



**ASSOCIATION OF
COMMUNICATION SCHOLARS
& PROFESSIONALS OF NIGERIA
BOOK SERIES**

Artificial Intelligence Tools: Awareness and Use among Journalists in Owerri, Imo State, Nigeria

*Adeline Nkwam-Uwaoma
Mishack Ndukwu*

To cite this article:

Adeline Nkwam-Uwaoma, Mishack Ndukwu (2024), Artificial Intelligence Tools: Awareness and Use among Journalists in Owerri, Imo State, Nigeria in *Digital Communication And Nigeria's Transformation; Bridging the Technology, Policy and Citizenry Divide* ACSPN Book Series 9, pp. 285— 310

Retrieved from <http://www.acspn.com.ng>

(Institutional or Subscribed access may be required)

Please note that this is an electronic, pre-print version of this article published by the Evan Brothers (Nigeria Publishers) Limited for Association of Communication Scholars & Professionals of Nigeria (ACSPN).

The ACSPN Book Series is exclusive to the Association of Communication Scholars & Professionals of Nigeria.

ISBN: **978-978-696-444-7**

Copyright ©2024

Editor and Contributors

Layout/Design: Ashroph De Grafico Ventures.

All rights reserved. No part of this book may be used or reproduced in any form or any electronic or mechanical means, including information storage and retrieval systems, without permission in writing from the publisher, except by reviewer who may quote brief passages in a review.

Chapter Thirteen



Artificial Intelligence Tools: Awareness and Use among Journalists in Owerri, Imo State, Nigeria

*Adeline Nkwam-Uwaoma
Mishack Ndukwu*

Abstract

The study examines awareness and use of AI technologies among journalists in Owerri Municipal Council, Imo State, Nigeria. The objectives of the study are to: examine the of awareness of AI tools for media practice, knowledge on how to use media-related AI tools and determine the usage of media-related AI tools for journalism practices . The Uses and Gratifications theory served as the study's foundation. Survey research method was used for the study. The purposive sampling techniques were used to select 380 Journalists. The

findings showed that, journalists in Owerri, Imo State agreed to be aware of artificial intelligence (AI) tools for media practice. Findings further showed that the knowledge on how to use media-related AI tools is lacking among journalists in Owerri municipal. The study concludes that Journalists in Owerri Municipal Council, Imo State are aware of AI tools for media practice. But the same thing can not be said of the knowledge on how to use media-related AI tools. As most of the Journalists in Owerri Municipal Council don't have the knowledge on how to use AI tool. The study recommends that journalists in Owerri Municipal Council should acquire more skills on how to use media-related AI tools.

Keywords: Artificial Intelligence, Tools, Awareness, Use, Journalists, Owerri

Introduction

Today's work routine is being redefined by the introduction of Artificial Intelligence (AI) solutions across professional endeavours. The AI tools and apps that have simplified tasks now have a favourable impact on every sector or profession, including the media industry. Pietro et al.'s (n.d.) hypothesis contends that the current process of digitization is fundamentally altering business models and impacting the value of already-existing goods and services. New needs that call for quicker and more effective procedures are being created as a result of the digital transformation. To accommodate these developments, businesses and professions worldwide must undergo a significant transition. Noticeably, AI is currently enabling this significant transformation.

Guanah and Akumabor (2022) note that AI has brought about a paradigm shift in the study and practice of journalism, where it is now used to speed up research, gather and disseminate information, cross-reference data, and boost quality outcomes by enhancing the journalistic process. AI is also being used to quickly turn lengthy articles into bite-sized content for social media, make quick films from text, and gather data from a variety of sources. According to Guanah, Agbanu, and Obi (2020: p.699), "the advent of AI has impacted on various sectors of the society. It also affects journalism practice in numerous ways, especially now that journalists can use AI-generated smart templates to gather and disseminate news reports on various issues easily."

According to Zangana (2017), the relationship between technology and content creation in modern newsrooms can be summarized by the following fundamental notion: "This tendency in journalism proves the changing character of the newsroom staff, where programmers are steadily working more closely with journalists and where journalists become programmers and vice versa. In-depth technological tools are directly related to the major transformation in the journalistic industry (Vaglis and Bratsas, 2017). As a result, the employment of AI technology has become a need in the journalism industry that has resulted in significant changes (Galily, 2018).

