IMPACT OF DIGITIZATION OF THE BROADCASTING

MEDIA IN NIGERIA. A STUDY OF NIGERIA

TELEVISION AUTHORITY (NTA ENUGU)

BY:

WILLIAMS, RUTH CHIKODILI

MC/2008/321

DEPARTMENT OF MASS COMMUNICATION

FACULTY OF MANAGEMENT AND SOCIAL SCIENCES

CARITAS, UNIVERSITY

AMORJI-NIKE, ENUGU

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DECLARATION

This is to declare that this work is my original idea and has not been submitted previously, either in part or in full to the University or any other institution for the award of any certificate or degree. Therefore, any mistake spotted is regretted.

Williams, Ruth C.

Date

CERTIFICATION

This project has been certified by the Faculty of Management and Social Sciences, Caritas University, Amorji-Nike, Enugu, as having met the requirements for the award of Bachelor of Science (B.Sc.).

Godwin Okoye (Supervisor) Date

Dr. Regina Acholonu (Head Of Department) Date

External Examiner

Date

DEDICATION

This research work is happily dedicated to our Lord and Savior Jesus Christ for his wisdom, provision, inspiration and guidance.

Also, this project is dedicated to my husband, for his understanding and Encouragement throughout my stay in school.

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TABLE OF CONTENTS

Conter	nts	Pages
Title Pa	age	i
Declara	ation	ii
Certific	cation	iii
Dedica	tion	iv
Acknow	wledgement	V
Table of	of Contents	vi
List of	Tables	viii
Abstra	ct	Х
CHA	PTER ONE: INTRODUCTION	
1.1	Background of the Study	1
1.2	Statement of the Problem	6
1.3	Objective of the Study	6
1.4	Research Questions	7
1.5	Scope of the Study	7
1.6	Significance of the Study	7
1.7	Operational Definition of Terms	8
CHA	PTER TWO: REVIEW OF LITERATURE	
2.1	Introduction	9
2.2	Review of Concepts	9
2.2.1	The Concept of Digitization	9
2.2.2	The Concept of Broadcasting Media	13
2.3	Review of Related Studies	14

2.4	Theoretical Framework	15
2.5	Summary of Literature Review	16

CHAPTER THREE: RESEARCH METHODOLOGY

3.1	Introduction	17
3.2	Research Design	17
3.3	Population of Study	17
3.4	Sampling Technique/Sample Size	18
3.5	Description of Research Instrument	18
3.6	Validity/ Reliability of Data Gathering Instruments	18
3.7	Method of Data Collection	19
3.8	Method of Data Analysis	19

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION

4.1	Introduction	20
4.2	Data Presentation and Analysis Demographic Data	20
4.3	Discussion and Findings	31

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.1	Introduction	33
5.2	Summary of Findings	33
5.3	Conclusion	33
5.4	Recommendations	34
5.5	Suggestion for Further Studies	35
Refere	ences	36
Apper	ndices	37

LIST OF TABLES

Table 4.1.1:	Showing Questionnaire Administration	20
Table 4.2.1:	Sex Distribution of Respondents	20
Table 4.2.3:	Age Distribution of Respondents	21
Table 4.2.4:	Showing Educational Qualification of Respondents	21
Table 4.2.5:	Showing Marital Status of Respondents	22
Table 4.2.6:	showing Occupational Distribution of Respondents	22
Table 4.2.7:	Showing Response of those who have DVD Machine	23
Table 4.2.8:	Showing Response on difference between DVD Machine and VHS	5
	Machine	23
Table 4.2.9:	Response of those who said "Yes" to Question No VIII	24
Table 4.2.10:	Showing Response on whether DVD gives better audio visual	
	Transmission	24
Table 4.2.11:	Showing Response on whether Digital Television gives higher	
	Image quality than analogue	25
Table 4.2.12:	Response rate in differences in sound quality between digital	
	television and analogue Television	25
Table 4.2.13:	Response rate of those who agree that NTA Enugu broadcasting	
	station have computer equipment.	26
Table 4.2.14:	Response rate on the use of computer component i.e. flash drive in	data
	gathering and processing	26
Table 4.2.15:	Response for those who think Computer storage and retrieval	
	system is faster	27
Table 4.2.16:	Response rate on if Telephone (Mobile Phones) erased or improved	
	information gathering?	27

Table 4.2.17:	Response Rate on if the Operators of Gadgets are Computer	
	Literate	28
Table 4.2.17:	Response rate on if recruitment of computer literates and digital	
	technologist promote success in transmission.	28
Table 4.2.18:	Response Rate on if digitalization integrate the computer and	
	television for improved services	29
Table 4.2.19:	Response Rate on if NTA Enugu Broadcasting Station have OB	
	Van	29
Table 4.2.20:	Response rate on those who agree that digital OB Van is less	
	painstaking in terms of operation than analogue equipment.	30
Table 4.2.21 F	Response rate on Internet reception in Nigeria.	30
Table 4.2.22:	Response rate on the audio and visual quality of a Digital	
	Television	31

Abstract

The purpose of embarking on this study was to provide a well-detailed account on the impact of digitization of the Broadcasting Media in Nigeria. The study ascertained the level of media digitization in Nigerian Television Authority, Enugu (NTA) in this Era of ICT and internet operations. The researcher used survey research design to enable her determine the sample size which is 150 through the appropriate statistical method to represent the population of the study. Survey Research Method was employed in the collection of data because it is easier to sought people's opinion using questionnaire. Data gathered from the study were analyzed and interpreted using simple percentage and tables. Also summary of findings, conclusion and recommendations were made on the study for future studies.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Unlike many other inventions throughout history, the history of the television credits many inventors instead of just one. In this case, there were many inventors working on the idea of watching pictures on the screen.

