Influence of technological innovation on journalism practice amongst journalists in Owerri metropolis

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Abstract
Journalism has been going through several major technological changes during the past few years. The pace of these changes is breathtaking, altering the practice of the profession in ways on thought of just decades ago. These changes have impacted on a wide range of activities from news gathering to dissemination and are known to birth many benefits. However, the profession faces some negative impact too. The study was conducted to ascertain the influence of technological innovation on journalism practice amongst Journalists in Owerri Metropolis. The objectives of the study amongst others were to find out the degree to which media practitioners use new media technologies in their day-to-day reportage and examine the influence these technological innovations have had on their news reportage and other media activities. The study was anchored on Technological Determinism Theory. The population of this study comprised 121 registered registered practicing Journalists in Owerri metropolis and this formed the sample size of the study using the Census principle. The Questionnaire was used for data collection while statistical package for Social Science (SPSS) was used to run the analysis of the data obtained. The study revealed that there is a positive significant impact of technological innovations on Owerri based media practitioners. The study recommends that orientation should be intensified at journalism schools and other allied training schools to educate Journalists to embrace new technological innovations.

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Introduction
The mass media in any society are seen as purveyors of culture, morals and values which are passed down from one generation to another. Media practice is thus public and people-oriented. The mass media are media technologies that were created with the intention of reaching a large audience by mass communication (Philpatura, 2014). Broadcast media also known as electronic media transmit their information electronically and they include, television radio, film, movies, CDS, DVDS, Cameras, and so on. The print media, on the other hand use printed objects, such as the newspaper, magazine, pamphlets, books and brochures as means of information to a large number of people. (Ayotunde 2012).
According to Philpatura (2014) the Pre 21st century mass media could be classified as indigenous and traditional, since they did not incorporate information technology into their operations. The contemporary society we find ourselves now is rapidly developing with breakneck technological changes. People’s attitude to the traditional media of television, music, radio film and print has also changed due to the dynamic nature of the applicable technology in their preference and delivery. (Obayi.P., Oyebuchi, A And Anorue, Li, 2016). The changes are fast encroaching into every sector of life. However, the media seem to be one of the various sectors that consistently tune in to whatever form of technology that seems available, (Ayotunde 2012).
In essence, the media and emerging technologies are bringing new ways of sharing ideas, teachings, opinions, thoughts and information as well as new ways to hearing about the world.
Technological trends, their prospects and possibilities have significantly facilitated the global information flow, which has fulfilled Marshall McLuhan’s idea of the global village, where one’s neighbor is no longer the fellow who lives next door. He could be in a remote part of the hemisphere separated from others in time and space, language culture, norms and value, yet attuned to minute by minute happenings around the globe. Buttressing the point, Agbo (2001) says what happens to one is known by the other within a split second.

The import of the above assertion is that journalism practice has benefited immensely from available technology, per time. From papyrus to ink, paper to print and radio to the Internet, technology has served the media. As Idiong (2017) notes, we are today in the era of digital media convergence. Convergence for journalists, he notes, means using operating systems in a one-screen-fits-all-scenario to publish and distribute stories across virtual platforms, such as blogs and podcasts, Really Simple Syndication (RSS) and Aggregator. It means integrated newsrooms where journalists come together and with digital tools are able to produce multimedia (Iwule and Anderson 2011) [12]. With the change in hardware and innovation comes a whole range of new technologies that enable media workers to create, annotate, edit, appropriate, disseminate and redistribute media contents on a global scale. Rich (2011) [20] observes that while these trends offer great possibilities in terms of speed and output, they also pose fresh challenges and pressures to journalists hitherto accustomed to the traditional methods of producing news. In the light of the foregoing, this paper seeks to ascertain the influence that technological innovation has had on journalism practice in Owerri metropolis.