However, Nnamdi and Nwanyanwu (2021), notes that many journalists in Nigeria have little or no knowledge of what AI actually means, let alone what it can do for a newsroom. Although this assertion by Nnamdi and Nwanyanwu (2021) points to Nigerian journalists. Nevertheless, there are other perspectives to these issues that affirm that the media industry in Nigeria has adopted and are utilising digital technology, which includes AI. For instance, Abiola (2023)) notes that

Several Nigerian media companies are taking proactive steps to embrace artificial intelligence. For instance, Legit.ng is employing AI to personalize newsfeed and create fresh content. Similarly, media outlets like Dubawa and The Cable are harnessing AI to detect and fact-check misinformation (para.10).

Abiola's perspective is a pointer that there is awareness and knowledge in respect of the utilisation of AI by journalists in Nigeria. However, it is unclear whether the awareness, knowledge of use and the use of AI among journalists in Nigeria applies to all journalists in all parts of the country. Therefore this study examines the awareness, knowledge of the utilisation and the utilisation of AI among journalists in Owerri, Imo State, Nigeria.

Statement of the Problem

AI tools are undoubtedly impacting the journalism profession. The present style of news gathering and content, speed of works in the newsrooms and patterns of news packaging and deliveries are indicators of the impact of AI in the media industry. All of these AI influences are results of awareness and knowledge on how to utilise the tools. Although Nnamdi and Nwanyanwu (2021), notes that many journalists in Nigeria have little or no knowledge of what AI actually means, let alone what it can do for a newsroom, Abiola (2023) notes that the Nigerian media industry have embraced AI and are already using it for journalism related works, such as, employing AI to personalize newsfeed,, create fresh content and fact-checking misinformation, which are products of awareness and knowledge to use the technology. However, the same thing cannot be said of all journalists in the entire country. Therefore, this study looks at awareness and knowledge on

how to use, and the use of AI tools for Journalism related works in a part of Nigeria, where there is noticeable active journalism practice: Owerri, Imo State.

Objectives of the Study

This study has the following objectives:

1. To examine the awareness of AI tools for media practice among journalists in Owerri Municipal Council.
2. To determine the existence of knowledge on how to use media-related AI tools among journalists in Owerri Municipal Council.
3. To determine the usage of media-related AI tools for journalism practices among journalists in Owerri Municipal Council.

Literature Review

Business, the military, entertainment, and news broadcasting are just a few of the industries that have started embracing artificial intelligence in recent years to streamline their operations (WTi-solutions, 2020). AI is described as "the ability of a device to perform functions that are normally associated with human intelligence such as reasoning, learning, and self-improvement" by the Computer Security Resource Center (CSRC) of the National Institute of Standards and Technology (NIST). AI generally concentrates on cognitive functions like observation, problem-solving, learning, and language understanding, that were previously only achievable with human intellect. AI initially felt out of place in the highly human-centered industry of communications. However, in recent years, media companies and journalists have begun to employ artificial intelligence to speed up some procedures, allowing them to analyze data more quickly, fact-check articles, and do other things. Creating computer programs to perform activities that would otherwise require human

intelligence is known as artificial intelligence (AI), and it is a subfield of computer science. AI algorithms are capable of learning, perceiving, solving problems, comprehending language, and/or using logic (Saleh, 2019). Artificial intelligence is the simulation of human intelligence in computers that have been programmed to think and act like humans, according to Frankenfield (2020), quoted in Nsude et al., (2021). According to Vinuesa et al. (2020), artificial intelligence (AI) refers to any software technology that possesses at least one of the following abilities: perception, including audio, visual, textual, and tactile (e.g., face recognition), decision-making (e.g., medical diagnosis systems), prediction (e.g., weather forecast), automatic knowledge extraction and pattern recognition from data (e.g., discovery of fake news circles in social media), interactive communication (e.g., social). They claim that it encompasses a wide range of subfields, including machine learning. Drawing from some of the foregoing definitions of AI, it can be concluded that machines can be empowered with intelligence to perform some acts maximally, even better and faster than humans, with little or no human input.

Meihui Hu et al (2021), observe that “as AI plays an important role in modern society, it is also popular in the broadcasting field. In the era of big data, effective use of broadcast content is conducive to the development and mining of big data. At the same time, it also provides convenience for the broadcasting field, and people can acquire information quickly in the era of big data.” They further maintained that “the use of AI in broadcasting stations can effectively improve the efficiency and speed of broadcasting, and members of staff and technicians can receive regular training to improve the rational use of AI technology.” According to Fieiras-Ceide et al. (2022), “the media must choose how they approach the installation of intelligent systems in the application of AI tools. The first is to

develop an internal algorithm, which entails not only a big financial investment but also significant challenges in locating skilled employees with the abilities to develop and oversee an AI infrastructure.