The earliest proposal was in 1908, in a paper by A.A Campbell-Swinton which postulated the use of Cathode rays. The First Practical demonstrations of television, however, were developed using electromechanical methods to scan, transmit, and reproduce image. As electronic camera and display tubes were perfected, electromechanical television gave way to all-electronic systems in nearly all applications.

The beginnings of mechanical television can be traced back to the discovery of the photoconductivity of the element selenium by Willoughby by Smith in 1873, the invention of a scanning disk by Paul Gottlieb Nipkow in 1884 and John Logie Baird's demonstration of televised moving Images in 1926. (Wikipedia, 2010).

A 23 year old German University student, Paul Nipkow proposed and patented the first electromechanical television system in 1884. Although he never built a working model of the system, variations of Nipkow's spinning – disk "image rasterizer" for television became exceedingly common, and remained in use until 1939. Constantin Perskyi coined the word television in a paper read to the International Electricity Congress at the international world fair in Paris on August 25, 1900. Perskyi's paper reviewed the existing electromechanical technologies, mentioning the work of Nipkow and others.

However, it was not until 1907 that developments in amplification tube technology, by Lee Deforest and Arthur Kom among others, made the design practical. The first demonstration of the instantaneous transmission of still Sillhoutte images was by Georges Rigrioux and as a Fournier in Paris in 1909, using a rotating mirror – drum as the scanner and a matrix of 64 selenium cells as the receiver.

In 1911, Boris Rosing and his student Vladimir Zworykin created a television system that used a mechanical mirror – drum scanner to transmit, in Zworykin's words, "very crude images" over wires to the "Braun Tube" (Cathode ray tube or "CRT") in the receiver. Moving images were not possible because, in the scanner, "the sensitivity was not enough and the selenium cell was very laggy". On March 25, 1925, Scottish Inventor John Logie Baird gave the first public demonstration of televised silhouette images in motion, at Selfridge's Department store in London. AT & T's bell Telephone laboratories transmitted halftone still images of transparencies in May 1925. On June 13 of that year, Charles Frances Jenkins transmitted the silhouette image of a toy windmill in motion, over a distance of five miles from a naval radio station in Maryland to his laboratory in Washington, using a lensed disk scanner with a 48-line resolution.

However, if Television is defined as the live transmission of moving images with continuous tonal variation, Baird first achieved this privately on October 2, 1925. But strictly speaking Baird had not yet achieved moving images on October 2. His scanner worked at only five images, per second, below the threshold required to give the illusion of motion usually defined as at least 12 images per second. By January, he had improved the scan rate to 12.5 images per second.

Television Broadcasting in Nigeria started with the initiative of the first Western Region premier Chief Obafemi Awolowo who on October 31, 1959 launched television broadcasting at Ibadan the head quarters of the region. The Western Region went into partnership with the Overseas Rediffusion Limited. The Western Nigerian Radiovision services limited were created with the responsibility of radio and television broadcasting under one management.

Nigeria as the giant of Africa has to her credit, the first television outfit in Africa, the Western Nigeria Television (WNTV) on NTA Ibadan. The emergence of what is known today as Nigerian Television Authority (NTA) was borne out of the sheer desire to cater for the crying needs of variegated audience in terms of News gathering, packaging and transmission; this became the second oldest station after (WNTV) resuming transmission on 1st October, 1960. The Degree No 24 of 1977 caused all existing television stations in the country to be taken over by the federal government and then led to a change of name to Nigerian Television Authority (NTA).

However, television broadcasting in Nigeria since inception has been transmitting through analogue television which use complete waves to transmit pictures and sounds. The major drawback of this is that location plays an integral factor, disabling, distorting images and audio on Television in rural areas (Kombol: 2008, P. 13).

3

Over the years, television transmission had grown from strength to strength. It moved from monochrome (black and white) to colour transmission and today we talk of Digitization.

The International Telecommunication Union (ITU) a United Nations Organization body responsible for co-ordinating the use of Telecommunication among nations in its 17th plenipotentiary conference in Turkey, ratified a treaty engendering the digitization of broadcast in every member state before 2015. In consonance with the above Treaty and with the intent to beat this deadline, the national Broadcasting Commission which is Nigeria's broadcast regulatory body gave an ultimatum to Nigeria broadcast firms to digitalize its operations before 17 June 2012 or stand licence revocation. Three years ahead of the global deadline, the date was however shifted because it is seen all over that the broadcasting industry was not fully prepared for the digitization to kick off. A new date was then issued by the Nigeria Broadcasting Commission where Mr. Yomi Bolarinwa, Director General, national broadcasting commission announced to the whole world that Nigeria will achieve the digitization of its broadcast stations by June 17 2015.

It is unarguable to state that to be in the leading position in today's highly technological and competitive media industry the world over, Nigeria must strive to acquire and utilize state of-the-art information and communication technologies in its daily news, programme transmission etc. Anything short of this will spell doom for such media organization. According to Anaeto et al (2008, P. 6) Information Communication Technology has been the converging platform for different word of media communication, information machine and technologies and equipment i.e. Radio, Television, Computers, satellites, Fibre optic Cables, phones, Facsimile machine etc. Consequently, the acquisition, utilization and application of information communication technology in media practice today makes the world activity less cumbersome, faster and error proof. The foregoing views is in tenderm with realistic scholarly position' adopted by Maid (1996, P:13), who posits that new information, communication technologies have revolutionized information gathering, processing, storage, retrieval and transmission, making information available even more widely, rapidly and less expensive. They do not only gather, process and disseminate information, they can also arrange, marshall and select information rapidly.

