Communication and Audience in the Age of New Media: Exploring Psychosocial Interfaces for Effectiveness

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Abstract
In all communication situations, the audience remains the cardinal component of the communicating process. For efficiency, the communicator must seek to embrace the psychological and sociological embodiments of the audience. This is to engender completeness of the communication process, leading to an intended feedback. Fortunately and conversely, the emergence and intrusion of new media, has ultimately altered structures of the conventional media audiences. In the new media age, there are changing faces of communication audiences. This research was investigated to access, the size, location, exposure, perception of print media contents as well as their feedbacks within the psychological and sociological frames of these changing audiences in this emerging new media age. Based on the above realism, this research uses explanatory mixed method to study the reading audiences of Nigerian print media in Enugu State, which was researched as the population of study. Following the specific articulated research objectives, hypothetical statement was framed as a way of testing statistical significance of collected research data, and tested with chi-square statistical tool. Evidence from research data indicates that with the intrusion of communication technology that is advancing, the number of reading audiences in the age of the new media is increasing geometrically. This is premised on the fact that most readers do not buy newspapers, but read the online editions. The researchers concluded that mass communication audiences have been altered in terms of their sizes, location, access and exposure patterns as well as perception, as communication contents are being migrated to the new media environment. Accordingly, the researchers recommended, among other things that as the new media have created an immediate feedback mechanism for the changing media audience, all conventionally mass media structures are strongly enjoined to migrate fully into the new media environment, so as to take care of emerging and diversifying audiences.
Keywords: Communication, Audience, Age, New Media, Psychosocial, Effectiveness

Introduction

Communication is a process that concerns exchange of facts or ideas between persons holding different positions to achieve mutual harmony. It is a complex process, and it is difficult to determine where or with whom a communication encounter starts and ends. The process of communication is the sharing of meaningful information between two or more people with the goal of the receiver (Audience) understanding the sender's intended message.

Although models of communication provide a useful blueprint to see how the communication process works, they are not complex enough to capture what communication is like as it is experienced. Accordingly, it must be established that communication activity centres around the audience for whom the messages are communicated. No audience, no communication. Therefore, audiences change depending of the communication form and the channel or media of communication. In an age of the new media, the audiences are sure in their changing faces.

Information and communication technologies (ICTs) have revolutionized the way we do things. Everything is possible with just a click at a button. The revolution has affected virtually everything around us. Of all the areas affected by these new technologies, communication is the worst hit. The way we communicate, either interpersonally or through the channels of the mass media, have been affected. Just the way there technologies in a way of telephone has brought people closer to communicate despite distance, that is the same way they (technologies) have made message dissemination through the mass media not only simultaneous but widespread. This indeed is the power of technology.

Media audiences are changing. The dynamics of how audiences consume (and now, even produce) media are changing, as are the ways that media industries make sense of, and define, their audiences. New technologies are at the heart of all of these changes. New media technologies that give audiences increased control and increased

choice over when, where, and how they consume media are transforming the relationship between audiences and the media.

In fact, the age in which we are now, no doubt came along with many possibilities in the use of information technologies. Information can be accessed and shared through the net across cultures, traditions and international boundaries. The advent of computers brought revolutions in information management. One of the areas in which the computer is applied in information management and dissemination is the internet. The internet comprises of computer networks that are attached to one another via pathways, that facilitate the exchange of information, data and files, (Nwajinka, 2004, p.78).

The mass media have already changed significantly, certainly from the early-twentieth-century days of one way, one-directional and undifferentiated flow to an undifferentiated mass there are social and economic as well as technological reasons for this shift, but it is real enough. Changes in the communication process which are made possible through the new media have brought a new dimension, in the ways information are received by the changing audiences.

The 'New Media' as conceived here are in fact a disparate set of communication technologies that share certain features, apart from being new, made possible by digitalization and being widely available for personal use as communication devices. But someone may ask what is even meant by New Media?

The expression 'New Media' has been in use since the 1960s and has had to encompass an expanding and diversifying set of applied communication technologies. The editors of the, *Handbook of New Media* (Lievrous and Livingstone, 2006) point to the difficulties of saying just what the New Media Comprise. They choose to define them in a composite context, bringing together three elements: technological artefacts and devices, activities, practices and uses, and social arrangement and organizations that forms around the devices and practices. As noted above, much the same definition applies to 'old media' although the artefacts, uses and arrangements are different. As far as the essential features of New Media are concerned, the main ones seem to be their interconnectedness, their accessibility to individual users as senders and/or receivers, their interactivity, their multiplicity of use and open-ended character and their ubiquity and delicateness.

