



The Place of Artificial Intelligence in Journalism Practice: Perception of Practicing Journalists in Anambra State

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Abstract

Journalism practice has witnessed eras and paradigm shifts as far back as humanity has existed, and these eras are characterized by changes in journalism practice and landscape. The integration of Artificial Intelligence (AI) into journalism practice is relatively new in Nigeria, particularly in Anambra State, where technological advancements seem to be growing. Thus, the current study investigated the place of artificial intelligence in journalism practice among journalists in Anambra State. The study was grounded in Diffusion of Innovation Theory and Technological Determinism Theory. The study adopted the mixed methods research design integrating both survey and in-depth interview. The study adopted census sampling technique in selecting all 265 registered practicing journalists in Anambra State. Both descriptive statistics and thematic analysis were used to analyse the quantitative and qualitative data collected for the study respectively. The study found that journalists in the state possess substantial knowledge about AI and its application in journalism. The study also found that hindrance to AI integration in journalism include resistance to new technology, lack of requisite ICT knowledge and lack of finance. The study concluded that despite significant knowledge about AI's potential for enhancing news production, fact-checking, and personalized content delivery by journalists, barriers such as financial constraints, technological resistance, and inadequate ICT skills hinder its full adoption. The study thus recommends among others that media houses across Nigeria, with guidance from the National Broadcasting Commission, should implement policies that support the gradual shift toward technologically driven broadcasting.

Keywords: Artificial intelligence (AI), journalism, journalist, journalism practice, Nigerian Union of Journalist (NUJ)

Introduction

Journalism practice has witnessed eras and paradigm shifts as far back as humanity has existed, and these eras are characterized by changes in journalism practice and landscape. Ebeze et al., (2018) described different eras in journalism practice as a move from the

Gutenberg era to the Zuckerberg era- that is the era characterized by the development of language, writing and printing, and the multiplication of written words. The movement from Gutenberg era to the Zuckerberg era primarily set the stage for what followed, as man's efforts to bring in another dimension of development in the communication world through print and other similar devices (Ebeze, et al., 2018). It is on the progress of the eras that the adoption and use of Artificial Intelligence for journalism practice emerged.

One of the most recent developments in the practice of journalism is the integration of a higher form of Information Communication Technology termed Artificial Intelligence. This newest innovation is described as the simulation of human intelligence in machines that are meant to be programmed to think and perform like a human being. Such tasks that humans perform that are expected of Artificial Intelligence include learning, reasoning, problem-solving, perception, and language comprehension (Rekdal & Sawtell-Rickson, 2024). While the developed world has gone far ahead in the use of Artificial Intelligence for journalism practice, there seem to be slow integration and adoption of Artificial Intelligence in the developing world journalism practice, Nigeria inclusive (Oyedeji & Uthman, 2024).

Artificial Intelligence has increasingly been integrated into journalism, streamlining processes, and enhancing content production. Automation tools like the Associated Press's Wordsmith have been used to generate news articles, especially for financial reports and sports summaries (Graefe, 2016). AI also supports data analysis, enabling journalists to uncover insights from vast datasets, aiding investigative reporting (Diakopoulos, 2019). Tools like Natural Language Processing (NLP) help filter and verify news stories, combating misinformation and enhancing fact-checking efforts (Linden, 2017). While Artificial Intelligence tools have improved efficiency, concerns about job displacement and ethical issues in editorial decisions remain at the forefront of the discussion (Brennen et al., 2018). In the field of journalism, artificial intelligence has begun to play a major role, especially in developed economies. Through Artificial Intelligence, software stories are produced automatically by computers rather than human reporters. These programmes interpret, organize and present data in human readable forms. Artificial intelligence is formulaic in nature and applies to stories which are based on statistics and numerical figures (Okiyi & Nsude, 2020). It has innovated and changed how media work is carried out by staff. Robots

are trained through development of algorithms which they interpret and write faster than humans and produce scores of news stories simultaneously within few seconds. They fast track journalists' reporting, since robots can import data from various sources, recognize trends and patterns, and put Natural Language Processing into context which help to construct sophisticated sentences. Nwanyanwu and Nnamdi (2021) posit that Artificial intelligence (AI) is changing present day journalism. Automated news writing and distribution, without human supervision, is already a reality. In fact, AI has changed the way journalists interact with the world outside the newsroom. It enables journalists to analyze data from multiple sources.

