



## Assessing the Integration of Emerging Technologies in Communication and Media Profession

<sup>1</sup>Shehu Abdulkadir Abdullahi, <sup>2</sup>Okara Chibugo Judith, <sup>3</sup>Moneke Chisom, <sup>4</sup>Kayode Olayemi Oluyeye, <sup>5</sup>Abika Osinachi Bright, <sup>6</sup>Emmanuel Olu Flourish

<sup>1</sup>Department of Mass Communication, Federal Polytechnic Bauchi [sabdulkadir240@gmail.com](mailto:sabdulkadir240@gmail.com)

<sup>2</sup>Department of Mass Communication, Chukwuemeka Odumegwu. Ojukwu University. [chibugookara@gmail.com](mailto:chibugookara@gmail.com)

<sup>3</sup>Department of Mass Communication, Federal Polytechnic Oke, [monekechisom4@gmail.com](mailto:monekechisom4@gmail.com)

<sup>4</sup>Department of Media Studies, Ajayi Crowther University, [olaoluyeye@gmail.com](mailto:olaoluyeye@gmail.com)

<sup>5</sup>Department of Industrial Engineering, Louisiana Tech University, [abikab2022@gmail.com](mailto:abikab2022@gmail.com)

<sup>6</sup>Department of Electrical and Electronic Engineering, University of Ibadan, [Emmanuel.olufourish@gmail.com](mailto:Emmanuel.olufourish@gmail.com)

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### ABSTRACT

This study assesses the integration of cutting-edge emerging technologies in communication and media.

The creation of content through technical developments has transformed communication. Practice, redefining and harnessing the power of Artificial Intelligence, Blockchain, Virtual and Augmented Reality, Social Media Analytics, Drone communication, Sensor Journalism, Data Journalism, Live Streaming, and Natural Language Processing Techniques. The emergence of modern technologies has advanced the use of communication in our daily lives. The blend of technology has turned communication more engaging, interactive, and easy to us

Emerging technologies such as Drone technology communication have minimized the risk of human journalists in hostile environments, reducing the danger of loss of life and injuries. The adoption of emerging technologies has led a strong integration of the audience with the advanced communication process and allowed media to better inform the general audience.

The study employed a quantitative survey method to assess the integration of emerging technologies in communication among media professionals. Communication has been benefited from the tremendous growth of emerging technologies. This research showcases innovation in communication that has successfully integrated these technologies and transformed the communication landscape. The study's findings offer insights into the opportunities and challenges of technology adoption in communication.

**Keywords:** Emerging technologies, Drone Communication, Technology Adoption and Media Innovation.

### Introduction

The impact of emerging technologies on communication patterns has been quite distinct. From the instruments and methods of news collection to the process itself, it has changed communication practices. Reporters now have to cover stories in real-time. It has advanced to a new level today when news-gathering methods such as Drone Communication, Emerging Technologies, Technology Adoption, and Media Innovation collect information without physically visiting the location.

Various social media platforms and other online networking sites, including Facebook, Twitter, Instagram, YouTube, Google Alerts, news feeds, and others, have been utilized as news collecting tools by communication professionals. Reports are dispatched directly from the scene of events in the field, negating the need for a physical newsroom. The newest and greatest techniques for attracting audiences and promoting interactive and captivating content are provided by the rapidly developing technology because of its ease of use and high level of involvement..

New technologies have altered our world today. Immediacy, speed, and the real-time element have completely altered the communication landscape. Although virtual newsrooms have replaced physical newsrooms, people's news consumption has changed from the days when they waited for their morning newspapers and turned on their TVs and radios at certain times. Nowadays, whether seeking news or other information at any time, consumers use a variety of online media channels.

To collect, create, report, and distribute news and create timely, dynamic, and captivating content, communication professionals need to gain sufficient understanding of the appropriate and pertinent tools. Additionally, the confluence of many media formats (text, audio, visual, etc.) and new technologies has given digital journalism's growth and development a new dimension. Finding reliable and pertinent sources, developing story ideas, expanding their networking and improving their professional practices can all be facilitated by knowing web tools and mobile apps.

### ***Statement of the Problem***

Emerging technologies are causing a rapid transition in the media landscape. These technological advancements are changing the creation, dissemination, and consumption of communication and information, which presents both opportunities and difficulties for journalism and communication. Traditional media outlets face declining revenues and audience trust, while new platforms democratize content creation but often lack accountability. The proliferation of misinformation and disinformation exacerbates these challenges, complicating the public's ability to discern credible information. Additionally, the speed at which news is disseminated has outpaced ethical guidelines, raising concerns about journalistic integrity and the quality of information shared. As these technologies evolve, there is a pressing need to understand their impact on media practices, audience engagement, and the ethical implications of their use. This study seeks to explore how emerging technologies are transforming communication and journalism, the implications for media literacy among audiences, and the potential pathways for fostering a more informed public in this dynamic landscape. According to Lauraintine (2011), emerging technologies include digital gadgets that communicate information via hardware or software. These devices are essential in nearly every aspect of production and serve as a form of control for the industrial revolution.