Today being the age of new media, we see many signs of newspaper moving to a life online. Alongside computer-based technologies there are other innovations that have in some degree changed some aspects of mass communication (Carey, 2003). New means of transmission by cable, satellite and radio have immensely increased the capacity to transmit. New means of storage and retrieval, including the personal video recorder, CD-Rom, compact disc, DVD, pod, etc, have also expanded the range of possibilities, and even the remote control device has played apart.

The communication revolution has generally shifted the balance of power from the media to the audience in so far as there are more options to choose from and move active uses of media available. The old communication media was essentially one directional, while the new media forms of communication are essentially interactive. In all of these, new media comes with it, newer access to its transmitted contents, wider audience spread, audience location, their exposure level, perception and feedback to the communicated message.

Research Problem Statement

The New Media no doubt have revolutionized the way things are done in most societies. Everything from communication to culture has been affected by the New Media. While this is true, scholars have however argued that the potentials of the New Media have not been fully tapped in the developing countries.

In developed world, citizens use the New Media like Internet, housing the social media platforms to air their views and media people equally use these citizen generated messages in their reportage. But how these technologies are used is another matter altogether.

In Nigeria today, virtually all the national dailies have migrated into the new media gateways. All their daily publications can now be accessed online, unlike in the previous past when readers would have to wait till the papers are sold by the individual vendors.

In this present age of new media, how messages are communicated and received by the reading audiences remains an area of concern. This is based on the reality that access to these communicated messages, the exposure level, the location of the reading audience, their size and feedback has been greatly altered with the advent of the new media. Hence, this study is geared toward finding out the impact of the New Media in conventional journalism practice in Nigeria, with a view to establishing the effectiveness of message transmission to the changing audiences in the new media environment.

Objectives of the Study

The broad goal of this study is to examine the interface between communication and audience in the new media age, taking cognizance of psychosocial elements that could engender effectiveness. However, the research has the following specific objectives to pursue;

1. To check access and exposure level of reading audience of Nigerian newspapers to the New Media

environment.

2. The researchers also want to find out whether New Media communicated messages are effectively used by reading audiences in Nigeria.
3. To establish if the New Media environment have provided the reading audiences adequate feedback mechanisms as to engender communication effectiveness in the age of technology.
4. To identify the endogenous and exogenous psychosocial elements that drive communication efficiency in the age of new media
5. Finally and most importantly, to investigate the broader socio-cultural implications of the changes taking place in the social construction of new media audiences.

Research Questions

In moving beyond the fundamental notion of altered conventional media audiences' structures, this paper intends to address the following key questions;

i.   To what extent are reading audience of Nigerian newspapers exposed to the New Media environment?
ii. How has the New Media communicated messages effectively used by reading audiences in Nigeria?
iii. To what extent has the New Media environment provided the reading audiences adequate feedback mechanisms as to engender communication effectiveness in the age of technology?
iv. What are the endogenous and exogenous psychosocial elements that drive communication efficiency in the new media age?

These questions are at the heart of developing a deeper understanding of communication-audience interface, which in turn helps us to develop a deeper understanding of the process that can engender effectiveness of communication in the age of the new media within the psychosocial frames of the changing audiences. These are the questions that this paper seeks to address.

Significance of the Study

This research explores the penetration of the new media environment by newspaper reading audiences. By so doing, the effectiveness of the process in the face of the changing interfaces will be brought to the fore. That way, media of mass communication will use this research as blueprint in migrating fully into the new media environment, without losing the beauties of conventions and practices of mass communication.

More importantly, this work contributes to theoretical and empirical literature needed by interested and dissenting researchers and scholars, today and tomorrow.

Hypothetical Statement

The need for giving the study statistical and empirical relevance necessitated the formation of a testable hypothesis. The essence is to establish the relationship or variance between the observed and expected frequencies of the data used for this research.

Ho_1:   The New Media environment has not provided the reading audiences adequate feedback mechanisms as to engender communication effectiveness in the age of technology.

H_1:   The New Media environment does provide the reading audiences adequate feedback mechanisms as to engender communication effectiveness in the age of technology.

Scope of the Study

The study revolves around the new media environment, housing online newspapers and their use by reading audiences in Enugu State as to establish communication effectiveness. Here, those newspaper readers were studied to know their level of exposure to online contents and its efficacy in the new media age.

Literature Review

These technological changes are compelling media industries to think differently about their audiences, undermining traditional conceptual and analytical approaches, while at the same time opening up new dimensions for conceptualizing audiences. Thus, while in some ways audiences are becoming more elusive and more unpredictable, in other ways, new systems of identifying media audiences, gathering feedback from them, and anticipating their tastes and preferences, are making it possible for media industries to fundamentally redefine what media audiences mean to them and how they factor into the economics and strategy of their businesses. Hence, we are in the midst of an evolution in the nature of media audiences. Just as a growing body of scholarship has shown how media evolve in response to changing environmental conditions (Dimmick, 2002, Noll, 2006), so too do audiences evolve in response to such changes. This is to say that in the process of communication, the audience occupies a central position.