Nonetheless, it must be observed that mere availability of infrastructure and access to Artificial Intelligence would not necessarily lead to full adoption of such Artificial Intelligence resources. Adoption of social artifacts is a complex process that is implicated in an intricate web of psychological and sociological variables that may advance or undermine adoption (Alshahrani et al., 2024). Thus, the place of Artificial Intelligence in journalism especially in a country such as Nigeria deserves a research attention in the present journalism terrain, hence this study.

Statement of the Problem

The integration of Artificial Intelligence (AI) into journalism practice is relatively new in Nigeria, particularly in Anambra State, where technological advancements in media are still evolving. The rapid global integration of Artificial Intelligence (AI) in various industries has highlighted its potential to transform journalism by enhancing efficiency, accuracy, and innovation in news production and distribution. Despite these promising advancements, there is limited information on the extent to which journalists in Anambra State are aware of and perceive AI in their professional practice.

Understanding journalists' perceptions and levels of awareness is essential for gauging their readiness to engage with AI technologies in journalism. This insight is crucial as Nigeria strives to align with global technological trends, where informed and prepared media professionals can leverage AI for better reporting and news dissemination.

Given these circumstances, understanding how journalists in Anambra State perceive Artificial Intelligence integration in journalism practice becomes crucial. Their perceptions, possibly shaped by infrastructural deficits, financial constraints, and limited exposure to

Artificial Intelligence technologies, could greatly influence the future trajectory of Artificial Intelligence adoption in the state's media industry. This is particularly concerning as other developing nations have already embraced Artificial Intelligence to improve the efficiency and quality of journalism. Therefore, this study seeks to explore the perceptions of practicing journalists in Anambra State regarding the role and integration of Artificial Intelligence in their profession, identifying the barriers and opportunities that exist in adopting these technologies for enhanced journalism practice in the state.

Objectives of the Study

1. To ascertain the proportion of journalist knowledge in the use of artificial intelligence in Anambra State.
2. To determine the possible factors negating the use of Artificial Intelligence among practicing journalists in Anambra State.
3. To find out the level of awareness of ethical issues in the use of Artificial Intelligence for journalism practice among practicing journalists in Anambra State.

Literature Review

Understanding Artificial Intelligence

Artificial Intelligence is one of the most recent innovations in the world of sciences and computer science. According to Rekdal and Sawtell-Rickson (2024), it is a wide branch of computer science that is concerned with building smart machines that has the potential of undertaking tasks and functions that normally require human intelligence. Schroer (2024) explained that AI is a branch of computer science, that emphasizes the design of intelligent machines that react and work like humans. It enables machines to adjust to new inputs, learn from experience, and perform like humans. Speech recognition and learning are some of the examples of machines designed with artificial intelligence. Artificial Intelligence, a 21st century innovation has had a disruptive effect in all spheres of human endeavors such as Health, Education, Agriculture, Sports, Transportation and others. For context, Artificial Intelligence is the simulation of human intelligence through the use of machines like the computer systems to achieve an optimum results and effect (Burns et al., 2023). Artificial Intelligence is based on the working principle of feeding off large amount of labeled

training data, analyzing the data to establish relationships and patterns and using the correlated data to make possible predictions about the future.

Bellieni (2023) explained Artificial Intelligence as machine or computer systems that can perform tasks commonly associated with human cognitive functions such as interpreting speech, playing games and identifying patterns. Typically, Artificial Intelligence systems learn how to do so by processing massive amounts of data and looking for patterns to model in their own decision-making. In many cases, humans will supervise an Artificial Intelligence's learning process, reinforcing good decisions, and discouraging bad ones. But some Artificial Intelligence systems are designed to learn without supervision; for instance, by playing a game over and over until they eventually figure out the rules and how to win. For Duggal (2023), explained Artificial Intelligence as a factor that catalyzes growth in the sense that it has the potential to introduce new sources of growth and change the means in which work is done in any industry. It is further predicted that due to the finesse of Artificial Intelligence, that is could potentially contribute \$15.7 trillion to the global economy by the years 2035.