Statement of the Problem
We are witnesses in this age to the huge technological advancements and innovation that have swept through all aspects of human endeavour. Interestingly, the media world is not left out. Today, journalists have an array of digital tools and gadgets at their beck and call. It is thought that these tools help enhance the quality and delivery of their news and information contents.

As a relatively new and indeed vast field, digital media and information technology have been greeted with curiosity and suspicion.

The study tends to find out if journalists in Owerri have been influenced positively or negatively to embrace this new innovation of using technology which they were not used to. Meanwhile, new technologies keep coming out while the older ones keep evolving. Before it was only computer but now there are Ipdas, Iphones, Digital Cameras, Websites, Smartphones, Digital television, Geolocation, Drones and Guided missiles, Video Streaming, E-books, Digital Music and so on.

Another issue that journalists seem to grapple with is the attendant demands the new technology thrusts on them, a fear that has led to fears about job loss.

Media organizations have also voiced concerns about the tedium in keeping up with innovations and cost of acquiring new technologies as and when due. Health hazards associated with technologies are also on the front burner. But are these concerns real or imaginary? Do they pose a hindrance to their utility? To what extent do these new technologies influence journalists in their day-to-day reportage? This paper seeks answers to these questions and more using journalists in Owerri as case study.

Objectives of the Study
The study sought to:
1. Ascertain the extent to which practicing journalists in Owerri are exposed to media technological innovation.
2. Find out if Owerri based practicing Journalists are formally trained in new technologies.
3. Determine the extent technological innovation has helped practicing Journalists in Owerri in their reportage.

Research Questions
The following research questions were formulated to strengthen the study.
1. Are practicing Journalists in Owerri aware of new technologies?
2. Are Owerri based practicing Journalists trained formally in Information Communication Technology.
3. To what extent has new technological innovation helped Journalists on their reportage.

Definition of Terms
Influence: The capacity of new technologies to have an effect on the output and productivity of Owerri-based Journalists.

Journalist: An individual who gathers and disseminates news to the public in Owerri metropolis.

Journalism Practice: The act of gathering, processing and writing for public consumption through newspapers, radio and television in Owerri metropolis.

Mass Media: This refers to the main means of mass communication, such as broadcasting, publishing and the internet both private and public owned media outfits.

Technological Innovation: This refers to digital media tools, gadgets and digital media assistants (PDAs) that promote contemporary news production, such as computer systems, digital newsroom suits, cameras, page making applications, blogging tools, computer assisted reported packages, data journalism tools, video editing suits, DVDs, multimedia and convergent writing software packages, etc.

Review of Related Literature
Conceptual Review
Media technology, an overview
Humans believe in interacting with fellow humans via communication. Therefore, man has always sought to find effective ways to pass down, knowledge, cultural heritage and opinions. There has always been evolution of communication from generation to generation.

With the evolution of communication orchestrated by technological innovations, peoples’ way of communication with one another has changed from what was obtainable during the prehistoric era. During the prehistoric era, communication was person to person. From that it developed to signs then to letters to telephone and to the internet which paved way to many other means of communication.

Technological innovations have redefined communication unlike in the olden days when people have to wait for a long time to receive information or message. The world has become a global family where messages, texts, and e-mails, can be received with a snap of a finger.

The mass media communication evolved with Cave Paintings...
-- Symbols --Smoke Signals, ---Postal System---Newspaper -- Radio--Telegraph--Telephone -Television ---Internet ----E-mail--Text Message ---Social media.

Recent developments in media technologies
There have been untold developments in media technologies which has really repositioned the media and their audiences, some of them are;

World Wide Web
It is commonly known as "www" It was invented in 1999 by Sir Tim Berners-Lee, a British Computer Scientist. It is a commercial platform meant for selling products and services.

Electronic Mail
It is also popularly known as E-mail. Rice $ Barman – Adhikari (2013)) stated that Email is an avenue by which messages are exchanged between people from different locations at a faster rate unlike during the days of letter writing and postal services. This electronic mail system was built by an Indian --American Scientist and Entrepreneur, VA Shiva Ayyadural in 1978.