Communication Process

The communication process is dynamic in nature rather than a static phenomenon, and as such must be considered a continuous and dynamic inter-action, both affecting and being affected by many variables. The major elements of communication process are:

Sender: The person who intends to convey the message with the intention of passing information and ideas to others is known as sender or communicator.

Ideas: This is the subject matter of the communication. This may be an opinion, attitude, feelings, views, orders, or suggestions.

Encoding: Since the subject matter of communication is theoretical and intangible, its further passing requires use of certain symbols such as words, actions or pictures etc. Conversion of subject matter into these symbols is the process of encoding.

Communication Channel: The person who is interested in communicating has to choose the channel for sending the required information, ideas etc. This information is transmitted to the receiver through certain channels which may be either formal or informal.

Receiver: Receiver is the person who receives the message or for whom the message is meant for. It is the receiver who tries to understand the message in the best possible manner in achieving the desired objectives.

Decoding: The person who receives the message or symbol from the communicator tries to convert the same in such a way so that he may extract its meaning to his complete understanding.

Feedback: Feedback is the process of ensuring that the receiver has received the message and understood in the same sense as sender meant it.

Media Audiences

We must be able to think critically about the role and status of media audiences in our contemporary society, reflecting on their relative power in relation to emergence of new media.

The meaning of "audience" is complex, and it has undergone significant historical shifts as new forms of mediated communication have developed from print, telegraphy, and radio to film, television, and the Internet. Whether we are watching TV, surfing the Internet, listening to our iPods, or reading a novel, we are all engaged with media as a member of an audience. A media audience may be as small as one person reading a newspaper or as large as billions of people around the world watching events as they unfold live on television or heard on radio.

Audiences have a complex relationship with the products they consume. Media producers intend audiences to read their product in a certain way, but in actual fact everyone 'reads' and enjoys a product differently due to the individual's sociological and psychological background and lifestyle.

Media audiences may be consuming different types of media at any one time, such as listening to an iPod, watching TV, chatting on the Internet and be engaging at different levels.

Media Consumption: The Transformation

The media environment is changing in ways that are dramatically reconfiguring how, when, and where audiences consume media, and, consequently, forcing media industries to reconceptualise their audiences. One key driver of contemporary audience evolution is the technological changes that are transforming how audiences consume media.

Autonomy of Audience

The term audience autonomy refers to how contemporary characteristics of the media environment, ranging from interactivity to mobility to on-demand functionality to the increased capacity for user-generated content, all serve to enhance the extent to which audiences have control over the process of media consumption.

One industry analyst has described the contemporary media environment as one in which the consumer is "devastatingly in control" (Jaffe, 2005, p. 43). The use of the term devastating in this statement is particularly telling, as it suggests that audience autonomy, like fragmentation, may be having destructive effects on the traditional dynamics of the audience marketplace. Perhaps the most dramatic impact, in this regard, is the increased interactive capabilities of the new media environment, and the way they can blur traditional boundaries between content provider and audience (Cover, 2006; Stewart & Pavlou, 2002; Svoen, 2007). According to Cover (2006), "Such interactivity . . . has resulted in new tensions in the author-text-audience relationship, predominantly by blurring the distinction between author and audience" (p. 140). As audience researcher Sonia Livingstone (2003) thus notes, the end result is a transformation of the audience from "passive observer to active participant in a virtual world" (p. 338; Svoen, 2007).

She goes on to suggest that the implications of this evolutionary process extend so far as to mean the end of the concept of the audience (Livingstone, 2003), with the concept of "users" as potentially better able to capture the current range of means by which consumers engage with media in the new media environment. In

developing a similar critique, Roscoe (1999) notes that "The idea of an audience presupposes a binary opposition between producers and consumers, between the creators, providers and purveyors of content, and the 'audience' itself, which views, browses and 'consumes' the content" (p. 678). This transition, like the transition to an increasingly fragmented media environment, also has undermined traditional approaches to audience understanding.

However, as much as the autonomy facilitated by the new media environment is undermining the traditional passive, exposure-focused conceptualization of audiences, it also is opening up new avenues of audience understanding.

That is, the various interactive components of the new media environment illuminate previously concealed dimensions of audiences, many of which are being judged to have significant economic and strategic value, and, perhaps most important, can facilitate the gathering of types of information that previously could not have been gathered.