Inspite of the above merits, the truth still remains that acquisition and application of these advanced media, technologies by media outfits in Nigeria especially the government owned stations in their gathering, packaging and transmission equipment is still insufficient.

Indeed, the recent survey carried out in a bid to ascertain the current state of acquisition and utilization of ICT facilities by NTA Enugu Channel 8, which is the study of this project, clearly depicts that the station has not fully embraced this trend in the overall packaging and transmission of News and programmes.

Ibeh (2009), Deputy Director Engineering, NTA seems to agree with the foregoing viewpoint when he stated that although the station has technologies in the

packaging and transmission of its news programme, yet such sophisticated communication equipment are still inadequate.

The above viewpoint throws more light to challenges and hindrance of digitization of media broadcast which is a progeny of information communication technology. It also presupposes that inspite of the much – touted technological improvement, there are still gaps in the media world especially in developing countries like Nigeria.

1.2 Statement of the Problem

The National Broadcasting Commission (NBC) in its annual stations on TV and radio broadcast in Nigeria, observed that most private and public owned broadcast media outfit are yet to make digital transmission part of their daily broadcasting and even those who are into it are partially implementing it. This research intends to look at the impact of the digitization of the Nigeria broadcasting media. The focus is on NTA Enugu.

1.3 Objectives of the Study

- i. To identify problems hindering the digitization of broadcasting in Nigeria.
- ii. To evaluate the possible way of meeting these challenges.
- iii. To understand the socio-economic advantages of digitizing in the broadcasting industry.

1.4 Research Questions

The research questions involved in this study were as follows:-

- 1. To what extent is the digitization of TV broadcast going to enhance audio visual transmission?
- 2. How can Information and Communication Technology equipment facilitate digital broadcasting?
- 3. Does Digital television have advantages over Analogue broadcasting?

1.5 Scope of the Study

This study focuses on the challenges and possibilities of digital broadcasting in Nigeria, using NTA Enugu Channel 8 as study area.

1.6 Significance of the Study

This study is timely because it is on one of the most current and prominent issues. Today, there is intense competition in broadcasting industry all over the world.

Also, the study will be of immense benefit to Nigerians especially media professionals as it focuses on providing possible sensitization on making digitization a reality.

It is expected that this, will shade more light on where and how media outfit will deliver quality services to the satisfaction of the teaming audience.

Finally, students of mass communication will also find the work useful as it touches on their area of specialization.

- 1.7 The Key Terms used in the topic of the Study are defined operationally thus:
- Impact: The influence and impression created by television programmes.
- **Digitization**: This means the use of digital data rather than analogue waveforms to carry broadcasting over television channel.
- **Broadcast Media:** This means one of the mass media channels that make use of television and radio.

CHAPTER TWO

2.1 Introduction

The sources of literature for this study include books on mass communication, and other professions as well as articles, Newspapers, Interviews and features.

2.2 **Review of Concepts**

The following concepts were reviewed

- A. Concept of digitization
- B. Concept of broadcasting media

2.2.1 The Concept of Digitization

The keynote of this study which focuses on digitization goes forward to define it as a process through which information, whether relayed or through sound, text, voice or image is converted into digital, binary language for computer use (Okorie: 2008, P. 38). This makes possible the conversion of information from different, though one channel, and to reduce the risks of distortion. Thus, the use of digital language facilitates the coverages of computer, telecommunication, office technologies and assorted audio visual consumer electronics. Their integration, in turn, allows information to be handled at higher speed, with more flexibility, improved reliability and lower cost.

Through digitization, the capacity of communication channels are greatly expanded, there is more scope for consumer choice, and more possibilities for interactive system (Kambol: 2008, P. 6). Furthermore, digitization considerably improves the quality of voice and video transmission and, economic efficiency is enhanced because conversion to digital forms of storage, retrieval and editing save time and labour. For high quality video, for example, images can be digitally compressed and then transmitted over satellites at 56,000 bits per second as a

9

computer file. This digital data can be stored on disc system. Until it is played back at the original speed. Since digital compression and storage system are light weight, the news technology can be especially useful in news gathering.

Digital compression techniques in television offer important role in economic advantages for satellite broadcasting. (Ekeh: 2009, P. 113). More television channels can be put on fewer transponders, which implies considerable savings. Digital compression techniques will also increase opportunities for projects like video conferencing and pay television.

In sum, the principle characteristic of digital technologies is its pervasiveness. They are everywhere, at home from kitchen to living room, in the office from electronic badge to computers among other places.

Understanding Analogue TV.

To understand digital TV, it's helpful to understand analogue TV so as to point out the differences to actually help us understand and appreciate the necessity of digital television.

Analogue television did not really begin as an industry until the development of the cathode-ray tube (CRT), which uses a steered electron beam to "write" lines of electrons across a phosphor coated surface. (Wikipedia, 2010). The electron beam could be swept across the screen much faster than any mechanical disc system, allowing for more closely spaced scan lines and much higher image resolution, while slow fade phosphors removed image flicker effects. Also for less maintenance was required of an all electronic system compared to a spinning disc system.