Facebook
Hughes & Hans (2017) made it known that Facebook is a website that was created by a Harvard College student Mark Elliot Zuckerberg, his room mates and some other students in 2004.

X (Twitter)
It is considered the SMS of the internet -Rice& Barman-Adhikari (2013). It was created in 2006 by Evan Williams Biz Tork, Noah Glass and Jack Dorsey. Messages posted in Twitter is known as tweets.

Google
It is a search engine that was developed in 1996 by two PhD students of Stanford University as their research work.

Youtube
It is one of the on -line sites for watching and sharing videos that was created by Chad Hurkey and Steve Chen in 2005.

Instagram
It is for fun Photography and Videos.There are other Social Media platforms like Blab,Hi5,House party, LinkedIn, Snap chat, My Space,Bing,Xing, Vimeo and others.

Artificial Intelligence
Artificial Intelligence (AI) is the ability of a digital computer or computer controlled robot to perform tasks commonly associated with intelligent beings It may not be an over statement to state that AI is gradually taking dominance in the field of journalism. AI Software stories are automatically generated by computers instead of reporters on the field. It also interpret, organise, and present data in human readable forms. The presence of AI in the journalistic practice has innovated and changed how media work besides it has also given room to leaner staff because it virtually does everything a reporter can do.

Okiyi & Nsude (2021), say Robots are trained through development of algorithms which they interpret and write faster than humans and produce scores of news stories simultaneously a with few seconds. They fast tract journalists reporting since robots can import data from various sources, recognize trends and patterns and the use of natural language processing put them into context and help to construct sophisticated sentences. This is known as automated journalism which is also known as robot journalism"

Media Convergence
The term Convergence was first coined by Nicholas Negroporite in 1978

Media Convergence simply refers the merging of different types of mass media such as Traditional media, Print Media, Broadcast Media, New Media and Internet as well as portable and highly interactive technologies through digital media platforms -Team Leverage Edu (2021)

There are 3 types of Media Convergence namely;

Cultural Convergence good
Economic Convergence
Technological Convergence.

We would concentrate on the last convergence which is Technological Convergence. It is the fusing of computing, communication and content (that is the 3Cs) around networked digital media platforms. It also converts traditional media that have been in existence into a digital form of technology. A typical example is viewing a book on line (E_book, Kindle) Some of the examples of media convergence are these: Ipad encapsulating different digital media like camera, Tv, radio,, music etc into a carriable single device. Media Convergence is pertinent because it fuses the 3Cs. The presence availability of portable devices now has led to cross media.

Media Organizations do no longer rely on News Agencies for their news stories. Media Convergence has given birth to Podcast, News feeds, Blogging, Websites, News Portals Mobile Applications etc.

Impact of technological innovation on journalism practice
These days news goes viral increasingly affecting journalistic practice in diverse ways both positively and negatively, of course journalism practice in developing countries like Nigeria are feeling the impact.

so fast and "as e dey hot" one can say that the phrase "Breaking News " in no distant time will be a thing of the past because of the presence of technologies like Smart Phones and other News media devices and platforms which people use to stream events as it is happening.

The presence of technology has given rise to media convergence where many media types such as text, audio, sound, images, graphics, photography, animation and so on are. Used to transmit, transfer and convey messages. According to Felix U.T (2011) Online journalism has created urgency in media reporting. This means that most journalists no longer battle to meet deadline nor rush to their office from their beats to file their news story rather with the help of WhatsApp and other Applications, they can file their stories from wherever( it is happening)they are.

Again the relaying of eye witness stories by Mass media users has become a reality. A vivid example is Channels Television”s Eye witness Report. Radio Stations now have phone in programmes unlike when individuals or radio users go to radio stations or station's studio to participate in a program.