Fragmentation of the Media
Many observers have noted the ever-growing fragmentation of the media environment, in which an increased array of content options are provided across an increased array of distribution platforms; while at the same time, within many of these distribution platforms, the capacity for providing more choices continues to expand dramatically (Anderson, 2006; Napoli, 2003).

Media fragmentation in this case refers to the technological processes via which the range of content options available to media consumers grows more pronounced. The most well-known recent discussion of this phenomenon is certainly Chris Anderson's(2006) Long Tail scenario, in which he documents how the new media environment is facilitating unprecedented levels of disaggregation of audience attention, as a result of the massive storage capacity and enhanced search functionalities of the new media environment. The key implication of this process is the extent to which it is undermining traditional approaches to conceptualizing media audiences.

Increased media and audience fragmentation is making it increasingly difficult to quantify audience attention via traditional measurement systems.
Approaching media audiences primarily in terms of their exposure to content is therefore becoming a much more difficult and, ultimately, potentially less viable proposition that it was in years past.

Newspapering in the High-Tech Age
For hundreds of years, printing has been serving humanity in the art of dissemination of information. Printing has served mankind in general communication and learning for over 500 years. Just like any other art, printing came up from a rudimentary form and has evolved much process into its current state-of-the-art.

The Internet comprises computer networks that are attached to one another via pathways that facilities the exchange of information, data and files (Nwajinka 2003, p.113). The Internet project started in the United States of America by the Department of Defense (DARPA) as "resource sharing computer network" in 1969 to provide a system for exchanging military base. It started as a simple network of four computers connected and called, ARPANET. By 1984 up to one thousand (1000) computers were connected. In 1989, the worldwide web (w.w.w) was developed as a striking feature of the network.

It grew to a massive web of computer network by 1994 and was called the Internet. By 1995 up to seven million computers were connected in the worldwide network of which Nigeria was among. The Internet when the Nigeria Internet Group (NIG) was formed (Wakalo, 1998).

According to Okoye (2000, p.192) by 1999, the Internet used by an estimated 50 million people worldwide". Since the Internet is able to provide information on sound, video and text, it became possible to use it for newspapering-Internet publishing. It is therefore possible for Internet users to view newspapers on computer screens in full colour pictures and print same if desired. Today, virtually all the Nigeria papers (e.g. *The Guardian, The Sun, Thisday, Daily Trust, The Nation* and *The Punch*) display their daily editions on the internet.

New Media and the Digital Revolution
Digital technology is a system that encodes information (sound, text, graphics and video) into a series of "on" and "of" pulses that are usually denoted as zeros (0) and once digitized, the information can be duplicated easily and transported at extremely low cost. It is important to note that the computer was the first technological device to use the digital system to process information. The innovation quickly spread to other media. Digital technology makes possible the special effects now common in motion pictures and TV as well as digital audio, digital video, digital photography and digital equivalent of newspapers, magazines and books.

The development of the internet meant the computers could send digital information to all parts of the globe. Thus, the internet as a product of digital technology has revolutionized the way information is processed,

stored or transmitted. Furthermore, the digital revolution has had a profound impact not only on the mass media, but on other organizations. Fledgling writers no longer totally need a publisher; they can create a blog. Traditional news media no longer have monopolies over information. Pictures of events can be taken with digital cameras and shared over the internet. In a nutshell, the digital age has made technology pervasive to the extent that information can be easily obtained and shared.

Mobile Media: cell phones and laptops are described as mobile media. Many people today transact business from their cell phones, especially blackberry; as well as laptops and palm pilots. However, these devices shared common characteristics:

1. They depend on wireless technology
2. They are portable, thereby making it possible for people to access information from almost anywhere.
3. They are interconnected, thereby making it possible for people to have access to the internet on the go.
4. They have blurred the distinction between interpersonal group and mass communication.

It is imperative to note that before the advent of cell phones and laptops, two screens dominated the world; the TV screen and the computer screen. Today, cell phones and laptops have become the third screen; a screen that has the potential to transform the traditional media and global culture.

Technology and Media Convergence

In the times past, technological devices were separate, each operate a specific task. A camera was used to take pictures only; a phone was for making and receiving voce calls only; a tape deck or compact disc player was for playing music only; and a computer was for typing only. But today, all that has changed. A single device can be used to perform all these functions. We are now surrounded by a multi-level media world, where all modes of communication and information are continually reforming to adapt to the enduring demands of technologies, changing the way we create, consume, learn and interact with each other. It follows therefore, that the media in the modern age are blurring and blending into a single system or a set of interrelated systems. We are now living in the world of multi-media computers, compact discs, hand held data bans, national fiber optic networks, advanced facsimile messaging, the Internet and the World Wide Web. Computerization is now the module for all forms of electronic information: sound, video and print. Computers are forcing a massive restructuring of media services are forcing a massive restructuring of media services to have an interface. The building block of the information age is the semi-conductor chip, a device shared by computers. Computers and networks are connected by the semi-conductor chips.