AI in Journalism Practice

Much empirical evidence suggests that while there is awareness about the existence of AI tools that can aid journalism practice, reality shows low AI skills and adoption among media organizations and practitioners.

A study on Artificial Intelligence and Journalism Practise in Nigeria: Perception of Journalists in Benin City, Edo State, was also carried out by Guanah et al. in (2020). The study examined the potential effects of AI on the practise of journalism in Benin City, Edo State, Nigeria. The media morphisms theory served as the foundation for the study, while survey and in-depth oral interviews were chosen as the research methodologies for gathering data. The sample size of 152 was chosen using Cozby's Precision of Estimate table, and the population consisted of the 254 registered journalists under the Nigerian Union of Journalists (NUJ), Benin City Chapter. The study found, among other things, that journalists in Benin City concur that automated journalismthe use of AI-driven media applicationsimproves upon the current reporting practises, which are still carried out "manually." It came to the conclusion that automation is the way of the future and that Nigerian journalists must get ready and embrace AI in order to avoid being left behind in the eventual transition to an automated world. It also recommended that journalism programmes adopt technology-based curricula that will adequately equip aspiring journalists for the usage of AI in their profession in the future.

In their research, Okiyi and Nsude (2019) conducted a study that focused on the adoption of artificial intelligence in journalistic practises inside Nigeria. The study aimed to identify the challenges associated with this adoption and propose potential solutions for moving forward. The global expansion of Artificial Intelligence (AI) has led to its widespread use across several industries, facilitating the acceleration of production processes, enhancing productivity levels, and guaranteeing precision and efficiency in corporate operations. The field of journalism has experienced notable advancements through the integration of artificial intelligence (AI), whereby automated systems are employed to do various journalistic tasks, leading to expedited outcomes in both broadcast and print media formats. The utilisation of artificial intelligence (AI) in the field of journalism in Nigeria is limited due to a variety of circumstances, despite its widespread appeal.

The present study is characterised by its conceptual nature and use of qualitative research methodologies to obtain findings. The study used insights and perspectives from experts in order to obtain the necessary information. This study aimed to identify the issues that may impede the effective implementation of artificial intelligence (AI) in journalism practises within the context of Nigeria. The study was grounded in the ideas of media richness and technological determinism, which explore the effects of communication technologies on production processes and their broader societal impacts. The integration of artificial intelligence (AI) in journalism is of utmost significance as it enables newsrooms to maintain their competitiveness and enhance career prospects within the field.

Although AI offers numerous benefits, it presents various difficulties that impact the newsroom. While certain aspects may pertain to technical matters, others are related to the

structural framework and governance. Moreover, there exist professional and foundational challenges, encompassing rudimentary knowledge and practical skills, which impede the advancement and dissemination of AI implementation in journalism within Nigeria and other Sub-Saharan African nations. Consequently, it is advised that there is a necessity for a shift in perspectives on the significance of artificial intelligence (AI) among both governmental bodies and journalists. This shift is crucial in order to promote the utilisation of AI as a means to enhance productivity within the sector.

AI Awareness and Adoption in Nigerian Journalism

There may be a relatively high level of awareness of AI technologies (arising from exposure to foreign and local news stories) among media practitioners in Nigeria, but that may not translate to skillful knowledge and adoption of AI tools among journalists and media organizations. According to Guanah and Akumabor (2022), it is acknowledged that artificial intelligence (AI) has brought about a significant change in the methods of learning and practice within the field of journalism. AI is now utilized to expedite research, collect and distribute information, cross-reference data, and improve the overall quality of outcomes by enhancing the journalistic process. The authors assert that artificial intelligence (AI) is additionally employed for the purpose of condensing intricate written materials into concise content suitable for social media platforms, as well as generating brief movies based on textual input within a matter of seconds, or aggregating information from diverse sources.