To review quickly here are the basics of analogue television transmission

(a) A video camera takes a picture of a scene at a frame rate of 30 frames per second.

10

- (b) The camera rasterizes the scene. That is the camera turns the picture into rows of individual dots called pixels. Each pixel is assigned a colour and intensity.
- (c) The rows of pixels are combined with synchronization signals, called horizontal sync and vertical sync signals, so that the electronics inside a TV set, will know how to display the rows of pixels (Wikipedia, 2010).

This final signal, containing the colour and intensity of each pixel is a set of rows, along with horizontal and vertical sync signals which is called composite video signal sound is completely separate.

These video signals can be used in the following ways:

- (d) You can broadcast them as radio waves when you attach antenna to your TV set and pick up local stations for free, you're receiving broadcast television from TV stations.
- (e) You can record them with a VCR.
- (f) You can transmit them through a cable

Television system along with hundreds of other composite signals.

When a composite video signal is broadcast over the airwaves by a TV station, it happens on a specific frequency. The composite video signal is transmitted as an AM signal and the sound as FM signal on these channels. When the VCR wants to display its signal on a normal analogue TV, it takes the composite video signal and the sound signal off the tape and then modulates those signals. A cable box or satellite box does the same thing.

The set-top box receives a digital signal from the satellite or cable, the box then converts that signal to an analogue signal and sends it to your analogue TV.

Getting Ready for a Digital Television

By 2015, all analogue television getting programming over the air through antenna will need to be plugged into a special box television set-top box to receive digital broadcasts.

Digital television (DTV) is more than just a digital version of the analogue TV programming view. Today it is a new transmitting high quality video and audio to your TV-set using DTV, broadcastings cable system operators and satellite program service can transmit audio and news service such as multicasting (more than one programme on the same channel) and data casting (Electronic program guides and interactive television).

To get a better idea of the difference between digital and analogue TV, compare a DVD movie with a VHS movie. A VHS tape will allow you to play, fast forward, pause and rewind the programme. But a DVD allows you to go directly to any "chapter" use interactive means and select a wide screen formats.

Those affected by this transition are consumers who receive files-to-air television signals through a television set that are equipped with analogue turners. What to do to be connected is to have a CTV set-top box or purchase a television set with a built in digital turner.

A digital "set-top box" is a digital to analogue signal converted device that easily plays into television to allow audience to continue to get programmes (sennette, 2008). The converter options is not free for everyone, some people have television set already connected to cable, if the cable service producer carries terrestrial signals, settop boxes will not be needed for this people.

2.2.2 The Concept of Broadcasting Media

Broadcasting is a form of mass communication that involves the dissemination of information, news and entertainment to a large audience through electronic transmitters. When the signals transmitted are audio (sound and speech) it is reffered to as radio broadcasting, but when both visuals (motion pictures) and audio signals are transmitted it is called television broadcasting (Adeniyi, 2009, P. 46).

Aside the importance of Broadcasting for Education, Entertainment and information, the society cannot maximize its potential for development and prosperity without a strong broadcast media organizations such as CNN, BBC and Al Jazeera have contributed immensely to the economic strength of their host countries. Few can deny the power of the media in shaping the destiny of any nation.

Mass communication scholar, Dr Ibrahim of the University of Lagos, said in a recent lecture in 2010 at the university campus that the potential of the media as a tool for political and economic power cannot be easily measured. This is why nations around the world are moving fast towards the digitization of broadcast media. The global drive is so crucial because digital format of broadcasting is of higher quality than analogue.

2.3 Review of Related Studies

2.3.1 1doko,E. O (2010). Digital Television Transition in Nigeria and its implication on the Nigerian Society, Unpublished Project Work, Benue State University, Makurdi

Idoko, in her work, explored the importance of digital television transition. She observes that the television of the near future will resemble a movie screen more closely than a TV set, the picture will be sharper and wider. The TV may soon become more than just an appearance on which to watch a game or a show. Instead, it may serve as the display, for a variety of entertainment and information devices. He also pointed out that there will be wide range distribution of information and content can turn broadcast into an almost universal access platform.

According to the researcher the Nigeria society is bound to encounter some of the following challenges in her journey to digital broadcasting. They include, lack of trained personnel, poverty, ignorance, corruption.

This research and the current study are related in the sense that both studies are focused on the digitization of the broadcasting media in Nigeria. The reviewed study failed to specify its scope of study while the current study defines its scope to be NTA Enugu.

2.3.2 Ifeanyichukwu, I. (2012), *Digitalization of the Nigerian Broadcasting Media, Challenges and Possibilities*, Unpublished Project Work, Enugu State University, Enugu.

He observes that some of the dividends that modern society is expected to reap from broadcasting digitization are: Efficient use of available spectrum which will allow more channels, thus bringing more choice to the viewer, high quality audio (sound) and video (images), digital television signals can carry extra information such as electronic programme guide that can provide more traditional programme information.

The researcher indicated the challenges which could be: Economic, political and technological which affect the entire gamut of stakeholders.

The research therefore is relevant to the current study because it answers one of the research questions posed in the current study as whether digitization of TV broadcast is going to enhance the audio visual transmission. The scope of the reviewed study is too wide and not effectively executed while the present study is limited to a particular location (NTA Enugu) to exhaustively execute the research and generate data.

2.4 Theoretical Framework

This research work is anchored on the Diffusion and Technological determinism theory propounded in 1986 by Everest Rogers. The diffusion side of the theory talks about the use of communication to transfer technological innovation from development agencies to their clients so as to create an appetite for change though raising a climate for modernization among members of the public.