### **Objectives of the Study**

- 1 What is your take on the use of emerging technologies to facilitate and enhance the processes of news production
- 2 To what extent has the use of emerging technologies improve news processing in terms of news immediacy?
- 3 Which challenges do modern technologies pose for the communication sector?

### **Literature Review**

Numerous studies have been conducted to evaluate different viewpoints on new technology in relation to communication. The studies highlight how the media and communication landscape has changed at a never-before-seen pace due to the most recent advancements in developing technologies, which are driven by the internet. The techniques for determining what material is newsworthy have been enhanced by developing technologies. A glimpse of events occurring globally from the perspective of those who are present is provided via feeds from social media platforms like Facebook and Twitter, and blogs and citizen news sources offer analytical insights from the field more quickly than print or television can. According to ITU (2009), communication is simply developing and not yet dead, and subsequent communication must also reinvent itself.

She researched how a media house function has been impacted by emerging social media platforms including Facebook, MySpace, LinkedIn, and Twitter. The study asked a sample of chief editors from around the globe how they use social media in their news production. According to five of the six editors polled, the characteristic of modern technology that aided them the most in getting news was speed or immediacy. The primary functions of social media networks within their newsrooms were breaking news, increasing traffic to the company's news web page, and branding and visibility on social media. The study's primary issues of concern were accuracy, the necessity for verification, and losing control over the data. According to Bosah (2018), the emergence of new technologies has a substantial impact on the structures, roles, and practices of the media and communication industry in Nigeria.

Nsude (2004: 105) suggested that media organizations invest in new technological devices to support and grow the field of ICT complaint reporting. According to Catal (2017) 6, education about new technologies on the internet should be dispersed throughout society. While the advancement of digital communication technology has given people access to new features like multimedia, interaction, and connectivity, it has also opened up new avenues for journalism by establishing new frameworks for the media sector. According to the studies, technological developments have changed the media in one way or another, and in order to stay relevant and improve their employability, journalists must improve their digital technology abilities. The research also emphasized the new opportunities and difficulties that come with integrating new technology into journalism.

### **Theoretical Framework**

#### **Technological Determinism Theory**

Marshal McLuhan introduced the thesis of technological determinism in 2004. The fundamental tenet of the theory is the evolution of human communication. McLuhan believes that the way we communicate with each other shapes the culture we live in. There are a few things to think about to comprehend this. First, innovations in communication technology foster cultural transformation; second, they alter communication methods and influence human existence; and third, they influence communication instruments. A subset of technological determinism, media determinism is a sociological and philosophical viewpoint that holds that the ability of the media to influence society is the cause of change.

## METHODOLOGY

The study design is qualitative in nature. Qualitative studies are less interested in statistical measurements; rather, they use an inductive approach by which data are relevant to the topic collected and grouped into appropriate and meaningful categories. The researcher will employ a study survey method to collect pertinent data from research participants. According to Wimmer and Dominick (2003), a population is a class or group of variables, phenomena, concepts, or subjects. According to Dermers and Nicholas (2005), the general population is a collection of components you intend to generalize. Media Trust Limited's staff will make up this study's population. Because they are in a better position and have a greater probability of providing the data required for this investigation. The staff will be drawn from the administrative department which is made up of seventeen(17) staff, programs department is made up of fifteen(15) staff, current affairs department is made up of fifteen(15) staff, sports department is made of ten(10) staff, business day department is made up of ten(10) staff, engineering department is made up of eighteen(18) staff, and accounting/marketing department is made up of (15) staff therefore, the population of the study will be one hundred(100), in respect to the records from Media Trust Limited Human Resources Department. The sample size is a small group of elements or subjects drawn from definite procedure of specific population. Since the study is the entire of Media Trust Limited, size of the population is large, the sample responses of the study area of 100. The sample for this research will be chosen using the non-probability sampling technique. This method collects samples in a way that does not provide each person with an equal probability of being chosen. In Ohaja's ((2003), A purposive sample is chosen with the knowledge that it is not representative of the general population. Therefore, for this study purposive sampling technique will be adopted. The instrument for data collection is survey and it used to obtain information about the research topic from reliable management personnel. The information that the researcher gathered through the use of survey analyzed qualitatively and presented in a chart for better understanding.

## DATA PRESENTATION AND ANALYSIS

This study's primary goal is to identify how emerging technologies are used in journalism and communication. This displays the outcome of the survey. Additionally, it discusses the data analysis in light of the study's goal.

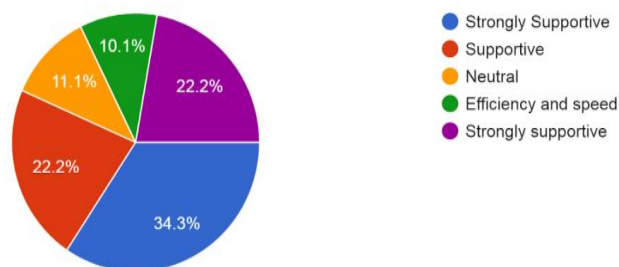
### Research Questions

To properly how emerging technologies transform communication and journalism. The researcher employs survey methodology to gather date using questionnaire to get response from the respondents. We sample the opinions of 100 (one hundred) response valid for this research.