"Automation in journalism has begun to be implemented in some nations, and in Africa, experimental practices in application of artificial intelligence has taken place in Namibia and South Africa," according to Okiyi and Nsude (2019). They add that it has not yet become widely accepted and established in various businesses across most African nations. Despite the

fact that AI technology has proved useful in a variety of fields, it has not been widely adopted in Africa, and is much less so in Nigeria due to the exorbitant costs associated with its manufacturing and upkeep. Meihui Hu et al. (2021) contend that artificial intelligence can efficiently broadcast the content of traffic through the means of broadcast communication, allowing big data mining to have a comprehensive grasp of the content of the broadcast communication. The battle for talent is a significant barrier to the development of AI in news media, according to a recent analysis. Since newsrooms pay less than the IT sector, there is rivalry not only to recruit talents but also to keep professionals there. As a result of this newsroom brain drain, the news industry is less likely to adopt new technology (Broussard et al. 2019; Lokot & Diakopoulos, 2016 in De-lima-Santos, 2021). Even despite the aforementioned circumstances, news organizations all across the world are implementing AI solutions in their newsrooms. Newsrooms have been increasingly automating news articles in recent years (Linden, 2017b). Many of these efforts still rely on basic automation to fill in the blanks of template stories and do not develop stories based on prior data, even if machine learning techniques are utilized to some extent in some of these projects (Biswal and Gouda, 2020 in De-lima Santos, 2021).

AI Utilisation in Journalism Practice in Nigeria

In a study by Gondwe (2023), an examination was carried out on the utilization of CHATGPT in the Global South, specifically focusing on the engagement of journalists in Sub-Saharan Africa with generative AI technology. This research delves into the utilization of generative artificial intelligence (AI) technologies among journalists operating in Sub-Saharan Africa, specifically examining the challenges pertaining to disinformation, plagiarism, stereotypes, and the limited representativeness of internet databases. This study situates the present investigation within wider discussions pertaining to

the capacity and equity of AI technologies in the Global South. The present study entailed the execution of interviews with journalists hailing from five distinct Sub-Saharan African nations, specifically Congo, Democratic Republic of Congo (DRC), Kenya, Tanzania, Uganda, and Zambia. The primary aim of this research was to investigate the utilization of ChatGPT among journalists in the Sub-Saharan African region. The findings suggest that ChatGPT, a generative AI system, relies on a restricted and unrepresentative African corpus, resulting in a selective approach towards distinguishing civil and uncivil discourse. Consequently, this selectivity imposes limitations on the system's efficacy within the African region. The study additionally posits that due to the lack of representative corpora, the utilization of generative AI tools such as ChatGPT offers a potential avenue for enhancing journalistic practice. However, journalists must exercise caution and not solely depend on these tools.

The study conducted by Nnamdi and Nwanyanwu (2021) examined the application of Artificial Intelligence in the field of journalism within the context of Nigeria. The article delved into the implications of artificial intelligence on newsrooms and proposed strategies for its more effective integration into the realm of journalism. The findings of this study indicate that artificial intelligence (AI) is presently being utilised to automate various tasks within the newsroom, enhance the capabilities of journalists, introduce novel approaches to investigative journalism, aid in the verification and fact-checking processes, facilitate personalised user experiences, and raise ethical concerns. Nevertheless, the survey indicates that journalists in Nigeria have not yet used artificial intelligence (AI). The implementation of artificial intelligence (AI) in Newsrooms in Nigeria has several hurdles, including insufficient electrical supply to adequately power AI applications, inadequate infrastructure, and limited financial resources for the

procurement and maintenance of necessary equipment. The expenses associated with Internet connectivity, the education of AI handlers, among various other factors, are noteworthy considerations. Despite the presence of several obstacles, journalists have difficulties in utilising artificial intelligence (AI) that hinder their creative abilities. These issues include the lack of effective monitoring, the presence of prejudice, a dearth of transparency, inadequate fact-checking mechanisms, and a lack of justice, among other concerns. It is crucial for journalists, particularly in emerging nations such as Nigeria, to adapt and embrace the transformative effects brought about by Artificial Intelligence. The findings of the study indicate that professional journalism is not significantly endangered by artificial intelligence. Artificial Intelligence technologies have significantly contributed to and continue to enhance the value of journalism in the digital era.