According to European Parliament Report (2023), Artificial Intelligence provides technical systems to perceive their environment, deal with what they perceive, solve problems and act to achieve a specific goal. The computer receives data - already prepared or gathered through its own sensors such as a camera - processes it and responds. Artificial Intelligence systems can adapt their behavior to a certain degree by analyzing the effects of previous actions and working autonomously.

Application of Artificial Intelligence in Journalism Practice

Technology has played and is still playing vital role in the way journalism is practiced and has become one of the most influential journalism resources in the 21st century (Nwanyanwu & Nnamdi, 2021). According to Vaglis and Bratsas (2017), dramatic change in the field of journalism is connected directly to advanced technology tools. Therefore, the use of Artificial Intelligence (AI) technologies has become an indispensable part of the field of journalism that has led to radical transformations (Galily, 2018). Li et al., (2018) note

that from the mid-2000s to the 2010s, machine learning algorithms became integral to journalism. These algorithms could sift through large datasets, identify patterns, and even predict trends, proving particularly useful for investigative journalism. This era also saw AI tools being used to analyze trends and public opinion on social media. Journalists began to rely on these tools for insights into public sentiment, which helped uncover emerging stories and understand audience reactions.

Amponsah and Atanashie (2024) argues that the advent of Artificial Intelligence (AI) in journalism has brought about a paradigm shift, particularly in enhancing efficiency and productivity. AI's role in automating routine tasks such as data collection and sorting through large volumes of information is transformative. By taking over these time-consuming tasks, AI allows journalists to devote more time and energy to the nuanced aspects of storytelling. This shift is not merely a matter of convenience but a significant enhancement in the quality of journalism. Journalists are now able to engage more deeply with complex stories, leveraging their human insight, empathy, and investigative skills in ways that were not possible before. Especially in fast-paced environments like breaking news or live reporting, AI tools are invaluable, providing instant data analysis and content suggestions. This capability greatly accelerates the delivery of news, ensuring that audiences receive timely and relevant information.

Lutz (2019) argues that this historical context underscores the dynamic nature of AI in journalism, illustrating how AI has transitioned from a supportive tool to a central component in modern journalism and highlights the ongoing dialogue between technological innovation and journalistic ethics. No wonder the advancement of AI technologies, especially deep learning, has further enhanced journalistic capabilities. Sophisticated sentiment analysis, real-time reporting assistance, and the generation of complex articles have become possible. Concurrently, AI tools have been increasingly used for fact-checking, helping combat misinformation and deep-fakes (Wang, 2021).

Waleed and Mohamed (2019) note that in recent times, readers can read articles written entirely by a journalist who does not have a human form; in this context, the Washington Post has developed its own technology, an artificial intelligence called "Heliograp Beets".

However, what is most interesting, are the perceived advantage associated with the use of AI for journalism. It is argued that AI has ushered in a new era of advanced data analysis and reporting. It has the remarkable ability to process and analyze large datasets, a feature that has been a game-changer in fields like election reporting, financial markets, and sports journalism. AI algorithms can quickly interpret vast and complex data sets, revealing trends and patterns that might be invisible or difficult to discern for the human eye. This capability not only enriches journalistic content but also brings an unprecedented depth to investigative journalism. Reporters can now uncover stories hidden within layers of data, offering their audiences insights and perspectives that are backed by a robust analysis of information (Nueremaldina et al., 2021).

Application of Artificial Intelligence in Journalism Practice: Challenges

From the literature looked at so far, the researcher has been able to establish the importance of the transition from analogue to Artificial Intelligence driven journalism, hence, from the prevailing views there is no gainsaying that the migration is a crucial one. However, irrespective of these gains there are in the migration, there seems to be several cogs in the wheels of great number of journalists in the country towards the application of AI. This may largely explain why Arinze (2015) argues that “even AI Journalism has its great number of advantages, there seems to be several factors that challenge the migration, especially in Africa and Nigeria where these factors are reoccurring on daily bases.

