

CHANGING TECHNOLOGIES AND THE NIGERIAN MASS MEDIA

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ABSTRACT

The society we live in these days is a fast developing one and it is characterized by various technological changes. The changes are fast encroaching into every sector of life, however the media seems to be one of the various sectors that consistently tune in to whatever form of technology seems available. The introduction of the internet is a major technological advancement in the Nigerian society which has given birth to what is referred to as the new media. The new media is the infusing of the internet functions into the traditional media which gives birth to various concepts like online newspapers, internet radio and webcasting.

The paper however takes a critical look at the way the media has taken the colouration and form of the changing technology from the days of the movable type to the era of online publishing. It was predicted on the domestication theory which assumes that Many of the traditional media had a conventional way of relaying information however, over time, with the changing technology, media organizations began to adapt to the various innovations to suit their mode of operation. Also the technological determinism theory which states that media technology shapes how we as individuals in a society think, feel, act and how the society operates as we move from one technological age to another.

The historical method was used to gather historical facts on the origin of the various media in Nigeria and the way they have evolved and advanced with the changing technologies to arrive where they are today. Recommendations are however made on the way the media can continue to integrate the new technologies into their traditional format so as to avoid extinction.

Keywords: New Media, Changing Technologies, Innovation, Traditional media

INTRODUCTION

Technology and mass communication have always been in a sort of competition. This is due to the fact that for every new form of technology that evolves the mass media has a way of inculcating it into mass communication practices. From Johann Gutenberg's invention of the printing press in the 15th century, via an abundance of technological advances in the fields of communication, printing, database and computing technology, before finally arriving where mass communication has gotten to today. Various technologies have created new forums and avenues for the mass communication field which keeps evolving on a daily basis.

The mass media are all those media technologies that are created to reach a large audience through mass communication. Broadcast media (also known as electronic media) transmit their information electronically and comprises of television, radio, film, movies, CDs, DVDs, and other devices such as cameras and video consoles.

Alternatively, print media use a physical object as a means of sending their information, such as a newspaper, magazines, comics, books, brochures, newsletters, leaflets, and pamphlets.

The organizations that control these technologies, such as television stations or publishing companies, radio stations and even online stations are also known as the mass media or new media.

The importance and role of technology in the media process cannot be over emphasised as since the evolution of technology, visible changes have been recorded in the success of the media. A medium can come in various forms like print, broadcast or digital.

The last decade has brought some important new technologies for the mass media. In 1991, the first usable portable computers were developed. Around the same time, "mobile" phones started to make their entry. In 1994, the internet became commercially available. Within two years, "everybody" had heard about the internet, and after another two years the number of available web sites had nine-doubled to more than 20 million different sites. From being a tool for the American military and educational institutions, the Internet has become a commodity service, freely available to anybody who wants to use it.

MASS MEDIA AND TECHNOLOGY

Mass communication is all about communication. Man lives to communicate and communicates to live. Various communication channels have surfaced to make this communication function possible. Mobile telephony and electronic mail were welcome additions to the array of possibilities out of the various types of communication channel that came up as the new media. The Internet as a whole, however, presented a whole new range of challenges for mass communicators as they needed to keep up with the changing technologies.

Before the Internet, most communication has been largely unidirectional as well as traditional in nature. Print media consists of Newspapers, Magazines, and Books while, Broadcast consist of Radio, Television. The new media which is in form of Digital media consists of hard disk drives or computer networking which is a form of electronic media where data is stored in digital form. It can refer to the technical aspect of storage and transmission of information or to the "end product", such as digital video, augmented reality, digital signage, and digital audio or digital art.

The Nigerian mass media has grown encouragingly over the years. Milestones, and records have been noted and forms of such media that paved a way for the others can be seen below:

- *Iwe Irohin Fun Awon Ara Egba Ati Yoruba*(the first printed and published newspaper in Nigeria)
- Radio (Rediffusion)
- Television

THE MEDIA IN NIGERIA

Print generally was invented in the 15th century and it created a major breakthrough in technology, which was the invention of "the movable type". It enabled people to produce and send messages faster than before. The two important developments followed the invention of

movable type. First, the use of the papermaking machine in the eighteenth century made it possible to mass produce and cut paper in specific sizes, reducing the cost of production. Second, the application of steam power to the printing press, an alternative to human labour, made possible true mass production of printed material. Sources of power, improved printing presses, and improved paper manufacturing processes developed during the nineteenth century.