Moreover, the study conducted by Fieiras-Ceide et al. (2022) examined the utilisation, projections, and forthcoming problems of artificial intelligence methods in European public broadcasters. With the increasing prominence of artificial intelligence in the media landscape, public broadcasters are actively engaging in the testing and experimentation of these technologies in order to enhance their services and align with the evolving requirements of the audio-visual ecosystem. The utilisation of algorithms in public audio-visual enterprises is becoming more prevalent, encompassing a range of applications such as content recommendation systems for users and automated news detection tools that assist journalists in their work. The data was collected through semi-structured in-depth interviews with a convenience sample of 15 firms representing 12 different nations. The findings demonstrate a diverse implementation of artificial intelligence inside corporate settings, with a focus on utilising structured data for automated content generation, enhancing audience

engagement through chatbots, and facilitating personalization and verification processes. The incorporation of these technologies also presents significant obstacles. The primary hindrances to the widespread implementation of these technologies in public broadcasting are the economic expenses associated with customising these systems for each organisation and the challenges in recruiting proficient professionals to design AI solutions. The primary findings indicate that AI, regarded as a "culture," is considered crucial for the future of public audio-visual services. However, its implementation is not yet widespread and generally lacks significant strategic prominence within corporate innovation departments.

The study conducted by Udoh et al. (2022) examined the level of awareness regarding the utilization of artificial intelligence in news production among journalists in Ebonyi State, Nigeria. The primary objective of this study was to assess the level of knowledge and understanding that journalists in Ebonyi state possess regarding the utilization of artificial intelligence in the production of news content. The participants of the study consisted of professional journalists who were actively engaged in their journalistic practice within Ebonyi state. The study's population consisted of 250 registered journalists listed in the records of the Nigeria Union of Journalists (NUJ), Ebonyi state. Census sampling was employed due to the limited size of the study population. The researcher employed the survey research approach to gather data. In this instance, a total of 250 questionnaires were distributed to active journalists inside Ebonyi state. Data analysis was conducted using basic percentage and frequency tables. The research was grounded in the diffusion of innovation theory and media morphisms theory. The research revealed that all journalists who are officially affiliated with the Nigerian Union of Journalists (NUJ) in Ebonyi state have knowledge on the utilization of artificial

intelligence in the production of news.

Theoretical Framework

For this study, the researcher employed the uses and gratification theory. In 1974, Katz, Blumler and Gurevitch proposed the theory. The primary premise of the idea is the advantages that media consumers experience as a result of their media usage. According to the notion, people use the media to fulfil needs that they believe will be useful rather than only for entertainment purposes. "The uses and gratifications approach views the audience as active; meaning that they actively seek out specific media and content to achieve certain results or gratification that satisfy their personal needs," according to Rossi (2002), cited in Asemah et al (2017). As stated by Wimmer & Domminick (2000) and referenced by Asemah et al. (2017), the uses and gratifications hypothesis adopts a media consumer's perspective. It looks into how people utilise the media and the satisfactions they derive from using it in certain ways. The theory of uses and pleasure holds significant value in the explanation and interpretation of the studied phenomena.

This theory is suitable for this research because it helps to explain the disparities that may exist on how media practitioners are acclimatizing to AI technologies and adopting them for their media practices. As a theory that tries to reveal an irregular pattern in the consumption of media contents, use and gratification also helps us to investigate how practitioners adopt and consume new technologies in media practices.

Method and Materials

The survey research, adopted by the researchers was considered most suitable because it allows for the study of people's opinions and perceptions on any given issue of public

interest (Anyanwu, et al., 2017). The population of the study comprised all 380 registered and practicing journalists in Owerri Municipal Council (Nigeria Union of Journalists Imo State chapter fact sheet, 2022). Due to the manageable size of the population, the census method was adopted. Damico (2016,) notes that when a population is small and well-defined, the entire population is often studied. Therefore, the sample size of this study is 380. The questionnaires, contained questions related to the research questions. The self developed questions were structured in Likert-scale dichotomous formats. This structure of question was adopted to provide respondents the latitude to expression in every item. The questionnaires were administered and retrieved with the help of the Survey Monkey (an online survey tool). The SPSS statistical tool was used for data analysis.

Results

The findings were presented based on the research questions. Of the 380 questionnaires distributed, 370 (97%) copies returned valid and usable for the analysis while 10 copies (3%) were invalid due to incomplete answers. (Please indicate whether all the questionnaires administered were all retrieved and found usable).

Demographic Data

Table 1: Sex of Respondents

Sex	Number of respondents	Percentage
Male	270	74%
Female	100	26%

Let's have an idea of gender of the 380 journalists.

Table 1 shows that there are 270 (75%) number of males and 90 (25%) females. This indicates that there are more male

practicing journalists in Owerri, Imo state.

Research Question One: Are journalists in Owerri Municipal Council, Imo State aware of AI tools for media practice?