Annato et al (2008) explains that technology in mass communication serves a dual role in diffusion. They are channels for messages, as well as messages of innovation.

This theory states that technology can transform any environment, and in a communication sense, media technology can be both a channel and a message at a time since technological innovations can imbibe development through the diffusion of the message it carries. Then one can say, that digital broadcasting will no doubt break the barriers associated with analogue broadcasting.

15

2.5 Summary of Literature Review

This chapter reviewed the concept of digitization, Broadcasting media, it also discussed getting ready for a digital television. Also featured in this chapter were reviews of related studies done by other researchers. It adopted as its theoretical framework the technological determinism theory by Everest Rogers. The relevance of the theory adopted by the researcher for the study is also clearly stated in this chapter.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter is designed to provide the methodology used for collecting data for this research work. In doing so, we have covered the following areas, Research design, Area of the study, Population of the study, Sampling technique/Sample size, description of research instrument, Validity and Reliability of data gathering instrument, Method of data collection and analysis.

3.2 Research Design

Survey as a research methodology is found to be the most suitable option because survey research focuses on people, the vital facts of people and their beliefs, opinions and attitudes.

Survey as a method will not only be useful in uncovering communication problems as it will equally be relevant in seeking solutions to the existing problems of communication.

3.3 Population of Study

Population of study refers to the target of the study which specifies the aggregate of items or persons from whom data pertinent to the study was collected. Moreover, it is the acted or definite population to be studied. The population of study was that of NTA Channel 8 Enugu, which has the population of 250.

3.4 Sampling Technique/Sample Size

Sample is a small group of elements or subjects drawn from the specified population of study.

In other words, it is the actual number or part of a study population that is objectively and systematically selected for the study. Moreover, we sample because the entire population cannot be studied. The researcher used purposive sampling technique to get the sampling size which is 150. The choice of purposive sampling technique by the researcher was due to certain characteristics which had to do with the knowledge of the respondents, so she simply used purposive sampling technique which is employed for the purpose of selecting a handy sampling size which is 150.

3.5 Description of Research Instrument

The instrument used in gathering the data for this study is the questionnaire which consisted mostly of structured form.

Section (A) dealt with the demography of the respondents while section (B) dealt with the real research question with a view to solving them.

3.6 Validity/Reliability of Data Gathering Instrument

The instrument for data collection in the study was well structured and approved by the project supervisor as valid for eliciting information. The questionnaire instrument used was reliable because they constantly measure what is relevant to the study.

3.7 Method of Data Collection

The data in this study was collected by the researcher herself using questionnaire. This was to enhance efficiency in retrieving completed questionnaire and to enable the researcher have physical contact with respondents.

The researcher distributed questionnaire to 150 respondents and was able to retrieve 140 copies.

3.8 Method of data Analysis

Data collected were decoded, grouped into frequencies, completed and arranged in tables for easy reference. Percentage method was used for the tables.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter has to do with the analysis of data collected through the use of questionnaire distributed to 140 respondents. For clarity, simple percentages, tables and explanations were used in presenting the data collected.

 Table 4.1.1:
 Showing Questionnaire Administration

ITEM	FREQUENCY	PERCENTAGE %
No. distributed	150	100%
No. returned	140	93.3%
No. not returned	10	6.6%
Source:	Field Survey, 2013	

In table 4.1.1 above, a total of 150 questionnaires were distributed to the respondents and 140 or (93.3%) were returned while 10 or (6.6%) questionnaires were not returned. The total numbers returned were considered appropriate to provide the necessary data for this research.

4.2 Data Presentation and Analysis Demographic Data

Section A

Table 4.2.1: Sex Distribution of Respondents

SEX	FREQUENCY	PERCENTAGE %
Male	80	57.1%
Female	60	42.8%
Total	140	100%
a r:	110 2012	

Source: Field Survey 2013

An analysis of data in table 4.2.1 shows that of the 140 respondents, 80 or (57.1%) were male while 60 or (42.8%) were female.

AGE	FREQUENCY	PERCENTAGE %
25 - 30	15	10.7%
31 – 35	28	20%
36-40	43	7%
41-45	34	24.2%
46 & above	20	14.2
Total	140	100%

 Table 4.2.3:
 Age Distribution of Respondents

Source: Field Survey 2013

The above table shows that of the 140 respondents, 15 or (10.5%) were within the age bracket of 25-30 yrs and 28 or (20%) were of the age bracket of 31-35 yrs and 43 or (7%) were of the age bracket of 36-40 yrs and 34 or (24.2%) were of the age range of 41-45 yrs and 20 or (14.2%) were of the age range of 46 and above.

EDUCATIONAL QUALIFICATION	FREQUENCY	PERCENTAGE %
WAEC/NECO	20	14.2%
OND / HND	45	32.1%
BSC / MSC	60	42.8%
Ph.D & above	15	10.7%
Total	140	100%

 Table 4.2.4:
 Showing Educational Qualification of Respondents

Source: Field Survey 2013.

From table 4.2.4, it was observed that 20 or (14.2%) respondents have WAEC/NECO as their highest qualification while 45 or (32.1%) respondent have

OND/HND as their highest qualification also 60 or (42.8%) respondents have BSC / MSC as their highest qualification, finally 15 or (10.7%) respondents have Ph.D and above as their highest qualification

MARITAL STATUS	FREQUENCY	PERCENTAGE %
Married	40	28.5%
Single	95	67.8%
Divorced	5	3.5%
Total	140	100%
	140 urvay 2013	100%

 Table 4.2.5:
 Showing Marital Status of Respondents

Source: Field Survey 2013

In table 4.2.5 above 95 or (67.8%) respondents are single, 40 or $(28.5\%^{\circ})$ are married, while 5 or (3.5%) were divorced.