Furthermore, advanced chip technology has changed computers from room-sized machine into hand held devices which place vast amount of media and other information resources into the hands of consumers. Thus media/technology convergence is driven largely by the revolution in ICTs. This convergence is based on technological innovations in micro-electronics, computers and telecommunications. Through digitalization, all kinds of data, irrespective of origin and size, can be manipulated and integrated on the basic of a common ICT structure.

Convergence in News Production: An Emerging Trend

An emerging dimension to the concept of convergence can be seen in news production. Adamu (2009, p.6-8), has dilated upon the influence of technology convergence on news distribution and consumption thus:

Multi-Plat Form Delivery: Distribution of content has been the dimension of convergence that more visibly has developed in recent years, even though journalism research has seldom paid attention to the implications of this trend. The maturity of the Internet and mobile communications, as well as the data-enabled digital television systems, has broadened the range of options for the citizens to access news.

Digitalization, again, has facilitated the development of multi-platform delivery strategies that aim to make news distribution as efficient as possible, ideally using the work of one reporter on an issue as the common source for any version of the story in the different outlets of the media company. There seems to be a vicious circle accelerating the development of multi-platform delivery technologies. All the actors seem to benefit telecommunication companies and software developers foster new content services as a way to find new revenue opportunities; the media perceive multi-platform strategies as a way to reach new audience and increase the visibility of their content; and the users may be attracted by the easy anywhere anytime access to news.

Media industry observers predict an important shift from an offer-focused production to a demand-focused production. In the demand-focused model, users have more control over the content that they want to consume, as well as the way and time to do it. RSS feeds, podcasts, video and demand and web 2.0 services are specific technical solutions used to develop this new delivery model.

Active Audience: Current media trends do not only seem to blur the differences among the media, but also the distance between producers and audiences. The origin of this redefinition of the relationship between journalists and citizens can be found in the qualitative changes in the audience habits and attitudes, namely: fragmentation,

specialization and active participation. Digital distribution technologies allow for the customization of content and ease the production of news that is highly targeted to specific niche audiences. But it is active participation that may have a greater influence in the redefinition of professional journalism.

As a result, blogs, wikis and other self-publishing tools have eased the ability of the Netizens to produce their own content and potentially reach a global audience.

Theoretical Framework

There is a body of theories that provide explanation for observable phenomena in our endeared field of mass communication. A theory according to Kerlinger (1964, p.9) as quoted in Okenwa (2004, p.14) is a set of interrelated constructs (concepts), definitions, and propositions that present a systematic view of phenomenon by specifying relations among variables with the purpose of explaining and predicting the phenomenon.

It is the belief of Ohaja (2003, p.63-64) that "knowledge does not exist in vacuum", hence the need to anchor academic research like this on a relevant communication (*Technological Determinism)* theory.

The main trust of the Technological Determinism theory by Marshal McLuhan, according to Nwodu, (2004, p.73) is to draw the attention of the media audience to the underlying effects of New Communication Technologies.

McLuhan, according to Griffin (2000, p.316), was convinced that the way we live is largely a function of the way we process information. Tom wolfe, an analyst of popular culture in Griffin (2000), summarizes McLuhan's thesis thus:

> *The new technologies…radically alter the entire way people use their five senses, the way they react to things, and therefore, their entire society. It doesn't matter what the content of a medium like TV is, the medium is the message (p.316).*

Be it oral, written, or electronic, the primary channel of communication changes the way audiences' exposure and use of communicated messages. The dominant medium of any age, no doubt, dominates people.

From the analogy of this theory, it is obvious the technology has impacted on communication processes; how newspaper communication interfaces with the reading audiences have been affected by the New Media. So everything boils down to technology.

Methodology

The research design used in this study is the survey method. The population of this study comprises all the newspaper readers in Enugu State. Unfortunately, there is no dependable existing statistics of the exact number of newspaper readers in the state. However, all readers of national dailies in Enugu State make up the population of this research. Hence, this research has infinite population. Accordingly, the researchers randomly sampled 30 newspaper readers in each of the 5 most popular vending units in Enugu, making a total of a manageable sample size of 150 in this study.

A 23-item Structured Questionnaire specifically designed for the study was used to source research data. The questionnaire was designed to take care of the research questions raised and the hypotheses formulated in the study. The questionnaire was designed and validated in its content and face values. Fellow researchers were used to do the face and content-validity tests of the instrument. The various suggestions made were used to modify the face and contents' values.

