Data is viewed as any conceivably helpful actuality, amount or worth that can be communicated exceptionally with precision (Dewatteville and Gilbert, 2000). They further expressed that data is whether is equipped for making a human personality change into assessment about the present condition of this present reality.

Correspondence as indicated by Ajah (2011) is the exchange or trade of data from individual to individual or starting with one spot then onto the next. At the point when activity creates a response, regardless of whether negative or positive, correspondence has occurred. In accordance with Ajah, Womboh (2008) portrays correspondence as the trading of thoughts, actualities, sentiments demeanors and convictions among individuals; it's anything but a single direction charge.

Innovation alludes to the utilization of logical information to create apparatuses that help individuals in their endeavors to beat natural perils and obstacles to comfort (Ajah, 2011). Get the job done to say that innovation allude to the things like PC, phone, wireless, GSM handsets, TV, radio, Facebook. elevated monitor and so on.

Put together Information Communication Technology (ICT), according to Ajagun (2003) refers to a wide range of technologies involves in information processing and electronic communication. It includes all those electronic devices (hat are used in broadcasting, telecommunication and all other electronically, mediated information gathering and communicating systems Dewatcrville and Gilbert (2000) describe ICT as means of acquisition, analysis, manipulation, storage and distribution of information; and the design and provision of equipment and software of these purposes. ICT covers wide range of electronic equipment or devices adopted for communication within and outside the work place. These range of devices are telephones (cellular phones), facsimile, computer based emails beepers and so on. Other facilities are wiki, website, podcasting, instant messaging, text messaging, webcasting, blog email, discussion group, video conferencing, online discussion forum and others (Griffith, 2007).

Nwodu (2006) states that ICTs are assembled into significant modes. These modes are the broadcast communications and the PC interchanges. Computerized and PDAs, fiber optics, microwave innovation, satellite interchanges, transistor, PC and the Internet have joined to enthrone rapid, quicker and simpler social event handling and appropriation of news and data around the world. Umunadi (2009) declares that data and correspondence innovation includes the utilization of automated hardware, fiber optics, media transmission, satellites, the Internet and other (ICT) devices in the present economy. Agu (2011) opined that any communicated station equipped with computerized programmed following (DAT) can give programmed programming; sound altering and following are programmed and increasingly dependable. This makes it workable for communicate stations to screen in excess of three other communicate stations all the while for advancement of projects content and for examination. Tiamiyu (2002) clarifies that data and correspondence advances are currently commonly seen as key exercises and the administration of assets for invigorating individual, authoritative and national profitability development and improvement. Ufuophu-

Biri (2007) asserts that ICTs have changed the circumstance in broad communications emphatically, in different parts of their activity all inclusive, on the grounds that news never again sets aside some effort to go inside a nation let alone across nations and landmasses.

Similarly, radio and television wen,¹ not abolished with the advent of satellite. Rather, there is integration of old and new technologies into large communication networks (Dcileur & Dennis, 1998). According to Orhewere (2006), the idea of new information and communication technologies has to do with the combination of computer technologies in relaying, retrieving and storing information. It is the convergence of computer and telecommunications technology.

Choo (2002) considers innovation to be the manner in which individuals use assets to address their issues and needs. In his specification of such needs, he records them as the requirement for agreeable rest, putting away and searching for nourishments, transportation, etc. All these are the physical needs of man. Data and correspondence innovation (ICT) has contributed a great deal to the globalization procedure which has surpassed the world as of late (Adimorah. 2005). Dickinson (2007) is of the view that innovation comes in two stages, one stage is, its dynamic advancement on account of the capacity to report current world occasions, while then again, is the constant over flooding of outside thoughts, ways of life and social materials into different nations by the unrivaled mechanically progressively ground-breaking nations. Nwodu (2006) states that progressions in data and correspondence advancements (ICTs) have, in this way made the sharing of news and data over the globe significantly simpler, more clear, quicker and moderately less expensive.

Chari (2013) says that the manner by which news is conceptualized, accumulated, created, spread or devoured is changing with regards to new correspondence innovations. Letlhogile (2005) states that data and correspondence innovations (ICTs) have become some portion of the advanced newsroom for accepting and sending data for handling and capacity of information. He includes that ICTs makes the cutting edge newsroom, regardless of whether it is for TV, radio or press office increasingly effective and better ready to convey a focused and more current item that can sell quicker and better as a result of its quality Aniogholu, Nina and Ememeriagbon (2009) assert that communication technologies such as e-mail, fax computer and video conferencing arc used to overcome barriers of space and time. The world has become a global village as a result of the emergence of Information and Communication Technology. The force fueling this rapid transformation of remote and isolated information units into global inter-connected super highways is information and communication technologies.

