



ARTICLE



<https://doi.org/10.1057/s41599-025-06263-z>

OPEN

# Bandwagon of artificial intelligence use among media houses in Oyo State, Nigeria

Felix Olajide Talabi<sup>1</sup>✉, Christiana Shade Ade-johnson<sup>2</sup>, Joseph Moyinoluwa Talabi<sup>3,4</sup>,  
Pauline Oghenekaro Adeniran<sup>1</sup>, Samson Adedapo Bello<sup>5</sup>, Stephen Afam Kenechukwu<sup>6</sup>,  
Joshua Kayode Okunade<sup>5</sup>, Omowumi Bukola Olaseinde<sup>7</sup> & Ayodeji Boluwatife Aiyesimoju<sup>8</sup>

The wave of artificial intelligence (AI) is transforming all spheres of human life. AI is continuously expanding, shaping the future of humanity and raising important ethical and societal implications. Hence, this study explored the bandwagon effect of AI and its use among media houses in Oyo State, Nigeria. The study adopted the ethnographic qualitative design, chiefly utilising focus group discussion (FGD) to gain rich empirical insight into the phenomenon. Twelve media professionals were purposively sampled for the FGD. The study found that AI is becoming more prevalent in Oyo State, Nigerian media houses for tasks like generating content, analysing data, verifying facts, and managing social media. The study concluded that AI is revolutionising the media industry and can serve as a competitive edge for media houses that embrace it, bearing in mind that responsible use, ethical considerations, and technical challenges are crucial for harnessing AI's potential.

<sup>1</sup> Redeemer's University, Ede, Nigeria. <sup>2</sup> Adekunle Ajasin University, Akungba, Nigeria. <sup>3</sup> Lagos State University, Ojo, Nigeria. <sup>4</sup> Naveen Jindal Young Global Research Fellowship, O. P. Jindal Global University, Sonipat, India. <sup>5</sup> Caleb University, Lagos, Nigeria. <sup>6</sup> Federal University Oye Ekiti, Oye-Ekiti, Nigeria.

<sup>7</sup> Bamidele Olumilua University of Education Science and Technology, Ikere Ekiti, Nigeria. <sup>8</sup> Joseph Ayo Babalola University, Ile-Ife, Nigeria.

✉email: [talabif@run.edu.ng](mailto:talabif@run.edu.ng)

## Introduction

**A**rtificial Intelligence (AI) has crept into various industries and endeavours of humans, and the media has not been left out. Technological breakthroughs in the 21st century have enabled the development of automated journalism, a specific use of AI. The origin of automation can be traced back to ancient civilisations when engineers in Greece, China, and Egypt were at the forefront of scientific and technical advancements (Jamil, 2023; Okiyi & Nsude, 2019). The emergence of Expert Systems in the 1950s initiated the integration of AI into several businesses in Europe and Asia. The following AI tools, including DENDRAL, XCON, MYCIN, and ACE, showcase their chemical structure analysis, computer hardware setup, medical diagnostics, and telecommunication maintenance proficiency, respectively (Okiyi & Nsude, 2019; Nnamdi & Nwanyanwu, 2021). According to Udoh et al. (2022a), the development of PROLOG (a logic programming language primarily for natural language processing) in 1972 considerably strengthened the potential of AI by allowing logic programming and language logicism with few errors. Recent breakthroughs in AI technology have further developed these tools, resulting in enhanced work quality and the possibility of automating human operations.

The adoption of AI in media operations is spreading worldwide, and the benefits to the mass media are enormous (Noain-Sánchez, 2022). The widespread adoption of AI in journalism has become visible around the world since 2013, when the Associated Press (AP) started the automation of narrative text stories directly from sports data and expanded this practice to corporate earnings reports (Nusude, 2022). Media houses globally are already embracing AI to ease the work of the media in various areas, such as automating tasks, enhancing audience engagement, and improving content quality. AI has globally revolutionised the media industry in terms of production, personalisation, audience analysis, marketing and promotion, content quality, real-world application, visual effects, design, casting and a host of others (Mahmood, 2024). Media houses have also embraced AI technologies, although their full impact remains unknown in journalism. Gbaden et al. (2024) state that AI has considerably impacted journalism and research, blurring the line between truth and falsehoods, and enhancing productivity when used ethically. Although there have been concerns over the effect of AI on job security in the media, studies indicate that AI has made journalistic work easier, allowing journalists to concentrate on more advanced responsibilities (Udoh et al., 2022b; Lyu, 2020). According to UNESCO (2019), cited in Wilson and Jibrin (2019), AI plays a significant role in managing vast amounts of data, using cloud computing, and creating virtual worlds for media houses. These advancements are reshaping the development of several industries, including the media industry. Contemporary technologies, developed using algorithmic procedures, have mechanised press operations, such as selecting beats, collecting news, controlling media access, and distributing material (Jamil, 2023). The intelligence component of AI allows computers to perform activities that require human cognitive and social skills (Yu 2023), thereby assisting media in speeding up performance. AI has procedural problem-solving skills that enable robots to think and behave like humans (De-Lima-Santos & Ceron).