Option	SA	A	D	SD	Total	Mean	Decision
I am aware of Artificial Intelligence technology	181	159	18	12	370	3.3	Agree
I am aware of AI tools specifically for journalism practice	181	159	18	12	370	3.3	Agree
My media organization is aware of AI tools for journalism practice	148	126	50	46	370	3.0	Agree
My organization is aware that some media organizations use AI tools	164	110	47	49	370	3.0	Agree
I am aware of some AI tools that can improve my job	176	128	37	29	370	3.2	Agree
Average mean						3.1	Agree

Source: Field Survey, 2023

Table 2 reveals that at an average mean of 3.1, which means that most of the respondents (Journalists in Owerri) confirmed that they are aware of AI tools.

Research Question Two: Do journalists in Owerri Municipal Council, Imo State have knowledge on how to use media-related AI tools?

Table 3: knowledge on how to use media-related AI tools among Journalists in Owerri Municipal Council

Option	SA	A	D	SD	Total	Mean	Decision
I know how to utilize AI tools that are meant for journalism practice	17	34	161	158	370	1.7	Disagree
I can use more than two AI tools as a journalist in your daily practice	17	34	164	155	370	1.7	Disagree
I know how to subscribe to AI tools that helps me in daily reporting	18	33	169	150	370	1.7	Disagree
My organization trained me on how to use AI tools for Journalism	00	00	182	188	370	1.5	Disagree
My organization subscribes to any AI tools that facilitate production	00	00	184	186	370	1.5	Disagree
Average mean						1.6	Disagree

Source: field survey, 2023

Table 3 above, the result revealed that at an average mean of 1.6, most of the respondents studied disagreed with having the knowledge on how to utilize media-related AI tools among journalists in Owerri municipal Council.

Research Question Three: Do journalists in Owerri Municipal Council use media-related AI tools for journalism practices?

Table 4: Use of media-related AI tools for journalism practices

Option	SA	A	D	SD	Total	Mean	Decision
I use AI tools for my news writing and editing	18	33	159	160	370	1.7	Disagree
I use AI tools for video and photo editing	00	00	188	182	370	1.5	Disagree
My media organization use AI tools for scheduling programmes.	00	00	192	178	370	1.5	Disagree
My organization use AI tools for information verification.	17	34	161	158	370	1.7	Disagree
My organization is encouraging the adoption of AI technologies in journalism practice	18	33	164	155	370	1.7	Disagree
Average mean						1.6	Disagree

Table 4 above shows average mean of 1.6, which means that most of the respondents confirmed journalists and media organizations in Owerri do not use media-related AI tools for their practice.

Discussion

According to the research question one's findings, journalists in Owerri Municipal Council agreed to be aware of AI tools, with an average mean of 3.1 among the respondents. This simply means that the majority of journalists in Owerri have heard or read about the existence of AI tools that are used for media practice. The implication of this finding is that there is an appreciable awareness of media-related AI tools among

journalists in Owerri Municipal Council. The findings of Udoh et al. (2022) aligns with the present study, as they revealed that all journalists affiliated with the Nigerian Union of Journalists (NUJ) in Ebonyi State possess knowledge regarding the utilisation of artificial intelligence in the production of news. The findings of Guanah et al. (2020) further substantiate the present assertion, as they reveal that journalists in Benin share the view that automated journalism, characterised by the utilisation of AI-driven media applications, represents advancement over the prevailing manual reporting practises. This finding is in line with the uses and gratifications theory which goes beyond awareness to emphasize the actual utilization pattern of media contents and technologies. The adoption of a novel concept, action, or product within a social system occurs as a consequence of the process of the perceived gratification the user is likely to get from using that particular product. No doubt, AI technology has gained momentum in virtually every aspect of human activities and has been widely adopted in solving human problems in every facet of human endeavour, journalism inclusive. This makes familiarization with relevant AI tools by media practitioners and organizations in Nigeria a necessity.

Findings from research question two indicate that at the average mean of 1.6, the respondents studied disagreed with being knowledgeable on how to utilize media-related AI tools for journalism practice, in Owerri Municipal Council. This implies that though a greater number of journalists in Owerri Municipal Council are aware of AI technology, most of them do not have the knowledge of how to deploy these tools for their daily practices. This finding is disturbing and gives reasons for one to be concerned as it does not indicate upward mobility in the Nigerian media landscape in general and with Imo State journalists in particular.