EMPERICAL REVIEW

Berger (2005) investigated the various problems embedded in the use of ICTs. Internet use was found to vary across countries, but email was used by all respondents. The study found that there was extensive utilization of ICTs and a considerable number of journalism practitioners confessed that they had engaged in some unethical practices, such as lifting material from the internet without attribution or downloading pornographic material.

Nwodu (2006) in his study showed that Information and Communication Technologies had a negative impact on the cultural values of developing nation. Further findings from the study highlighted that limited access to and lack of proper training in the use of information and communication technologies were responsible for this situation. The study however recommended that various governments in developing nations should assist their journalists to obtain proper training in the use of Information and Communication Technologies as well as make the technologies easily accessible to the journalists.

Krishnan (2016) in his study using discursive research method. Krishnan argued that being made by new and sophisticated technology in communication sector are creating a significant impact in the broadcast operations of many countries. He went further to assert that the term broadcasting may soon give way to narrowcasting as new services meet the needs of special interest groups.

Nwafor (2010) in his study sought to find out the current level of ICTs use in the Nigerian mass media. The work made attempt to identify the factors responsible, the likely implications, as well as some measures for an improved adoption and enhanced application of ICTs in the two media. The survey research method was used. At the end of the study, the findings revealed that, although the Nigerian mass media (NTA and The Guardian newspapers) have adopted the new ICTs to an extent, yet, the level of adoption and application still fall far below expectations, especially when compared with what is obtainable in the western world. The findings attributed the underutilization of ICTs in the two media to lack of infrastructure e.g. electricity, few trained or skilled ICTs personnel, poor knowledge of ICTs at all levels, from suppliers to users, financial constraints, corruption, poor planning and lack of political/ideological will. The study further revealed that the underutilization of ICTs in NT A and The Guardian newspapers has greatly hampered the quality and quantity of their programs and contents respectively. Based on findings, he made the following recommendations were made. One, government should intervene by providing enabling environment and basic social amenities e.g. electricity, that would assist in the smooth operation of the new

Eludu, Mbazie and Ndinojuo (2016) in their study found out that ICTs have been widely applied in television broadcasting by broadcast professionals at Nigeria Television

Authority, NT A, Channel 10, Port Harcourt. Study results also showed that NTA Port Harcourt does not have a website whereas the benefits of using ICTs by broadcast professionals of NTA Port Harcourt include case of communication and easier access to information using the internet and shared network, amongst a host of other benefits. The recommendations for the study include making funds available to upgrade ICT facilities and NTA Port Harcourt should have its own website in order to control its online identity, image and domain email accounts for staff.

Balogun (2008) did a study with the objective of ascertaining the rate of ICTs application in NTA 2 Channel 5, Lagos, and the extent to which the ICTs have impacted positively on the station. The findings show that the new ICTs have tremendously impacted positively on the quality of the station's programmes, however, the extent of application is still grossly inadequate and needs to be improved upon.

THEORETICAL FRAMEWORK

This study was anchored on Diffusion of innovation theory which was propounded by Ryan and Cross (1943) and Everett Rogers (1960). According Katz, Levin and Hamilton (1963), it means the process of spread of a given new idea or practice over time, via specified channels or through social structures.

The relevance of this theory to the study is anchored on the fact that media technological products and facilities are introduced and adopted by broadcast stations in order to use them in reaching to the audience more efficiently.

METHODOLOGY

The researcher adopted the survey research method because according to Cresswell (2011), survey enables the researcher to sample the opinion of respondents in a study. The population of the study comprises of broadcast media practitioners from Imo Broadcasting Corporation (IBC), Heartland FM, Hot FM, NTA Owerri, One Radio FM, in Owerri municipality which is estimated to be 156. The choice of Owerri Municipality is based on the concentration of broadcast media in the area.

The researcher employed the census principle to study the 156 respondents from the stations selected because the number is manageable. The census principle enables researcher to study a manageable sample size in a study (Obayi, Anorue & Onyebuchi, 2016).

Questionnaire was used to gather relevant data. The instrument for data collection was validated by statistician and experts in the field of communication. Pilot study was done

to test reliability of the instrument and the researcher used simple percentage to analyze the data.