### RQ1:

What is your take on the use of emerging technologies to facilitate and enhances the processes of news production

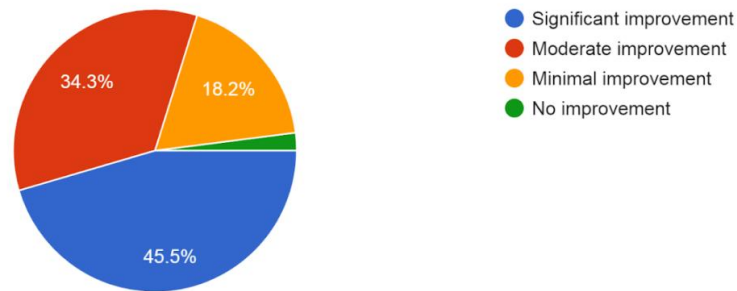
99 responses



Base on the information on the chart 34.3% strongly support the use of emerging technology to facilitate news, while 22.2% chose supportive using emerging technology to simplify the process of news production. 11.1% and 10.1% share similar view on the question. Putting all responses together, one can easily draw a conclusion that the use emerging technologies has tremendous advantage in terms of enhancing and facilitating the process of news production. This is because information and communication technologies serve as extra hands applied to the process of news production to simplify the process and also save one from the tedious and stressful pattern used in the past.

### To what extent has the use of emerging technologies improve news processing in term of news immediacy

99 responses

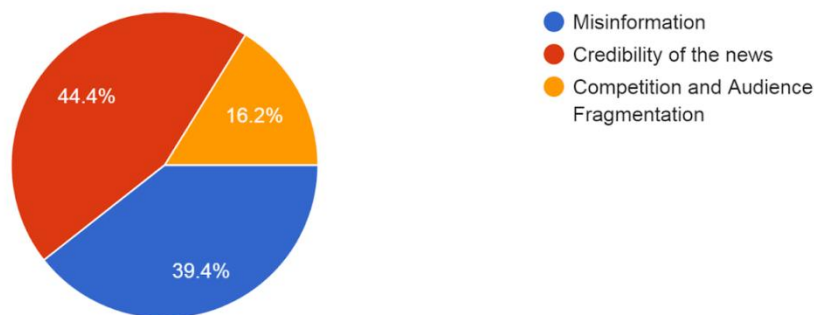


On the question on the immediacy of emerging technology on news 45.5% says it improved the process of news immediacy, 34.3% says the improvement is moderate, 18.2% says minimal improvement. Based on the findings obtained through the survey conducted for this research, the use of emerging technologies has greatly improved news processing and immediacy of the report anywhere.

To obtain a competitive edge, Gester and Zimmermann (2009) contend that the broadcast business is implementing developing technologies, that are delivering efficiencies in all functional wings, including production, editorial, and marketing. But this also resulted in "Immediacy." When it comes to digesting news using modern technology, immediacy implies that a journalist can cover a story in real-time and simultaneously share it with multiple websites and several platforms in a short amount of time.

### What are the challenges posed by these new emerging technologies to the communication industry

99 responses



Based on the findings obtained through the survey conducted for this research while asking of the challenges pose by emerging technologies to communication industries. 39.4% says it promote misinformation, 44.4% says the credibility of the news is not reliable as online users can create and share misleading information, 16.2% says online users can generate traffic on the social media by

### Summary

Emerging technologies are significantly transforming the media landscape, influencing communication and journalism in profound ways. Innovations such as artificial intelligence, social media, blockchain, and augmented reality are reshaping how information is created, shared, and consumed. While these advancements offer opportunities for democratizing content and enhancing engagement, they also present challenges, including the rise of misinformation and declining trust in traditional media. As traditional outlets struggle with revenue and credibility, new platforms often lack the accountability necessary for responsible journalism. This evolving environment necessitates a deeper knowledge and comprehension of implications of these technologies on media practices, audience behavior, and the need for improved media literacy.

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## Conclusion

The transformation of the media landscape through emerging technologies presents a complex interplay of opportunities and challenges for communication and journalism. As innovations like artificial intelligence, social media, blockchain, and augmented reality reshape how information is disseminated, the need for responsible media practices becomes increasingly critical. The decline of traditional media, coupled with the rise of unregulated platforms, underscores the urgent requirement for accountability and ethical standards in journalism. Furthermore, the proliferation of misinformation complicates the public's ability to discern credible information, highlighting the importance of enhancing media literacy among audiences.

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## Recommendation

Based on the research conducted, the research recommends the following measures to be taken so as to encourage and increase the application of new emerging technologies in communication and Journalism practice in Nigeria.

- Media houses should acquire new or modern emerging technologies and training for their staff in using new equipment.
- Media organizations should as well keep abreast of trends and advancements in media emerging technologies, to acquire and incorporate them in their production, in order not to lose audience to other stations that deliver top-notch media content.
- More emerging technologies facilities should be provided in media houses to improve the effectiveness of news gathering and processing activities.
- Government should help to improve our communication system to meet the challenges of the 21<sup>st</sup> century of new information and communication technology workers and media organizations.

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