OCCUPATION	FREQUENCY	PERCENTAGE %
Students	10	7.1%
Civil Servant	0	0%
Self employed	0	0%
Journalists	130	92.8%
Total	140	100%

 Table 4.2.6:
 showing Occupational Distribution of Respondents

Source: Field Survey 2013.

Table 4.2.6: shows that 10 or (7.1%) respondents were students, 0 or (0%) respondents were civil servants, 0 or (0%) respondents were businessmen while 130 or (92.8%) respondents were Journalists.

Section **B**

Table 4.2.7. Showing Response of those who have DVD Machine	Table 4.2.7:	Showing Response of those who have DVD Machin
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	RESPONSES	FREQUENCY	PERCENTAGE %
Yes		130	92.8%
No		10	7.1%
Total		140	100%

Source: Field Survey 2013.

From table 4.2.7: 130 or (92.8%) respondents own DVD machine, while 10 or (7.1%) respondents said they do not.

Table 4.2.8: Showing Response on difference between DVD Machine and VHS Machine

FREQUENCY	PERCENTAGE %
130	92.8%
10	7.1%
140	100%
	130 10

Source: Field Survey 2013.

From table 4.2.8, 130 or (92.8%) respondents noticed difference between DVD machine and VHS, while 10 or (7.1%) do not notice any difference.

RESPONSE	FREQUENCY	PERCENTAGE %
Because they offer good audio/visual quality	55	39.2%
Because digital forms of storage retrieval saves time.	5	3.5%
Because they offer more scope for consumer choice.	10	7.1%
All of the above	70	50%
Total	140	100%

Table 4.2.9: Response of those who said "Yes" to Question No VIII

Source: Field Survey 2013.

From table 4.2.9, 55 or (39.2%) noticed that DVD offer good audio/Visual quality over VHS, 5 or (3.5%) noticed that DVD digital form of storage retrieval saves time, 10 or (7.1%) noticed that DVD offers more scope to consumers choice than VHS, 70 or (50%) noticed all of the above.

Table 4.2.10: Showing Response on whether DVD gives better audio visual transmission

RESPONSE	FREQUENCY	PERCENTAGE %
Strongly agree	55	39.2%
Agree	70	50%
Strongly disagree	5	3.5%
Disagree	10	7.14%
Total	140	100%

Source: Field Survey 2013.

From table 4.2.10, 55 or (39.2%) Strongly agree that DVD gives better audio visual transmission, 70 or (50%) respondents agrees, 5 or (3.5%) strongly disagree, while 10 or (7.14%) disagree.

RESPONSE	FREQUENCY	PERCENTAGE %
Yes	135	96.4%
No	5	3.5%
Total	140	100%

 Table 4.2.11: Showing Response on whether Digital Television gives higher

 Image quality than analogue

Source: Field Survey 2013.

From the above table, 135 or (96.4%) respondents accepted that Digital television gives higher image quality than analogue while 5 or (3.5%) do not accept.

Table 4.2.12:	Response	rate	in	differences	in	sound	quality	between	digital
television and	analogue	Televi	isio	n					

FREQUENCY	PERCENTAGE %
135	96.4%
5	3.5%
140	100%
	135 5

Source: Field Survey 2013.

From table 4.2.12, 135 of (96.4%) respondents accepted there is a difference in sound quality between a digital television and analogue television while, 5 or (3.5%) persons do not accept.

RESPONSE	FREQUENCY	PERCENTAGE %
Yes	140	100%
No	0	0%
Total	140	100%

 Table 4.2.13: Response rate of those who agree that NTA Enugu broadcasting

 station have computer equipment.

Source: Field Survey 2013.

From table , 140 or (100%) agreed that NTA Enugu broadcasting station have computer equipment.

Table 4.2.14: Response rate on the second secon	ne use of computer	component i.e. flash drive in
data gathering and processing		

RESPONSE	FREQUENCY	PERCENTAGE %
High	110	78.5%
Low	30	21.4%
Total	140	100%

Source: Field Survey 2013.

From the above table, 110 or (78.5%) rated the use of computer components i.e. flash drive in data gathering and processing high, while 30 or (21.4%) rated It low.

RESPONSE	FREQUENCY	PERCENTAGE %
Yes	135	96.4%
No	0	0%
Can't Say	5	3.5%
Total	140	100%

 Table 4.2.15: Response for those who think Computer storage and retrieval

 system is faster

Source: Field Survey 2013.

From table 4.2.15, 135 or (96.4%) thinks that computer storage and retrieval system is faster, while 5 or (3.5%) can't say.

Table 4.2.16: Response rate on if Telephone (Mobile Phones) erased or improved information gathering?

RESPONSE	FREQUENCY	PERCENTAGE %
Yes	130	192.8%
No	5	3.5%
Can't say	5	3.5%
Total	140	100%

Source: Field Survey 2013.

From table 4.2.16, 130 or (192. 8%) respondents believe that telephone (Mobile phones) improved information gathering, 5 or (3.5%) do not believe, while 5 or (3.5%) can't say.

FREQUENCY	PERCENTAGE %
130	92.8%
5	3.5%
5	3.5%
140	100%
	130 5 5

 Table 4.2.17: Response Rate on if the Operators of Gadgets are Computer

 Literate

Source: Field Survey 2013.