A. S (2013) opined that the print media feature opinion poll that aids in the reception of feedback from it’s readers. Some
other news outfit go further to accord to it’s readers the liberty to upload reports of current news worthy events within their vicinity. Media outfits like Vanguard, The Sun Newspapers offer to their readers such service.

The migration of newspapers and television outfits to the Web has been consequently accompanied with that of it’s readership and viewership respectively. - Felix U.T (2011)

Another impact of Technological innovation on journalism practice is that audiences have an avalanche of Information Communication Technology (ICTs) to make use of.

T.A. (2010) states that Mass Media audiences can download and listen to programmes Some of them have photo Gallery and maintains presence on Facebook and X (Twitter)

Though P.C. (2001) maintained that the primary product of journalism which is news is presented solely or in combination as text, audio, video and some interactive forms and disseminated through media platforms.

Even though there are many positive sides to this technological advancement in the media industry, yet there are still some challenges.

Firstly, there can be temporary loss of internet connection which would in turn debar the audience access to online news and other activities.

Lack of expertise and dedication in trained personnel, inability to balance speed and accuracy, poor internet facilities and other sophisticated working tools, journalists may not know how to handle.

Theoretical Framework

This study is anchored on the Technological Determinism Theory. This theory was propounded by Marshall McLuhan in 1962. It 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. This theory came into being by the desire to fathom the casual relationship between advanced media technology and the culture of the Users of the media technology.

Nwodu (2004) says that linked historical, economic and cultural changes occurring in the world to the invention and development of new technologies. This implies that whatever type of technology that is prevalent in a particular time affects the people directly or indirectly. Same as their lifestyles.

Brand and Ronald (2014) revealed that technology is responsible for shaping and changing the individual, social, economic and political landscape.

Agbanu (2013) made it clear that technology shapes how individuals in a given society think, feel, act and how a society behaves as it moves from one technological age to the other.

However, others see technology, as more neutral and claim that the way people use technology is what gives it significance. This perspective accepts technology as one of many factors that shape economic and cultural change; technological influence is ultimately determined by how much power it is given by the people and culture that uses it. This disagreement about the power of technology is at the heart of the controversy surrounding new media, digital technology and ICT (Baran 2002). When McLuhan himself postulated that technology and developments in electronic media, especially the internet would turn the world into a global village, he attracted several dissenting voices.

Today, however, anyone with the most rudimentary knowledge of ICT can attest to the truth of McLuhan postulation (Idiong,A 2017)

This went on to buttress that Technological Determinism Theory totally hinges on the fact that new technologies has a subtle way of introducing new way of life socially amongst users of the technologies while being oblivious of other influencing factors or variables.

Methodology

Research Design

The study adopted the Survey research design

The area of study was Owerri Metropolis where it is believed that there are many media outfits where journalists eke out a living.

Population of the Study

The population of this study comprised Journalists in Owerri who are registered with the Nigerian Union of Journalists (NUJ), Owerri chapter. As at the time of this study, the NUJ had two factions in Owerri. However, the population for this study was based on the Precious Nwadike-led faction, 121 registered members (NUJ Secretariat, 2024). This allowed the researcher to gather data from registered practicing Journalists that are resident in Owerri metropolis who either work in public or private media outfits

Sample size

All the 121 registered journalists across the state capital were studied and the Census Principle method was used for the study.

Sampling Technique

The purposive Sampling technique was adopted because respondents need to have a fair knowledge of the subject matter.

Research Instrument

The research instrument used for this study was the questionnaire. The data gathered from field were organized, tabulated and presented to show a meaningful presentation of data and scholarly interpretation and analysis using the simple percentage. Statistical package for social sciences (SPSS) software version was used to generate tables and chart for clarity and easy understanding.