The split half reliability test was used. Correlation of the 2 score to obtain the reliability coefficients using the Spearman Brown prophecy formula to correct the reduction of the original instrument into 2 halves in order to estimate the reliability of the whole instrument. A reliability coefficient of 0.65 is obtained when the Spearman Brown prophecy formula is applied to the two halves of the instrument used for the study. The reliability coefficient of 0.65 shows that the research instrument has a high internal consistency. The questionnaires were administered to the respondents on a face to face basis at each of the identified newspaper vending units in Enugu.

The researchers used both descriptive and inferential statistics in analysing the collected research data. The study made extensive use of tables for the presentation and analysis of data. Simple percentages was used for the analysis of demographic and sociometric questionnaire analysis, while Chi-Square (X^2) test statistics was used to test the significant difference in the hypothesis.

Data Presentation and Analysis

Having administered the 150 copies of the questionnaire to the reading audiences in all the 5 randomly selected vending points in Enugu, 147 copies were returned, while 3 copies were not returned. Also, 4 copies out of the 147 returned were badly filled, hence could not be analyzed. Therefore, 143 copies of the questionnaire representing 95.3% were analyzed, giving room for 7 or 4.6% mortality rate. The statistics is here under presented on a pie chart.

IISTE
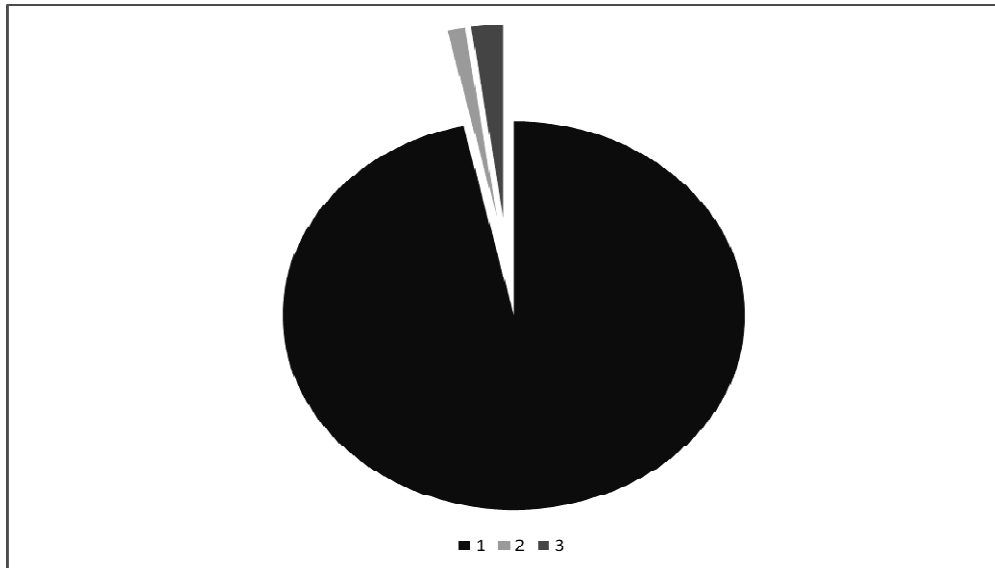
Questionnaire Distribution and Returns

PIE CHART KEYS:

1. ***Returned Valid:*** $=$ $\dfrac{143 \times 360^0 = 343^0}{150}$ or 95.3%

2. ***Returned Invalid:*** $=$ $\dfrac{4 \times 360^0 = 10^0}{150}$ or 2.7%

3. ***Not Returned:*** $=$ $\dfrac{3 \times 360^0 = 7^0}{150}$ or 2%

Consequent upon the checks on all the copies of the questionnaire returned, the researchers zeroed-in on 143 (343^0 or 95.3%) valid copies that are analyzable. The data as collected were coded in Tables, with mathematical (percentage) interpretations.

Research Question One: To what extent are reading audience of Nigerian newspapers exposed to the New Media environment?

Table One: Reading Audiences' Exposure Level to Newspapers in the New Media Environment

Variables	No. of Respondents	Percentage
Frequently (Daily)	107	74.8%
Occasionally (Weekly)	26	18.2%
Rarely (Unspecified)	10	7%
Total	**143**	**100%**

Presentation on *Table One* shows that 107 or 74.8% of the respondents, despite their readership of the daily newspapers on the news stand, also read the newspaper on the web. Their exposure to the new media environment is daily as claimed; 26 or 18.2% occasionally read newspapers in the new media environment, while 10 representing or 7% of the respondents have an unspecified exposure to online communicated newspaper materials. They are therefore, expected to understand and respond to the questionnaire administered. It can therefore be inferred that reading audiences of the conventional newspaper in the news stand and same people that consume the online editions of these dailies. However, with the intrusion of communication technology that is advancing, the number of audiences in the age of the new media is increasing geometrically.