Unfortunately, the technology is there, but it is not yet widespread, in Nigeria for instance where everybody can go into journalism the situation is worse because even the media professionals themselves lack the awareness of Artificial Intelligence driven journalism. It is not as widespread as it is with the analogue technology where we are used to, and which has been around for decades, hence the lack of proper awareness about Artificial Intelligence driven journalism has remained a big challenge to the digitization process. In this regard, Kombol (2008) stated that these professionals are content with the analogue broadcasting because they are ignorant of the workings and benefits of Artificial Intelligence driven journalism. The import of the above is that the process of Artificial Intelligence driven journalism has remained slow to a great extent as a result of awareness or knowledge about

the process. This is so because people who do not understand the value of this process might not key in quick to the realization of the process.

Empirical Review

The empirical review of the place of artificial intelligence (AI) in journalism practice reveals a growing body of research that explores journalists' perceptions, challenges, and the transformative potential of AI in the media landscape. In a study, Okiyi and Nsude (2020) examined the adoption of AI in journalism in Nigeria, highlighting its necessity for newsroom competitiveness and employment creation. However, their study identified various structural, technical, and governance-related challenges, compounded by a lack of foundational knowledge and practice in AI. This aligns with the findings of Guanah (2020), who investigated journalists' perceptions in Benin City, Nigeria, noting that while AI-driven automated journalism represents a technological advancement, many practitioners remain entrenched in manual reporting methods. Similarly, the study by Udoh et al., (2022) on awareness among journalists in Ebonyi State revealed widespread knowledge of AI tools for news production but underscored the need for training and skill acquisition to optimize these technologies. This finding corresponds with Nwanyanwu and Nnamdi (2021), who emphasized that AI is already automating newsroom processes and enhancing journalistic practices, such as fact-checking and personalized news experiences. Despite these advantages, the lack of infrastructure, financial resources, and adequate training remains significant barriers to AI adoption in Nigeria, a challenge also noted by Santos and Ceron (2021). Their analysis of AI subfields, including machine learning and natural language processing, showed limited implementation in journalism due to financial dependencies on tech giants like Google, restricting broader industry adoption.

Udoh et al. (2022) further reinforced these findings by exploring journalists' skepticism about the reliability of AI-generated news, despite their familiarity with the technology. This skepticism is mirrored in international contexts, as demonstrated by Sanchez (2022), who examined the ethical implications of AI in journalism. His interviews with media professionals across the United States, United Kingdom, and Europe highlighted AI's potential to enhance productivity but stressed the need for a mindset shift and

prioritization of training due to the observed knowledge gaps. Comparably, Makwenbi (2023) identified both utopian and dystopian views among South African journalists regarding AI's utility in community media, where efficiency gains are juxtaposed with fears of job losses and credibility erosion. Jana (2023) provided further evidence of mixed perceptions by studying Aljazeera Network journalists, who acknowledged AI's reduced bias compared to humans but expressed concerns about its compliance with journalism ethics and its potential to increase unemployment. This duality of perception resonates with the findings of Moravec et al. (2024), who analyzed public attitudes toward AI in journalism in the Czech Republic. Their study revealed that demographic factors, including gender, age, and education, influence the ability to differentiate between AI-generated and human-created content, with younger respondents and higher education levels associated with better discernment.

Collectively, these empirical studies underscore a consensus on AI's transformative capacity in journalism while highlighting persistent challenges related to training, ethical implications, technological readiness, and infrastructure. The synthesis of these findings provides a robust foundation for examining the perceptions of practicing journalists in Anambra State, offering insights into how AI adoption may shape the future of journalism in Nigeria and beyond.

Theoretical Framework

This study is grounded in the Diffusion of Innovation Theory and Technological Determinism Theory, both of which provide a comprehensive understanding of technology adoption and its impact on journalism. The Diffusion of Innovation Theory, popularized by Everett Rogers in 1962, explains how innovations are communicated and adopted within a social system. It identifies key elements—innovation, communication channels, time, and social system—that influence adoption rates (Baran, 2010). The theory categorizes adopters into five groups: innovators, early adopters, early majority, late majority, and laggards. In the context of this study, Artificial Intelligence (AI) represents the innovation that journalism practitioners are expected to adopt. Journalists in Anambra State may exhibit varying levels of readiness, from adventurous innovators eager to explore AI tools

to skeptical laggards resistant to change. This theory provides a framework for understanding the patterns and challenges of AI adoption among journalists, predicting that acceptance depends on perceived advantages, effective communication strategies, and supportive societal structures.