From the above table, 130 or (92.8%) believe that the operators of computer gadgets are literate, about 5 or (3.5%) believe that the operator of the computer gadget are not literate, while 5 or (3.5%) can't say if the computer gadget operators are literate.

Table 4.2.17: Response rate on if recruitment of computer literates and digitaltechnologist promote success in transmission.

RESPONSE	FREQUENCY	PERCENTAGE %
To an average level	75	53.5%
To a high level	60	42.8%
To a very high level	5	35.5%
Total	140	100%

Source: Field Survey 2013.

From table 4.2.17, 75 or (53.5%) respondents indicates a greater percentage, and believe that the recruitment of computer literates and digital technologist promote success in transmission to average level, 60 or (42.8%) respondents indicates that to a

high level it promote success, while, 5 or (35.5%) indicates that it promotes success in transmission to a very high level.

 Table 4.2.18: Response Rate on if digitalization integrate the computer and

 television for improved services

RESPONSE	FREQUENCY	PERCENTAGE %
Yes	100	71.4%
No	40	28.5%
Total	140	100%

Source: Field Survey 2013

From table 4.2.18, 100 or (71.4%) respondents indicate "Yes, while 40 or (28. 5%) said "No". These clearly show that greater percentage of the sample population believe that digitization integrate the computer and television for improved services.

 Table 4.2.19: Response Rate on if NTA Enugu Broadcasting Station have OB

 Van

RESPONSE	FREQUENCY	PERCENTAGE %
Yes	135	96.4%
No	0	0%
Can't Say	5	3.5%
Total	140	100%

Source: Field Survey 2013.

Table 4.2.19 indicates that about 135 or (96.4%) of respondents admitted that NTA Enugu broadcasting station has OB Van, 0% admitted "No", while 5 or (3.5%) can't say.

FREQUENCY	PERCENTAGE %
135	96.4%
0	0%
5	3.5%
140	100%
	135 0 5

 Table 4.2.20: Response rate on those who agree that digital OB Van is less

 painstaking in terms of operation than analogue equipment.

Source: Field Survey 2013

Table 4.20, 135 or (96.4%) respondents which is the majority agree that digital OB Van is less painstaking in terms of operation than analogue equipment, while 5 or (3,5%) can't say.

RESPONSE	FREQUENCY	PERCENTAGE %
Very good	10	7.14%
Good	55	39.2%
Fair	70	50%
Poor	5	3.5%
Total	140	100%

 Table 4.2.21 Response rate on Internet reception in Nigeria.

Source: Field Survey 2013.

From table 4.2.11, 10 or (7.14%) respondents rated internet reception in Nigeria as very good, 55 or (39.2%) rated it as good, 70 or (50%) rated it fair, while 5 or (3.5%) rated it as poor.

FREQUENCY	PERCENTAGE %
100	71.4%
30	21.4%
10	7.1%
140	100%
	100 30 10

 Table 4.2.22: Response rate on the audio and visual quality of a Digital

 Television

Source: Field Survey 2013.

From table 4.2.23, 100 or (71.4%) respondents rated audio and visual quality; of a digital television high over analogue television, 30 or (21.4%) rated it low, while 10 or (7.1%) can't say.

4.3 Discussion of Findings

Research Question: 1

To what extent is the digitization of T.V Broadcast going to enhance the audio visual transmission?

The answer to the question is provided in table XXIII. The data in table XXIII shows that 100 or (71.4%) respondents rated audio and visual quality of a Digital television high over analogue television. It can be inferred from the above that a significant majority of the population in NTA Enugu Broadcasting station rated high the audio visual transmission of a digital television.

Research Question 2:

How can information and communication technology equipment facilitate Digital broadcasting?

Table XIV explains research question 2. From table XIV, it shows that 110 or (78.5%) respondents assess the use of computer components i.e. flash drive in data gathering and processing high. From the deduction, it is obvious that a good majority of persons/individuals in NTA Enugu broadcasting station believe that computer components i.e. flash drive in data gathering and processing is fast.

Research Question 3:

Does Digital television have advantage over the Analogue Broadcasting?

The answer to this question was provided in table XI. Findings in table XI shows that 135 or (96.4%) respondents accepted that digital television gives higher image quality than analogue. From the analysis of data in table XI, it can be agreed that Digital television gives a higher image quality than analogue.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The main objective of this study was to determine the impact of Digitization of the broadcasting media in Nigeria. Using the staff of NTA Enugu Broadcasting station as a focus. The survey research design was used for data collection with questionnaire. Following the analysis of data and discussion of findings, this chapter presents the summary of findings, the conclusion and recommendations.

5.2 Summary of Findings

This research work has shown that digitization has a very high impact on Broadcasting in NTA Broadcasting station. Digital broadcasting transmission is all easy technology breakthrough which records data in singles and makes this transmissions easy. It directly makes editing even much easier especially for editors and line transmitters and transmitter engineers. Digitization will help improve accessibility, sharp picture quality, good and efficient programming and so on.

5.3 Conclusion

With the conduction of the research and having analyzed all the data collected, it was discovered that the global drive for digitization is crucial, because digital format of broadcasting is of higher quality than analogue, it enhances sound and picture quality and makes much channel viewing easily accessible. The introductions of digital television represent the most significant innovation since the advent of television itself. Digital broadcast delivery, in addition to multiplying the number of available channels, will also transform the very nature of the television medium by making it interactive.