This is premised on the fact that most of them do not buy newspapers, but read the online editions. Also, previously, they do not read newspapers, but with the availability of online versions, most people who hitherto do not read newspapers are now reading audiences of Nigerian online newspapers in the new media environment.

Research Question Three: How has the New Media communicated messages effectively used by reading audiences in Nigeria?

Table Two: If New Media Communicated Messages Are Effectively Used By Reading Audiences

Variables	No. of Respondents	Percentage
Sure	72	50.3%
Somehow	50	35%
Not at all	12	8.4%
Can't say	9	6.3%
Total	**143**	**100%**

Research data as presented on *Table Two* indicates that 72 representing 50.3% of the newspaper reading audiences agreed that newspaper messages read in the new media environment are effectively understood and used; 50 or 35% of the said they somehow effectively use such communicated messages effectively; 12 representing 8.4% of the respondents sharply disagreed, while 9 or 6.3% were undecided. The import of the above presentation is that, evidences from research data reveals that online newspaper versions are as effective as the messages on the hard copies of the national dailies. The audiences can therefore consume the messages from either online or offline publications.

Research Question Three: To what extent has the New Media environment provided the reading audiences adequate feedback mechanisms as to engender communication effectiveness in the age of technology?

Table Three: If New Media Environment Provided The Reading Audiences With Adequate Feedback Mechanisms As To Engender Communication Effectiveness.

Variables	No. of Respondents	Percentage
Yes	132	92.3%
Not at all	6	4.2%
Can't say	5	3.5%
Total	**143**	**100%**

As presented on *Table Three,* research data indicates that 132 or 92.3% of the newspaper reading audiences agreed that unlike the conventional newspaper publishing, the new media environment provides adequate feedback mechanism as to engender effective communication; 6 or 4.2% of them disagreed, while 5 representing 3.5% were undecided. The implication of the above presented data is that, mass communication, as practiced in the age of the new media environment, does engender more effectiveness as a result of the immediate feedback mechanisms it provides.

Research Question Four: What are the endogenous and exogenous psychosocial elements that drive communication efficiency in the new media age?

Table Four: Endogenous and Exogenous Psychosocial Elements that Drive Communication Efficiency in the New Media Age.

Variables	No. of Respondents	Percentage
Internet Access	12	8.4%
Experience	2	1.4%
Age	9	6.3%
Knowledge Level	8	5.6%
Perception Ratio	4	2.8%
All the Above	108	75.5%
Total	**143**	**100%**

Table Four is a presentation of research that data indicates that majority of the respondents (108 or 75.5%) listed *Internet Access, Experience, Age, Knowledge Level* and *Perception Ratio* as the combination of the endogenous and exogenous psychosocial elements that drive communication efficiency in the new media age. The implication of the above presentation is that, newspaper communicated messages in the age of the new media cannot be effective if there is no interplay between and among these sociological and psychographic elements.

Testing Of Hypotheses
The researchers used the Chi-Square X^2 formula to test the statistical significance of the hypothetical statement.

$$X^2 \quad \sum \quad \frac{(fo - fe)^2}{fe}$$

Where   fo   =   observed frequency

fe   =   expected frequency

$\sum$ =   summation

X^2 =   chi-square or calculated value.

Ho$_1$:   The New Media environment has not provided the reading audiences adequate feedback mechanisms as to engender communication effectiveness in the age of technology.

H$_1$:   The New Media environment does provide the reading audiences adequate feedback mechanisms as to engender communication effectiveness in the age of technology.

At 0.05 significance level and 1 degree of freedom, the *Table Value* 3.841. Since the *Calculated Value* (9.234) is greater than the *Table Value* (3.841), the research hypothesis was accepted. It therefore means that the New Media environment does provide the reading audiences adequate feedback mechanisms as to engender communication effectiveness in the age of technology.