DATA PRESENTATION AND ANALYSIS

Out of the 156 copies of the questionnaire distributed, only 142 were returned. This amounted to 91.03% return rate.

Table 1: Sex of respondents

Items	Frequency	Percentage
Male	79	56%
Female	63	44%
Total	142	100

Field survey: 2019

From the analysis in table 1 it is evident that 79 out of the total of 142 respondents which constitute 56% were males. This showed that there were more male respondents than the female in the study.

Table 2: Response of respondent on the level of knowledge they have on the usage of ICTs tools in broadcasting?

Items	Frequency	Percentage
Very high	21	15%
High	26	18%
Moderate	85	60%
Low	10	7%
Total	142	100

Field survey: 2019

Analysis from table 2 revealed that majority of respondents (60%) have moderate level of knowledge on ICTs aided tools in broadcasting. This means that practitioners have moderate level of knowledge on ICTs aided tools in broadcasting.

Table 3: Response of respondent on the use of ICT tools in broadcasting?

Items	Frequency	Percentage
Very often	50	35%
Often	65	46%
Rarely	27	19%
Never		0%
Total	142	100

Field survey: 2019

Analysis from table 3 showed that (46%) respondents used ICT tools in broadcasting that is in their job often. This implies that practitioners often use ICTs tools in carrying out their functions in broadcasting.

Table 4: Response of respondent on whether find ICT tools such as video conferencing, HD cameras, computer, OB Van, teleprompter, audio/visual consul, adobe premiere C5 etc. difficult?

Frequency	Percentage
27	19%
41	29%
59	41%
15	11%
142	100
	27 41 59 15

Field survey: 2019

Analysis from table 4 revealed that majority of the respondents (41%) said that ICT tools such as video conferencing, HD cameras, computer, OB Van, teleprompter, audio/visual consul, adobe premiere CC5 etc. were not so difficult, though they have not mastered how to use some of the tools. This means that respondents do not see such ICT tools as the ones mentioned above too difficult to use, however, they have not mastered the art of using them.

Table 5: Response of respondent on the extent of usage of ICT tools by broadcast media practitioner in broadcasting?

Items	Frequency	Percentage
Large extent	33	23%
Moderate	91	64%
Low extent	18	13%
Total	142	100

Field survey: 2019

Analysis from table 5 revealed that (64%) of respondents used ICTs tools on a moderate level in the cause of their job. This simply means that practitioners often times use these ICT tools on a moderate level in relation to their assigned jobs.

Table 6: Response of respondent on whether ICT has in any way helped them in reporting in broadcast media?

Items	Frequency	Percentage
Yes	104	73%
No	38	27%
Can't say		0%
Total	142	100

Field survey: 2019

From the analysis in the above table 6 it is evident that majority of the respondents (73%) confirmed that ICT has in a great deal helped them positively in their reporting. This implies that ICT among other things has helped journalists in their reportage.

Table 7: Response of respondent on whether ICT can enhance effective presentation of news?

Items	Frequency	Percentage
Yes	119	84%
No	23	16%
Can't say	-	0%
Total	142	100

Field survey: 2019

Analysis from table 7 showed that (84%) of respondents which happened to be the majority confirmed that ICT has enhance to a great extent effective news presentation from the angle of studio engineers, technicians and news presenters. This means that when ICT is employed in news processing and presentation it make the presentation effective.

Table 8: Response of respondent on the level of effectiveness in the use of ICT by broadcast media practitioners in broadcasting?

Items	Frequency	Percentage
Very effective	52	37%
Effective	78	55%
Not effective	12	8%
Total	142	100

Field survey: 2019.

Analysis from table 8 above it is evident that 78 respondents which constitute (55%) said ICT has been effective in terms of usage in broadcasting generally. This means that among other things ICT is effective in terms of usage in broadcasting.

Table 9: Response of respondent on the challenges facing broadcast media practitioners in the use of ICT in modern day broadcasting?

Items	Frequency	Percentage
Poor funding in the broadcast stations	20	14%
High cost of ICT tools	22	15%
Inadequate training	18	15%
Use of internet can create room for plagiarism	12	13%
among journalists		
Poor supply of power	10	7
All of the above	60	42%
Total	142	100

Field survey: 2019

From the table 9, analysis revealed that (42%) which happened to be majority of the respondents confirmed that poor funding of stations, high cost of ICT tools, inadequate training use of internet can create room for plagiarism among journalists, poor supply of power are the challenges facing ICT application to broadcasting. This means that above challenges identified are the major bottleneck militating the use of ICT by broadcast media practitioners m modem day broadcasting.