Conversely, Nigeria is still slow in training and building capacity for AI journalists; AI, just like any other industry in Nigeria, has been generally hampered by infrastructural issues such as electricity, data access, and many more. As such, there are low capacity-building opportunities for Nigerian Journalists in AI training (Aderoju, 2024a). Thus, there is a need for new opportunities to learn and master its use in Nigeria through various forms of education and training for robust AI integration in Nigerian Journalism (Aderoju, 2024a). The AI use in media

houses in Oyo State, Nigeria, is multifaceted, with AI technologies being integrated into journalism practices to enhance efficiency, facilitate data-driven reporting, personalise news delivery, and combat misinformation (Gbaden et al., 2024; Jaiyeola, 2023). The scope of the study covered AI use in journalism. However, adopting AI in the media sector has challenges, including infrastructural limitations, financial constraints, cultural resistance, and ethical considerations, which must be addressed to fully leverage AI's potential (Gbaden et al., 2024; Folayan et al., 2023). Interestingly, while AI has prospects for innovation in journalism, its adoption in other sectors, such as telecommunications and academic libraries in Nigeria, reflects a significantly positive impact on service quality and library services (Akinola, 2023; Busayo et al., 2023). This suggests that the integration and impact of AI may vary across industries within a country.

AI is already transforming the journalism industry and has the potential to dramatically change how news and information are consumed and created (Radcliffe, 2025). Looking at the importance of AI to the media, Bello et al. (2023), Folayan et al. (2023), Udoh et al. (2022a) and Abdel-Latif (2021) believe that AI in news production is beneficial to the media industry. Meanwhile, Gbaden et al. (2024) have written on the potential and challenges of AI use in journalism, while Tolnaiova (2023) has equally discussed AI and ethics in journalism. However, the previous studies did not explain AI usage in media houses in Oyo State, which this study will exemplify. Oyo State was chosen for the study because the first television station in Nigeria and sub-Saharan Africa was established in Oyo State in 1959. Again, the oldest surviving newspaper in Nigeria, The Tribune Newspaper, established in 1949, is located in Oyo State. However, the AI use is influenced by various factors, including technological, organisational, and environmental contexts, and industry-specific dynamics are underexplored in the media industry in Oyo State. To optimise the benefits of AI, Nigerian media houses must navigate the challenges of AI integration with responsible implementation and robust ethical frameworks (Gbaden et al., 2024). Hence, the objectives of the study are to examine the use of AI in media houses in Oyo State, including its use, benefits and challenges, impact on media professionals' work experiences and practices amongst journalism professionals, specifically, radio, print, online and television media.

## Literature review

AI is a complex sociotechnical artefact encompassing natural language processing, neural networks, and machine learning techniques. It results from complex social processes and comprises artefacts, technical systems, knowledge, and practices. Lee and He (2021) and Sharma et al. (2022) agree that AI is a concept that allows a machine to think, learn, imagine, conclude, recognise, and master tasks in the same way as a human being. It includes several technologies, techniques, and concepts that enable computer systems or software to execute tasks, generally called human intelligence (Alade & Daniel, 2023). Its everyday usage has helped humanity to perform their activities with ease. This complexity is evident in the rise of AI institutes and initiatives in both public and private sectors worldwide (Eynon & Young, 2021). According to Okiyi and Nsude (2019), the coinage of AI was created at a conference in America by John McCarthy in 1956 and has since been one of the most revolutionary technologies in various areas, including the media and journalism sectors.