This research has revealed that NTA Enugu broadcasting station is not fully digitized, this is because of some constraints which militate against the media house such as lack of adequate funds to run the broadcast station properly.

5.4 **Recommendations**

One may be right to express fear of NTA Enugu Broadcasting station meeting the NBC deadline of digitalizing by June 2015.

NTA Enugu broadcasting station is faced with myriads of challenges ranging from the use of obsolete equipment, lack of adequate funds, political constraints and government interference, breakdown of operational equipment among others. NTA Enugu whose major problems are lack of adequate funds/ finance according to the findings of the study, should be provided with adequate funds through the Federal annual budget allocation. Government should provide the broadcast station its full monthly subvention in order to fully operate maximally like other mass media organizations, because of the essential services it renders to the general public.

Government should minimize its interference in the station in order to enable the station run smoothly and generate funds to operate maximally. Although it is the case of "he who pays the piper calls the tune". It is no secrete that the greater percentage of the problems faced by the government owned broadcast outfits is government constant unfair interference, accounting for the reasons private owned

34

broadcast firms in the country thrive to the detriment of the government owned broadcasting organizations.

The prevailing analogues communication and engineering equipment should be replaced with digital communication gadgets such as digital satellite, electronic news gathering equipment (ENG), procurement of Teleprompters, news and programme processing equipment, digital editing studios among others. The researcher believes that the provision of some of these needed facilities will help NTA Enugu performance better.

Finally, the researcher also suggest that the management of NTA Enugu broadcasting station should pay proper management functions such as planning, organizing, coordinating etc to bear-on the overall administration of the broadcast stations, so as to optimally boost it's productivity.

Until these foregoing remedial measures are met, the myriad of problems facing the NTA Enugu Broadcasting station will still remain, thereby leaving the organization in digital divide.

5.5 Suggestion for Further Studies

Sequel to the findings of this research work, the researcher is suggesting that further research on this topic should be extended to other TV Stations in Nigeria.

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APPENDIX

Department of Mass Communication, Caritas University, Amorji-Nike, Enugu, Enugu State. July 10th, 2013.

Dear Respondent,

I am a final year student of the above named institution in the Department of Mass Communication. I am conducting a research on the topic: Impact of Digitization of the Broadcasting Media in Nigeria. A study of Nigerian Television Authority (NTA) Enugu).

I therefore, plead that you should provide sincere and accurate answers to the questions below as all information will be handled confidentially.

Thanks for your co-operation

Yours faithfully

Williams Ruth .C.

QUESTIONNAIRE

Instruction

Pleases tick ($\sqrt{}$) appropriately in the boxes

- 1. What is your sex?
 - (a) Male
 - (b) Female
- 2. What age bracket do you belong?
 - (a) 25 30
 - (b) 31 35
 - (c) 36 40
 - (d) 41-45
 - (e) 46 & above

3. What is your Educational Qualification?

- (a) WAEC/ NECO
- (b) OND/HND
- (c) BSC/MSC
- (d) Ph.D & above
- 4. What is your marital status?
 - (a) Married
 - (b) Single
 - (c) Divorced
- 5. What is your occupation?
 - (a) Student

(b)	Civil Servant	
(c)	Teacher	
(d)	Self Employed	
(e)	Journalist	

6. Do you have a Digital versatile Disc (DVD) Machine?

- (a) Yes
- (b) No
- 7. Do you notice any difference between the DVD machine and Video Cassette Recorder (VHS) video machine?
 - (a) Yes
 - (b) No
- 8. If you response to question 7 is Yes explain
 - (a) Because they offer good quality audio/visual
 - (b) Because digital forms of storage retrieval saves time.
 - (c) Because they offer more scope for consumer choice i.e. sports, fashion
 - (d) All of the above
- 9. Do you agree that digital versatile disc (DVD) gives better audio visual transmission?
 - (a) Strongly agree
 (b) Agree
 (c) Strongly disagree
 (d) Disagree

- 10. Does digital television give a higher image quality then analogue?
 - (a) Yes
- 11. Is there any difference in sound quality between a digital television and analogue television?
 - (a) Yes
 - (b) No
- 12. Does NTA Enugu broadcasting station have computer equipment?
 - (a) Yes
 - (b) No
- 13. How will you assess the use of computer components i.e. flash drive in data gathering and processing?
 - (a) High
 - (b) Low
- 14. Do you think computer storage and retrieval system is faster?
 - (a) Yes
 - (b) No
 - (c) Can't say
- 15. Has telephone (mobile phones) erased or improved information gathering?
 - (a) Yes

(b)	No		
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16. Are the operators of the gadgets computer literate?

(a)	Yes	
(b)	No	
(c)	Can't say	

17. Do you think the recruitment of computer literates and digital technologist promotes success in transmission?

- (a) Yes
- (b) No
- (c) Can't say
- 18. Can digitization integrate the computer and television for improved service?
 - (a) Yes
 - (b) No
- 19. Do NTA Enugu broadcasting station have an OB Van?
 - (a) Yes
 - (b) No

- 20. Do you agree that digital OBVan is less painstaking in terms of operation than analogue equipment?
 - (a) Yes
 (b) No
 (c) Can't say

21. How would you rate internet reception in Nigeria?

- (a) Very good
- (b) Good
- (c) Fair
- (d) Poor
- (e) Can't say
- 22. How would you rate the audio and visual quality of a digital television over analogue Television?
 - (a) High
 (b) Low
 (c) Can't say