DISCUSSION OF FINDINGS

The Knowledge Level of Broadcast Media Practitioners on the Usage Of ICTs Tools in Broadcasting

Findings from analysis revealed that 41% of broadcast media practitioners have moderate level of knowledge of ICTs tools in broadcasting. This finding is further made clearer by that of Nwafor (2010) who found that ICTs has been under-utilized as a result of few trained or skilled professionals in the field of broadcast media. The implication of this finding is that the media practitioners have not been able to fully understand. The knowledge level is still far below average which is worrisome situation, especially in this digital age. Though, the Diffusion of innovation theory principle is that when a given new technological idea are introduced and practice the knowledge of the user of such technology will definitely increase.

The Extent of Usage of ICTs By Broadcast Media Practitioners in Broadcasting

Analysis data revealed that 64% of media practitioners moderately make use ICT in their broadcast activities. This finding corroborates with the findings of Eludu, Mbaizie and Ndinojuo (2016) who asserted that broadcast professionals widely apply ICTs in their works to boost broadcast efficiency. However, Nwafor (2010) has a contrary findings in which he

revealed that., although the Nigerian mass media (NTA and *The Guardian newspapers*) have adopted the new ICTs to an extent, yet, the level of adoption and application still falls far below expectations, especially when compared with what is obtainable in the western world. The findings of Nwafor is not surprising, considering the fact that it took place since the year 2010, when most journalists were still trying to get use to the ICT gadgets. The study of Eludu et al (2016) is more recent and reflected more current situation of ICT usage. This implies that most journalists are beginning to get their hands around ICT. This could be the reason why it is more in line with the findings of this study. This finding also supports the idea of the Diffusion of innovation theory that this study was anchored.

The Level of Effectiveness of ICTs in Broadcasting

The study revealed that 55% of media practitioners were of the view that ICT has been effective in their use for broadcasting. They indicated that it has contributed immensely in the area of news processing, presentation and reportage in the broadcasting industry. In corroborating this finding, Krishnan (2016) revealed that the effectiveness of the use of ICTs has created impressive impact in broadcasting. He went further to assert that the effectiveness of ICTs has led to narrowcasting in our contemporary time.

Regardless of Krishnan argument it is important to state that until the ICTs is fully utilized very effectively there will still be some avoidable technical issues bedeviling the broadcasting media. If broadcast stations in Nigeria aspire to be like that of the western media then ICTs should be effectively used; and this means that the best ICTs tools should be adopted.

The Challenges Facing ICTs in Modern Day Broadcasting

The study revealed that among other things the challenges that feature prominently were poor funding, high cost of ICTs tools, inadequate training of broadcast personnel, poor supply of power. Also, the study revealed that the internet, which is an ICT tool, can create room for plagiarism among journalists. This finding on plagiarism corroborates with the finding of Berger (2005) finding where journalists confessed that they had engaged in some unethical practices, such as lifting materials from the internet without attribution.

Other challenges identified by the researcher that is confronting ICT in broadcasting is in agreement with the findings of Nwafor (2010), Eludu, Mbazie and Ndinojuo (2016) where they asserted confirmed from their investigations that poor funding, poorly trained personnel and high cost of ICTs as a bane of ICT in modern day broadcasting.

Therefore, this means that from the time they conducted their study not much has been done in addressing the challenges. If the challenges persist without an attendant remedy then there is a big problem.

CONCLUSION

This research work has been able to establish the level of knowledge of practitioners on ICTs tools and usage as well as the extent of the effectiveness of information and communication technologies (ICTs) in broadcasting industry. Also some challenges facing ICTs usage in broadcasting were identified. The researchers therefore, conclude that ICTs been effective in its usage is not enough, hence there is need for it to be fully utilized in all areas/aspect of broadcasting.

RECOMMENDATIONS

The researcher recommended that:

- 1) Practitioners in broadcast media should expose themselves to a large extent to ICT so as to increase their level of knowledge.
- 2) Practitioners should keep making effort in the use of ICT in most of their works at least 95% done with ICT.
- 3) Broadcasting stations should intensify efforts to effectively use ICT for a desirable result in production.
- 4) Management in broadcast stations should make efforts in funding their stations so that they can be able to get sophisticated ICTs tools that can produce quality results, Journalists should train on ICTs innovation and they should encourage to use internet professionally.

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