The history and growth of Radio can be linked to the intervention of the British Empire Service from Daventry, England. In 1936, the first Radio Distribution Service (rediffusion) came into Lagos, as a means of distributing programmes that originated from the British Broadcasting Corporation (BBC). After some years, many people subscribed to these programmes and rediffusion service became very popularly wanted in Nigeria. At a point the number of rediffusion boxes that were available couldn't meet the demand for it by people in Nigeria. It was from this stage that various regions started their own indigenous radio stations, starting from the west in 1959, Eastern Region in 1960 and the Northern Region in 1962.

The history of Television in Nigeria followed the same pattern as that of the radio. While it was the Federal Government that started the first radio broadcasting station in the nation, the regional governments were the first to venture in T.V. broadcasting. It was on October 31, 1959 that the former Western Region produced and transmitted the first television signals in the whole of Nigeria and Africa.

THEORITICAL FRAMEWORK ON CHANGING TECHNOLOGIES

Virtually all Nigerian media have developed with the changing World Wide Web, which has resulted into most of them having an internet presence now. The Internet has the ability to provide feedback quickly and easily from receivers to senders. The Internet has introduced mass interaction to mass media through the use of chats, blogs and so many other applications which are being put to use in the mass communication field. The innovation has led to a visible change in the way mass communication is being practised in Nigeria. The various aspects have witnessed different technological innovations ranging from the print media to the broadcast media. In a chronological order the print media was the first to witness this change before the radio and the television medium.

These study is however premised on certain technological theories first of which is the Domestication theory

Domestication theory is an approach in media studies that describes the processes by which innovations, especially new technology is 'tamed' or appropriated by its users. First, technologies are integrated into everyday life and adapted to daily practices. Secondly, the user and its environment change and adapt accordingly. Thirdly, these adaptations feedback into innovation processes in industry, shaping the next generation of technologies and services. The theory was initially developed to help understand the adoption and use of new media technologies by households (Silverstone et al. 1992), but has since been expanded in the innovation literature as a tool to understand technologies and innovations entering any consuming unit (workplace, country etc. e.g. Lie et al., Habib, Punie, Sørensen) that can be analysed economically, culturally and sociologically. The domestication approach considers both the practical and the symbolic aspects of the adoption and use of technologies, showing how these two elements- the meanings of things, and their materiality, are equally important

understanding how technologies become part of everyday life. It is a foremost a social theory as it highlights the negotiations, challenges to power and control, rule-making and breaking that accompany the introduction of technologies into any social setting.

Taking a look at the Nigerian situation it is evident that the domestication theory is applicable to what is obtainable. Many of the traditional media had a conventional way of relaying information however, over time, with the changing technology, media organizations began to adapt to the various innovations to suit their mode of operation. Online versions of the traditional media have been created to match up with the ever changing technology.

Domestication theory highlights the role of users in innovation - the work done by individuals and communities in order to make a technology from the outside do practical work, and make sense within that community. This strand of work links to the role of end users, lead users etc. in long term innovation process (Williams et al. 2004). This indicates the role of the various individuals who have capitalized on this innovation by creating news forums, blog sites, social networking sites for news and lots more.

However, the principal criticism of the domestication approach is its reliance of detailed case studies, and its rather descriptive approach which is difficult to turn into prescriptive lessons of the type required by business and policy makers. However, this rich-descriptive approach is also its strength: it enables processes and the complex interplay of artifacts and cultural values to be explored in much more depth than individualistic, quantitative methods.

The Domestication approach, describing the integration of technologies into social relationships and structures using evidence obtained using qualitative methods, stands in sharp contrast to individualistic and quantitative approaches. This theory however is relevant to this study due to the fact that it is able to establish a relationship between the new innovations and how the media takes the form and inculcate the various changing technologies into their mode of operation.

Technological Determinism: Another theory that supports the research is the technological determinism theory which states that media technology shapes how we as individuals in a society think, feel, act and how the society operates as we move from one technological age to another (Tribal- Literate- Print - Electronic). It was propounded by Marshall McLuhan in 1962. The theory has various assumptions which he broke down into individual interpretations, Metatheoretical assumptions which cover ontological assumptions, epistemological assumptions and axiological assumptions.

The theory postulates that in individual interpretations we learn, we learn and feel and think the way we do because of the messages we receive through the current technology that is available. The radio required us to only listen and develop our sense of hearing. On the other hand, television engages both our hearing and visual senses. We then transfer those developed senses into our everyday lives and we want to use them again. The medium is then our message. This to an extent seems to be closely related to the agenda setting theory which describes the ability (of the media) to influence the salience of topics on the public agenda. That is, if a news item is covered frequently and prominently the audience will regard the issue as more important. The innovations that affect the media especially in the area of online technology have to a large extent influenced some of the notable changes in the society. The types of phones that were used to communicate back then are now advanced and has been a

major tool used to influence the way communication is done this days. Taking a look at some other assumptions of the theory sheds more light on the role the changes in technology has on the media as well as media consumers.