Complementing this, the Technological Determinism Theory, introduced by Thorstein Veblen in 1929, posits that technological advancements shape human behavior and societal organization (Leonard, 2008). According to this theory, AI adoption will inevitably influence journalism practices, reshaping how information is gathered, processed, and disseminated. The theory implies that AI's integration will transform journalistic roles, workflows, and the ethical landscape of news reporting. Critics, however, argue that technology alone does not drive societal change; social contexts and human agency also play significant roles (McCarthy, 2007). Despite this critique, the theory's core assertion—that technology exerts transformative power—aligns with the anticipated impact of AI on journalism in Nigeria.

Together, these theories provide a robust framework for examining journalists' perceptions of AI in practice. The Diffusion of Innovation Theory helps explain varying adoption rates and social influences, while Technological Determinism highlights AI's transformative potential. By integrating these perspectives, the study aims to reveal not only the adoption patterns but also the profound technological shifts shaping contemporary journalism in Anambra State.

Methods

The study was conducted in Anambra State, Southeast Nigeria. The research adopted a mixed-method research design, integrating both survey (quantitative) and in-depth interview (qualitative) approaches. The population of the study consisted of 265 registered practicing journalists in Anambra State. Given the manageable size of the population, the researcher employed a census approach, involving all 265 members. For the in-depth interviews, purposive sampling was used to select five journalists, chosen based on their positions and experience to ensure they could provide insightful responses. The

interviewees included journalists from print and broadcast media across notable chapels, including ABS, NTA Onitsha, Nation Light Chapel, and Unizik FM.

Data collection instruments included a questionnaire with close-ended questions for the survey and an interview guide for the in-depth interviews. Data analysis employed both quantitative and qualitative methods. Quantitative data was analyzed using descriptive statistics with the aid of SPSS, while qualitative data was processed using thematic analysis to identify key themes from narrative responses. This dual approach enabled a comprehensive synthesis of findings, enhancing the depth and scope of the research conclusions.

Data Presentation and Analysis

Journalists Knowledge of AI

Table 1: Respondents knowledge about Artificial Intelligence

Variable	Frequency	Percentage
Yes	231	92.4%
No	19	7.6%
Total	250	100%

Source: Field Survey 2024

Data in table 1 shows that 92.4% of the respondents agreed that they have knowledge and understand what Artificial Intelligence entails while the remaining 7.6% of the respondents agreed that they do not know about Artificial Intelligence. Data from this table indicates that a very large majority of the respondents have a good knowledge of Artificial Intelligence. This result is in line with the responses of some IDI participants. An IDI participant opined that:

"Yes. I know about Artificial Intelligence (Broadcasting Journalist, ABS).

Another participant also opined that

I am very much aware about Artificial Intelligence for journalism (Editor-in-chief, ABS).

Another respondents further explained that:

I have a strong understanding of how AI is useful in journalism. Yes, AI encompasses a range of tools and techniques such as machine learning, natural language processing and computer vision which can be applied in the field of journalism (Photojournalist from Unizik FM).

Another respondent further explained that:

I would say to a reasonable extent I have a strong understanding of AI and its application in various field including journalism (Reporter, Nation Light Chapel).

The responses from the in-depth interview participants showed that there is a high level of knowledge about AI usage in journalism among practicing journalists in Anambra State.

Table 2: Do you know that AI is applied to journalism practice

Variable	Frequency	Percentage
Yes	230	92%
No	20	8%
Total	250	100%

Source: Field Survey 2024

Data in table 2 shows that 92% of the respondents agreed that they know that AI is applied to the program, while the remaining 8% of the respondents agreed that they do not know that AI is applied to journalism practice. This data indicates that majority of the respondents agreed that they know that AI is applied to journalism practice. This result supports the response on an IDI respondent who opined that:

AI is used in journalism either as a tool for reporting, research, presentation of data and data analysis in reports (Broadcasting Journalist, ABS).

Another respondent opined that:

For AI use in journalism, I possess knowledge about various AI application in journalism, such as automated creation, data analysis for story insight and audience engagement (Reporter, Nation Light Chapel).