Key Findings

Some of the very important findings of this study include:

i. The new media have played a significant role in conventional journalism practice in Nigeria.

ii.   Despite readership of the daily newspapers on the news stand, reading audiences also read the newspapers on the web. It can therefore be inferred that reading audiences of the conventional newspaper in the news stand and same people that consume the online editions of these dailies.

iii.   With the intrusion of communication technology that is advancing, the number of reading audiences in the age of the new media is increasing geometrically. This is premised on the fact that most readers do not buy newspapers, but read the online editions.

iv.   Research data also reveal that with the availability of online versions, most people who hitherto do not read newspapers are now reading audiences of Nigerian online newspapers in the new media environment.

v.   Evidences from research data, reveals that online newspaper versions are as effective as the messages on the hard copies of the national dailies. The audiences therefore, consume the communicated messages from online newspaper publications, and still enjoy the same communication effectiveness.

vi.   Newspaper reading audiences agreed that unlike the conventional newspaper publishing, the new media environment contrary to the notion of delayed feedback of mass communication does engender more effectiveness as a result of the immediate feedback mechanisms it provides.

vii.   Research that data indicates that *Internet Access, Experience, Age, Knowledge Level* and Perception *Ratio* are the combining endogenous and exogenous psychosocial elements that drive communication efficiency in the new media age. The implication is that, newspaper communicated messages in the age of the new media cannot be effective if there is no interplay between and among these sociological and psychographic elements.

Conclusion

Based on the collected research data as analysed, the researchers have come to the reasoned conclusion that mass communication audiences have been altered in terms of their sizes, location, access and exposure patterns as well as perception, as communication contents are being migrated to the new media environment. Accordingly, we conclude in this research that the new media revolution has impacted positively on journalism practice, as the communicator interfaces with the audiences for communication efficiency and effectiveness.

Recommendations

Consequent upon the findings obtained from this study, the researchers made the following recommendations:

i.   As the new media have created an immediate feedback mechanism for the changing media audience, all conventionally mass media structures are strongly enjoined to migrate fully into the new media environment, so as to take care of emerging and diversifying audiences.

ii.   The journalists must continue to upgrade themselves, particularly in the new media age. This is to enable them fit into the ever-changing faces of technologically driven journalism practice, since it is believed that the new media communicated messages are effectively used by the consuming audiences in Nigeria.

iii.   All migrating communication organisations should, with the interactive and ubiquitous nature of the new media, strive to identify their audiences for optimal efficiency. The days of claiming that mass communication audience is unknown are over. Hence, strategies must be put in place to know the audiences that consume media messages. Such interface must be explored in this new media age.

References

Carey, J.W. (2003). *New media and tv viewing behaviour*: NHK Broadcasting studies, 2: 45- 63.

Cover, R. (2006). Audience inter/active: Interactive media, narrative control and reconceiving audience history.

New Media & Society, 8 (1), 139-158.

Dimmick, W.J. (2002). Media competition and coexistence: The theory of the niche. Mahwah,NJ: Erlbaum.

Griffin, E. (2000). *A first look at communication theory*. New York: McGraw Hill Company.

Lievrown, L.A. and Livingstone, S. (eds) (2006). *The handbook of New media*, 2nd edn. London: sage publishers

Livingstone, S. (2003). The changing nature of audiences: From the mass audience to the interactive media user. In A. Valdivia (Ed.), Companion to media studies (pp. 337-359). Oxford, UK:Blackwell.

Luders, M. (2008). Conceptualizing personal media: *new media and society*, 10 (5): 683-702.

Napoli, P.M. (2003). *Audience economics: Media institutions and the audience marketplace*.

NewYork: Columbia University Press.

Noll, A.M. (2006). The evolution of media. Lanham, MD: Rowman & Littlefield.

Nwajinka, C. (2003). Information and Communication Technology in Nigeria: The Internet and Allied Perspectives. In Uwakwe Onyeka (ed.) *Communication and national development*. Enugu: Afrika Link publishers.

Nwajinka, C.O. (2004). Information and communication technology in Nigeria (ICT): the internet and allied perspectives. In O. Uwakwe (2004). *Media technology: issues and trends.* Enugu: Afrika-link books.

Nwammuo, A.N. (2011). Webcasting in the era of globalization: Implications for Nigeria. In *journal of Communication and Media Research*, 3 (1) Delta: Delmas communication Ltd.

Nwodu, C. (2004). Technological Determinism Theory and media practitioners perception of cultural influence on ICTs on developing nation. *Nigeria journal of communications*. I (4), p.72-83

Okenwa, N. (2002). The mass media: theories and realities. Enugu: Bismark publications.

Okoye, I. (2000). *Newspaper editing and production in the computer age*. Lagos: Mbeyi & Associates

Roscoe, T. (1999). The construction of the World Wide Web audience. Media, Culture and Society, 21, 673-684.

Svoen, B. (2007). Consumers, participants, and creators: Young people's diverse use of television and new media. ACM Computers in Entertainment, 5 (2), 1-16.

Wakalo, D. (1998) "Internet and Engineers in the millennium". A paper presented to the members of the Nigeria Society of Engineers, Nsukka Branch (cited by Nwajinka C. (2003). In Uwakwe Onyeka (Ed.) *Communication and national development*. Enugu, Afrika-Links publishers.