Data presentation and Analysis of Research Questions

Data Analysis was based on 116 copies of validly filled and retrieved questionnaire. The remaining 5 copies were mutilated

Analysis of Research Questions

Table 1: Practicing journalists in Owerri are aware of new technologies

<table>
<thead>
<tr>
<th>Option</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>112</td>
<td>97%</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>Can’t say</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>116</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2024

The analysis on Table 1 reveals that 112 (97%) journalists are aware of new technologies while only 4 person opined that they are not aware of new technologies in town. It can therefore be inferred that Owerri based journalists are aware of new technologies and technological innovations.
The researcher found out that Owerri based practicing journalists were aware of technological innovations. A good number of them also have access to these new technologies. The research, observed that though Owerri has many media organizations both private and government owned but a good number of practicing journalists in Owerri have not received formal training on the use of new technologies and other technological innovations.

**Recommendations**

Based on the findings of the study the following recommendations were made:

1. Though media outfits especially private establishments claim bad business orchestrated by non-workable government policies but they should endeavor to be organizing workshops, seminars, training and conferences to help keep journalists abreast of new technologies
2. The media organizations should as a matter of necessity make available to their journalists current and state of the arts technological advanced working tools.
3. The government should make available palliates for easy acquisition/ access to new technologies and proper training in information communication technology.
4. 4. The curriculum of Institutions of Higher learning and other allied training schools should be tailored in such a way that their undergraduates, will have the opportunity to learn how to manipulate new technologies in order to be acquainted and familiar with the tools, applications and programmes before graduation.

**Discusson of Findings**

It is no longer news that technology, technological innovations and advancement have great influence on journalism practice.

In this time and era, technology plays a vital role in the gathering processing and dissemination of news stories, preparing of advertisement contents and so on. The global trend has revolutionized the media industry and every journalist is striving hard to meet up with the pace at which it is moving. This is why media practitioners and media outfits are now discarding the old system of giving out news and information thereby paving way for the new invention that has affected the operation of the media houses positively (Onyebuchi 2018). The study investigated influence of technological innovation on journalism practice amongst journalists in Owerri metropolis.a sample of 121 practicing Journalists were selected for the study based on survey strictly for journalists in media establishments (both Private and Government owned ) in Owerri,Imo State.;The Announcer Express newspaper Chapel, Correspondent Chapel, FRCN Chapel, Orient FM Chapel, Nigerian Television Authority etc (NTA) and so on.

The census principle was used to study them. 121 copies of the questionnaire were distributed but 116 copies were found useable for data analysis.

The data was analyzed at the end of the study and it was gathered that a good number of registered practicing journalists were aware of technological innovators. The study also revealed that 52.5% of journalists in Owerri have access to new technologies and have embraced it.

**Conclusion**

The researcher found out that Owerri based practicing journalists are aware of technological innovations. A good number of them also have access to these new technologies. The research, observed that though Owerri has many media organizations both private and government owned but a good number of practicing journalists in Owerri have not received formal training on the use of new technologies and other technological innovations.

**Table 2:** Owerri-based practicing journalists are trained formally in information communication technology

<table>
<thead>
<tr>
<th>Option</th>
<th>Frequency</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>No</td>
<td>80</td>
<td>69%</td>
</tr>
<tr>
<td>Can’t say</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>116</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** Field Survey 2024

The analysis on table 2 reveals that 50 (69%) journalists disagreed to this assertion. This shows that only a few percentage of journalists 6 (5%) agreed that Owerri based journalists are formally trained in information communication/technological innovations.

**Table 3:** To what extent have new technological innovation helped journalists in their reportage

<table>
<thead>
<tr>
<th>Option</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Large extent</td>
<td>27</td>
<td>24%</td>
</tr>
<tr>
<td>Moderate</td>
<td>86</td>
<td>74%</td>
</tr>
<tr>
<td>Low extent</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>Can’t say</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>116</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** Field Survey 2024

Table 3 shows that new technological innovations have helped Owerri practicing Journalists.86 (74%) have been helped moderately,27 (24%) to a large extent and 3 (2%) to a low extent.

**References**

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