These responses implies that there are several ways AI is used among practicing journalists in Anambra State.

Factors Negating Use of AI for Journalism Practice

Table 3: Respondents' Knowledge of Factors Negating the Adoption of AI for Journalism Practice

Variable	Frequency	Percentage
Yes	240	95%
No	10	5%
Total	250	100%

Source: Field Survey, 2024

Data in table 3 shows that 95% of the respondents agreed that they know of different factors negating the adoption of AI for journalism practice in Nigeria while the remaining 5% of the respondents said that they don't have the knowledge of the factors. This data indicates that majority of the respondents have knowledge of the different factors negating the adoption of AI for journalism practice.

Table 4: Respondents' Views on whether Resistance to New Technology is a Factor Negating the Adoption of AI for Journalism Practice

Variable	Frequency	Percentage
Yes	200	83.3%
No	40	16.7%
Total	240	100%

Source: Field Survey, 2024

Data in table 4 shows that 83.3% of the respondents agreed that resistance to new technology is a factor negating the adoption of AI for journalism practice while the remaining 16.7% of the respondents disagreed that resistance to new technologies is a

factor negating the adoption of AI for journalism practice. This data indicates that majority of the respondent agreed that resistance to new technologies is a factor negating the use of AI for journalism practice. This result supports the response of an IDI participant who explained that:

Resistance to adopting AI in journalism often arises from concerns about job displacement, skepticism about AI's effectiveness, a preference for established practices, and privacy issues (Photojournalist, Unizik FM).

Another respondent explained that:

Despite the fact that AI have proven useful in journalistic practice, till date, it's not every journalist that feels comfortable integrating AI technologies into traditional journalistic practices. Some of us are still averse to the use of new innovations and would rather stick to the old order (Broadcasting Journalist, NTA Onitsha).

These responses implies that there are resistances to the adoption of AI among practicing journalists in media houses.

Table 5: Respondents' Views on Whether Lack of Requisite ICT Knowledge is a Factor Negating the Adoption of AI for Journalism Practice

Variable	Frequency	Percentage
Yes	240	100%
No	-	-
Total	240	100%

Source: Field Survey, 2024

Data in table 5 shows that all the respondents 100% agreed that lack of requisite ICT knowledge is a factor negating the use of AI for journalism practice among journalists. This data indicates that the reason AI has not been overly adopted for journalism practice is because of lack of knowledge to navigate AI. This result aligns with response of an IDI participant who explained that:

The unavailability of on-the job training is an issue that can easily affect the adoption of AI in journalism (Broadcasting Journalist, ABS)

Another respondent stated that:

Human capacity (i.e., poor knowledge of ICT) is among the factors that can mitigate against the full-scale adoption of AI for journalism practice (Editor-in-chief, ABS).

Another IDI participant further explained that:

Lack of expertise in ICT can result in difficulties with implementing AI tools, managing digital workflows, and utilizing online resources efficiently.

These responses implies that shortage or lack of knowledge in ICT hinders the adoption of AI in journalism practice.

Table 6: Respondents' Views on Whether Finance to Install AI Resources Negates Use of AI for Journalism

Variable	Frequency	Percentage
Yes	210	87.5%
No	30	12.5%
Total	240	100%

Source: Field Survey, 2024

Data in table 6 shows that 87.5% of the respondents agreed that finance to acquire and install AI resources for journalism is one of the factors that negates the use of AI for journalism practice. In contrast, 12.5% of the respondents did not consider finance as a factor that negates the use of AI for journalism practice. The import of this data is that majority of the respondents agreed that finance is a major constraint of the use of AI for journalism. This result supports the response of an IDI respondent who explained that:

Unavailability of technological software and gadget can impact AI adoption. So many newsrooms in Nigeria today still function as twentieth century newsroom. They are even unaware of AI technologies talk less of adopting them (Broadcasting Journalist, ABS).

Another respondent also stated that:

Financial constraints can limit access to necessary technology and training, affecting the ability to integrate AI effectively into journalistic practices (Photojournalist, Unizik FM).

These responses critically point to the fact that unavailability of technological software as well as financial constraints that limit that access to necessary technologies negate the use of AI for journalism practice.