The current study corroborates that of Okiyi and Nsude (2019), who found that basic knowledge and practise, as well as professional and fundamental difficulties, impede the development and diffusion of the use of AI in journalism in Nigeria and other sub-Saharan African nations. Furthermore, the findings of Fieiras-Ceide et al. (2022) are different because they show that Artificial Intelligence is being used in businesses in a variety of ways. These applications include improving audience interaction through chatbots, personalization or verification in European countries, and the automatic creation of content from structured data. This means that the challenges associated with the deployment of these tools assume some different nature in the Western world and Africa. While challenges in the European nations are cost-related, those of Africa and Nigeria are knowledge-related. The present finding contradicts the diffusion of innovation theory in that one can be aware of an innovation but lack the knowledge to utilize the innovation. This could be a result of the cost of the innovation or the economic involvement. Despite the reality based on the findings above, media practitioners must catch up with AI innovation as it remains fundamental to effective media practice. Media organizations should not shy away from acquiring and deploying these tools and as well support their members of staff to acquire the necessary skills for proper utilization.

Findings from research question three shows that, with an average mean of 1.6, the respondents surveyed agreed that the amount of media-related AI tools used by journalists and media organisations in Owerri Municipal Council is pretty pitiful. This suggests that most media companies and journalists are not using AI tools in their regular work. The current finding is consistent with Nnamdi & Nwanyanwu's findings from 2021, which showed that Nigerian journalists have not yet adopted AI. The researchers observed that there

exist multiple barriers impeding the integration of artificial intelligence (AI) in newsrooms. These obstacles encompass limited access to electricity, which hampers the efficient functioning of AI applications, inadequate infrastructure, insufficient financial resources to procure and sustain the requisite equipment, exorbitant costs associated with internet connectivity, and the necessity for training AI handlers. According to Gondwe (2023), the research findings suggest that ChatGPT's functionality is constrained by a limited and unrepresentative African corpus. Furthermore, the system exhibits selectivity in determining what qualifies as civil or uncivil language. These limitations, as highlighted by the study, have implications for the efficacy of generative AI in the region. Consequently, journalists themselves bear the responsibility of overseeing its usage to enhance productivity within the industry.

Conclusion

Artificial Intelligence has no doubt been embraced by the Nigerian media industry. However, there are still issues that relates to knowledge and use of AI. Thus this study concludes that Journalists in Owerri Municipal Council, Imo State are aware of AI tools for media practice. However, the same thing cannot be said of the knowledge on how to use media-related AI tools. As most of the Journalists in Owerri Municipal Council do not have the knowledge on how to use AI tools. These are the scenarios of the use of media-related AI tools for journalism practices. Most of the journalists, because they lack the knowledge to use the AI tools, do not use the AI tools for journalism practice.

Recommendations

Based on the study's findings, the study recommends that:

1. Journalists should go beyond awareness and acquire skills on how to use AI tools for journalism practice by exploring various paid and free AI training platforms.
2. Media owners should not just acquire and deploy AI tools in their newsrooms. They should also encourage their workers by organizing training and giving incentives that will engender growth.

References

- Abiola, R. (2023). Once again, the Nigerian media is late to the artificial intelligence party, when is Our time? <https://technext24.com/2023/11/14/nigerian-media-artificial-intelligence/>
- Asemah E. S., Nwammuo A. N. Nkwam-Uwaoma A. O. (2017). *Theories and Models of Communication*. Jos University Press.
- Automated Insights. (n.d.) <https://automatedinsights.com/customer-stories/associated-press/> Artificial Intelligence. (n.d.). Retrieved from NIST Computer Security Resource Center: <https://csrc.nist.gov/Topics/Technologies/artificial-intelligence>
- Biswal, Santosh K., and Nikhil K. G., (2020). "Artificial intelligence in journalism: A boon or bane," 15567. https://doi.org/10.1007/978-981-15-0994-0_10.
- Broussard, M., Nicholas D., Andrea L., Guzman, R. A., Michel D., and Ching H. C., (2019). "Artificial Intelligence and Journalism." *Journalism and Mass Communication Quarterly* 96 (3): 67395. <https://doi.org/10.1177/1077699019859901>.
- De-Lima-Santos M. and Lucia M., (2021). "A challenging future for the Latin American news media industry." in *journalism, data and technology in Latin America*, edited by Ramón Salaverría and Mathias-Felipe De-Lima-Santos, 1st ed., 22962. Cham: Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-65860-1_8.
- Fieiras-Ceide, C, Vaz-Álvarez, M., Túñez-López, M. (2022). "Artificial intelligence strategies in European public broadcasters: Uses, forecasts and future challenges". *Profesional de la información*, v. 31, n. 5, e310518.