Ontological Assumptions:

Humans do not have much free will at all. Whatever society as a whole is using to communicate, they too will use to communicate. Therefore they will adapt to the medium they are using so that they can send and receive messages like everyone else.

Epistemological Assumptions:

We know that there is one truth by observing what has happened over time. As the medium changes so does society's way of communicating. People can only use the medium for which it was created (phone for talking over lines or electronic mail for talking via computer). If the medium is impersonal (television) then the message too is impersonal.

Axiological Assumptions:

This theory is objective in that everyone will act and feel the same no matter what the medium they are using provided that they are using the same medium. Values are not involved because evidence is seen strictly through observation. The assumptions of the theory to a large extent has great influence on the society however some critics have identified certain faults with the theory, they are highlighted below:

- Explanatory Power: It explains when new systems of technology are developed, the culture or society is immediately changed to reflect the senses needed to use the new technology.
- Predictive Power: It predicts that with every new system of media technology, society will change and adapt to that technology.
- Parsimony: There is a simple cause and effect analysis between the introduction of new technology and the changes in society's way of thinking, feeling, acting, or believing.
- Falsifiability: The theory could be proved false if a new technology is invented and nothing changes.
- Internal Consistency: There is a logical flow of proof evidenced over time.
- Heuristic Provocativeness: Would this theory only work in the USA or would it vary culture to culture within or outside the United States? Does it vary in the electronic age between those who can afford the new technology and those who cannot?
- Organizing Power: We know that we have developed and we know that we have changed. This theory provides a way to see why this has happened.

Taking a lot at the criticism of these theory it is safe to assume that as much as the changing technology affects the various mass media it is not a sole requirement to changing the way humans think, feel or act, there are other factors that could also influence the way people behave the way they do.

However it should be noted that the various technological developments in the Nigerian society have brought about an improvement and change in the way the various traditional mass media operates. Newspapers for example have changed the ways of circulating news to their dispersed and diverse audience. In the 15th century, when print method was first established, it was called 'acta Diurna'. These works were posted in public places for all to read, and were kept in files as an official record for historical events. The bulletins were copied and reproduced by hand for distribution to other countries by ships, and messengers. The ability of the publication to transmit messages to a mass audience was minimal based on today's standards. New technologies now allow published works of the print to reach thousands of people at very cheap rates. Still taking newspapers as an example, there is a consistent review of newspapers on both radio and television as well as the presence of online newspapers is very prominent in this era of the 'internet media'.

The regular radio stations have also evolved into the internet radio through the help of the changing technologies. Internet radio (also web radio, net radio, streaming radio, and e-radio webcasting) is an audio service transmitted via the Internet. Music streaming on the Internet is usually referred to as webcasting since it is not transmitted broadly through wireless means. A lot of innovations have evolved in radio broadcasting which has led to various digital form of radio broadcasting. This innovation allow for the transmission of radio programmes just by owning a laptop connected to the internet.

Also Over the years, television broadcasting has been upgraded from the boring black and white forms, to dull colours, and then to high definition (HD), Liquid Crystal display(LCD), 3 Dimensional views(3D)... all for the viewing pleasure of the audience. These days there is even internet form of television that gives room for webcasting, online TV, which is the digital distribution of television content via the internet.

Recommendations

It is believed that the advent of the new technologies has brought about an encouraging growth and change in the Nigerian media. Technologies have sprung up to aid the functionality of our media system as such it is recommended that media planners and those generally involved in the media business must be abreast of the various technological changes so as to be able to match up against any form of innovation that could affect the media industry.

Also, the technological changes obtainable in the developed societies have been put to good use in the development of the society it is therefore recommended that media personnel capitalize on the importance of this technologies by translating them into developmental tools in the society

CONCLUSION

It should be noted that technology is bound to change as the society develops as such the media must always be at alert to be able to keep up with the ever changing technology in the world. The changing technologies in the Nigerian mass media offers new means of reaching out to the teeming population as well as the audience due to its interactive nature which gives room for feedback as well as immediate communication. The various media in Nigeria have passed through various developmental changes which have altered the traditional ways by which information was being disseminated or circulated. It can therefore be said that the

media has evolved over time through various stages and has been able to survive and adapt to the various changing technologies obtainable in the society

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