Ethical Issues in the Use of AI for Journalism Practice

Table 7: Knowledge of Ethical issues in the use of AI for Journalism Practice

Variable	Frequency	Percentage
Yes	197	78.8%
No	53	21.2%
Total	250	100%

Source: Field Survey, 2024

Data in table 7 shows that 78.8% of the respondents agreed that they have knowledge of ethical issues in the use of AI for journalism practice while the remaining 21.2% of the respondents said that they do not have knowledge of ethical issues in the use of journalism practice. The implication of this data is that majority of the respondents are knowledgeable of ethical issues in the use of AI for journalism.

Table 8: If respondent know about Copyright Ethical Concerns

Variable	Frequency	Percentage
Yes	197	100%
No	-	-
Total	197	100%

Source: Field Survey, 2024

Data in table 8 shows that all the respondents 100% agreed that they know about copyright concerns as an issue in ethical use of AI for journalism practice. This data

indicates that majority of the respondents agreed that they are very knowledgeable of copyright in the use of AI for journalism practice. This result supports the response of an IDI participant who explained that:

There is the Intellectual Property Rights question. Who owns the copyright to content generated by AI? There is also the Privacy and Data Protection. I'm not knowledgeable in-service violation, but I believe that it is related to publishers' concern that their news contents are used to build and train new AI tools and, in most cases, making money in deals with tech companies (Broadcasting Journalist, ABS).

Another respondent explained that:

The issue of copyright is glaring because some researchers claim that what AI does is to sample other works and then, pick one or two things and give you. Now, look at it, we have AI chat, we have Chatgpt, Chatbot and we have XAI and I'm sure there are other AI applications, but these are the ones I'm familiar with. Now, if you decide to ask all these applications to write a story about a government policy, for instance, the state government agricultural development program, you will discover that they will be giving you the same thing and if you try to tell it to maybe give you source, it may point out to some sources, maybe new story and when you check out this new story, you will discover that what these applications have done is that they paraphrased other people's work. So, I think there's copyright infringement here because it's not directly quoting them (Reporter, Nation Light Chapel).

These responses implies that there are copyright concerns in the use of AI by practicing journalists.

Table 9: If Respondents know about Credibility Concern of News Issues in the Use of AI

Variable	Frequency	Percentage
Yes	197	100%
No	-	-
Total	197	100%

Source: Field Survey,2024

Data in table 9 shows that all the respondents know about credibility concerns as an issue in the use of AI for journalism practice in Nigeria. The implication of the data is that

majority of the respondents know that credibility concerns can erupt in the use of AI for sourcing and disseminating information in journalism practice. This result supports the response of an IDI respondent who opined that:

Concerning credibility sources, AI can have one or two issues because if you ask AI to do something and it doesn't know it, it will still give you something. For instance, if you tell AI to give you maybe a 2024 incident of fire outbreak in Awka, now if there wasn't any fire outbreak in Awka, AI will still go ahead and tell you there was a fire outbreak in Awka on so and so date, meanwhile there wasn't anything like that. So, if you say ooh, I'm looking for stories, maybe I'm writing stories as I'm progressing the dry season, maybe I'm trying to write a story or commentary or an editorial or an article about how to prevent fire disaster, I want to make instance of fire disaster in Anambra, using Awka as an example now and you want to point a recent fire disaster. Since there wasn't any, AI will still tell you that there was a fire incident and then will be even quote, maybe according to Nwankwo even when there's no Nwankwo. So, I think, these are the issues when it comes to credibility and reliability of sources in AI. There is also source credibility concerns, even when AI is citing someone, you're not even sure it's getting from the real source or quoting the person, it may just generate something and just get information or lift it. Like I said before, AI is getting this information from other people's work (Reporter, Nation Light Chapel).

This response shows that there are credibility concerns that comes with the use of AI for journalism.