- Galily, Y. (2018). Artificial intelligence and sports journalism: Is it a sweeping change? *Technology in Society*, 54, 47-51.
- Gondwe G., (2023). CHATGPT and the Global South: How are journalists in sub-Saharan Africa engaging with generative AI? *De Gruyter Mouton. online Media Glob. Commun.* 2023;
- Guanah, J. S. & Akumabor, N. T. (2022). Application of artificial intelligence in the learning and practice of journalism in Nigeria. In Asemah, E. S., Ekhareafu, D. O. & Santas, T. (Ed) *Discourses on Communication and Media Studies in Contemporary Society*. Jos University Press.
- Guanah, J. S., Agbanu, V. N., Obi, I. (2020). Artificial intelligence and journalism practice in Nigeria: perception of journalists in Benin city, Edo state. *International Review of Humanities Studies* www.irhs.ui.ac.id, e-ISSN: 2477-6866, p-ISSN: 2527-9416 Vol. 5, No.2, July 2020, pp. 698-715.
- Meihui Hu, Xiang, Z., Kai Li (2021). Application of Artificial Intelligence Voice Technology in Radio and Television Media. *Journal of Physics: Conference Series 2031* (2021) 012051
- Meihui Hu, Zhiwei X., Kai L., (2021). Application of Artificial Intelligence Voice Technology in Radio and Television Media. *Journal of Physics: Conference Series 2031* (2021) 012051 IOP Publishing doi:10.1088/1742-6596/2031/1/012051
- Nnamdi C. N. & Nwanyanwu M., (2021). Utilization of Artificial Intelligence in Journalism in Nigeria. *Kampala International University (KIU) Journal of Social Sciences* ISSN: 2413-9580; 7(2): 205212
- Nsude, I., Elem, S. N. & Nkwam-Uwaoma, A. (2021). Combating cybercrime through artificial intelligence for sustainable Development in Nigeria. In Fayoyin, A. & Ademosu, I. (Ed) *Knowledge Societies: Artificial*

- Intelligence and the Media. United Nations Educational, Scientific and Cultural Organization.
- Okiyi G. O., & Nsude I., (2019). Adopting Artificial Intelligence to Journalistic Practices in Nigeria: Challenges and Way Forward. *International Journal of Communication: An Interdisciplinary Journal of Communication Studies*.
- Pietro S., Adriano M., Claudia L. (n.d.). AI solutions in broadcasting companies: How broadcasting companies can benefit from AI technologies. https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.nttdata.com/jp/ja/-/media/nttdatajapan/files/services/ai/ai-solutions-in-broadcasting-companies.pdf&ved=2ahUKEwje--WCzlaBAxUViVwKHeYhBxkQFnoECBYQAQ&usg=AOvVaw3Lr_haJxYLi0dcMVI3rxjZ
- Saleh, Z. M., (2019). "Artificial Intelligence Definition, Ethics and Standards," BUE, p. 13, [Online] available.
- Udoh, W.A., Nsude I., Oyeleke A.S. (2022) Awareness of Artificial Intelligence for News Production among Journalists in Ebonyi state Nigeria, *International Journal of Network and Communication Research*, Vol.7, No.1, pp.33-45
- Veglis, A. & Bratsas, C. (2017). Towards a Taxonomy of Data Journalism. *Journal of Media Critiques*, 3(11), 109-121.
- Vinuesa, R., Azizpour, H. & Nerini, F. F. (2020). The role of artificial intelligence in achieving the Sustainable Development Goals. *Nature Communications*. <https://www.nature.com/articles/s41467-019-14108-y>.
- WTi-solutions, (2020). AI in Media and News Broadcasting. https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.wti-solutions.com/wp-content/uploads/AI%2520in%2520Media%2520and%2520News%2520Broadcasting%2520v1.2.pdf&ved=2ahUKEwiJv_3FyoaBAxUhkFwKHc35AuAQFnoECBkQAQ&usg=AOvVaw1jTZQ0D7AemC8LM8JYpnfD

Zangana, A. (2017). The Impact of New Technology on the News Production Process in the Newsroom. Ph.D. Thesis, University of Liverpool. <https://livrepository.liverpool.ac.uk/3008664/>