Discussion

The study investigating the place of artificial intelligence (AI) in journalism practice among journalists in Anambra State revealed several significant findings, which are consistent with previous studies and provide a rich basis for further exploration. It was found that journalists in the state possess substantial knowledge about AI and its application in journalism. This aligns with the works of Nsude and Oyeleke (2020) and Nwanyanwu and Nnamdi (2021), who observed that AI is utilized by Nigerian journalists for news production, automating newsroom processes, fact-checking, and providing personalized news experiences. A possible reason for this widespread knowledge could be the growing digitalization of media platforms and the global shift toward AI-powered technologies, which likely compelled journalists to stay informed to remain competitive. Additionally,

journalism training institutions and professional development programs may have incorporated AI-related modules, thereby increasing awareness among practitioners.

Another important finding of the study is the resistance to new technology and the lack of requisite ICT knowledge, as well as financial constraints in acquiring and implementing AI resources in journalism practice. These challenges impede the full adoption of AI in Anambra State. Several underlying reasons might explain these barriers. First, the high cost associated with acquiring AI technologies, such as sophisticated software for automated news generation or advanced fact-checking tools, makes it difficult for small and medium-sized media organizations to invest in them. Media houses in Nigeria often operate on limited budgets due to fluctuating advertising revenues and economic challenges, which restrict technological upgrades. Moreover, inadequate infrastructure, including erratic power supply and poor internet connectivity, further discourages investment in AI technologies. Resistance to new technology is another key factor. This resistance can be linked to a fear of job displacement as AI systems become capable of performing tasks traditionally done by human journalists, such as content creation and editing. Journalists may fear redundancy and therefore exhibit reluctance toward fully embracing AI-driven tools. Additionally, limited ICT literacy among older journalists may also contribute to this resistance. Despite advancements in technology, training opportunities to enhance digital skills remain inadequate in many parts of Nigeria, creating a skill gap that hinders AI adoption.

Ethical concerns about AI in journalism also featured prominently in the findings, with journalists in Anambra State demonstrating awareness of copyright and credibility issues. The heightened awareness could be attributed to the global discourse surrounding AI ethics, where controversies related to plagiarism, deepfakes, and biased algorithms have sparked debates. Increased exposure to ethical guidelines from professional bodies, such as the Nigerian Union of Journalists (NUJ), may have further sensitized journalists to these issues. Moreover, the potential for AI-generated content to compromise journalistic integrity has likely heightened awareness of the need for ethical vigilance.

Conclusion

In conclusion, the findings of this study highlight the growing awareness and application of artificial intelligence (AI) in journalism among journalists in Anambra State. Despite significant knowledge about AI's potential for enhancing news production, fact-checking, and personalized content delivery, barriers such as financial constraints, technological resistance, and inadequate ICT skills hinder its full adoption. Ethical concerns, particularly regarding copyright and content credibility, remain pressing issues, reflecting the need for ethical frameworks in AI-driven journalism. These findings suggest that the integration of AI into journalism requires strategic investments in infrastructure, training programs to bridge ICT knowledge gaps, and comprehensive ethical guidelines to mitigate associated risks. Addressing these challenges will enhance the effective and responsible use of AI, positioning journalists to leverage its full potential while maintaining professional standards. Future research should explore solutions tailored to the specific needs of media organizations in resource-limited environments to advance AI adoption in journalism.

Recommendations

Based on its findings, the study recommended among others that:

1. The Federal Government of Nigeria and the Ministry of Communication and Information should collaborate with media houses to develop comprehensive AI training programs for journalists. This partnership should focus on organizing workshops, seminars, and certification courses that educate journalists on the practical use of AI tools and highlight potential ethical pitfalls. This, regular training sessions should be designed and updated to keep pace with new technological advancements, ensuring journalists stay informed and proficient in AI-driven journalism.
2. The Federal Government and the National Broadcasting Commission (NBC) should work in tandem with local and international software developers to create user-friendly AI tools tailored for journalism. These tools should be promoted through subsidies or grants to encourage widespread adoption. Providing incentives, such as

reduced licensing fees and technical support, will motivate media organizations to integrate AI into their operations, thus enhancing journalistic efficiency and reliability.

3. Media houses across Nigeria, with guidance from the National Broadcasting Commission, should implement policies that support the gradual shift toward technologically driven broadcasting. This transition can be facilitated by investing in the necessary infrastructure and offering targeted training programs to help journalists gain proficiency in AI applications. Structured timelines and continuous professional development courses should be put in place to aid journalists in mastering AI tools and adapting to the evolving media landscape.

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