The journalism sector has progressively embraced AI, which has improved several applications. However, human supervision is still necessary owing to the present degree of technological

development or the need for editorial control (Bailer et al., 2022; Abdel-Latif, 2021). AI technologies such as machine learning are used in new media in advertising and television montage to enhance user experience and interactivity. Additionally, they create materials more efficiently and quickly, decreasing costs and increasing production rates (Ye et al., 2023; Cioffi et al., 2020). Furthermore, AI plays a significant role in disseminating news, assisting in gathering information, analysing data, and creating content for ease of duty. However, this raises ethical and legal concerns (Yu, 2023). Paradoxes of intriguing details arise when contemplating the broader ramifications of AI in media. AI, while capable of simulating human intelligence, is distinct from machine learning, which emphasises explicitly acquiring knowledge from data without the need for explicit programming (Lyu, 2020). Furthermore, using AI in media speeds up the process of generating content and requires a reassessment of the ethical and legal structures that have traditionally governed the media industry (Yu, 2023). Moreover, using AI in the media is connected to the broader implementation of AI in other sectors, ranging from wind power to entertainment and industry, highlighting its capacity for significant change (Ashfaq et al., 2022; Alade & Daniel, 2023).

The integration of AI in media houses is a growing interest, with studies indicating varying degrees of adoption and preparedness. For example, Folayan et al. (2023) highlight that while AI can potentially transform news management, most editors in Nigeria need to be adequately prepared for the challenges of integrating AI into their newsrooms. This is corroborated by Gbaden et al. (2024), who emphasise infrastructural limitations and financial constraints as significant barriers to adoption. Conversely, Nsude (2022) suggests that media can play a crucial role in creating awareness of AI's benefits in combating security challenges and recognising AI's relevance of AI in the media sector. Interestingly, while there is an acknowledgement of the transformative potential of AI in Nigerian media practices, the actual use seems limited due to various challenges. Gbaden et al. (2024) and Folayan et al. (2023) discussed the need for robust ethical frameworks and skill development to effectively leverage AI. Moreover, these studies reflect a dynamic interplay between the conceptual understanding of AI and its practical applications within the industry.

Tolnaiova (2023) explores the ethical implications of AI in journalism from an ethical behaviour perspective. It aims to identify the ethical framework as a determinant of journalism's quality, define its critical elements, and highlight the challenges of implementing them in journalistic practice. The author also highlights the need for a new ethical framework for developing AI and its use, defining its values and principles, particularly responsibility and transparency. The study found the potential and difficulty of securing these values through deontological ethical standards in journalistic practice. The author emphasised the importance of investigating the socio-ethical consequences and risks of adopting AI, including its impact on journalism values. She emphasised the need to strengthen all media communication actors' ethical and social responsibilities, as these concerns extend beyond scientific interest. Tolnaiova (2023) explores the ethical implications of AI in journalism from an ethical behaviour perspective. It aims to identify the ethical framework as a determinant of journalism's quality, define its critical elements, and highlight the challenges of implementing them in journalistic practice. The author also highlights the need for a new ethical framework for developing AI and its use, defining its values and principles, particularly responsibility and transparency. The study found the potential and difficulty of securing these values through deontological ethical standards in journalistic practice. The author emphasised the importance of

investigating the socio-ethical consequences and risks of adopting AI, including its impact on journalism values. She emphasised the need to strengthen all media communication actors' ethical and social responsibilities, as these concerns extend beyond scientific interest.

In summary, the current AI use among the media houses in Oyo State is nascent, with clear recognition of its potential and significant challenges that hinder its widespread adoption. The media's role in awareness creation (Nsude, 2022) and the challenges faced by editors (Folayan et al., 2023) suggest that, while the bandwagon effect may be present, actual implementation lags due to infrastructural and financial constraints, as well as a need for skill development and ethical considerations (Gbaden et al., 2024).

An examination of Nigerian academic literature on AI use in Nigerian journalism indicates a positive portrayal, highlighting its capacity to tackle various national issues. Although there is a prevalence of expert perspectives and announcements regarding the use and advancement of AI (Aderoju, 2024b; De-Limasantos & Ceron, 2021), there is a need for more thorough and unbiased reporting. International media sources have brought attention to several challenges related to AI, including intellectual property disputes, biases in AI models, data privacy and security risks, ethical considerations on transparency and accountability, and the environmental and social consequences of AI hardware manufacturing to enhance the comprehension of AI. Aderoju (2024a) notes that media should be used for inclusion and diversity in AI engineering. He explains further that the efforts at promoting the regulation of AI and the ethical use of AI in different industries varied due to the ecological and societal consequences of AI hardware manufacturing and viewpoints.

### Automated journalism

Automated journalism is a semi-automated process of natural language generation, which involves selecting electronic data from private to public databases, assigning the relevance of pre-selected or non-selected characteristics, processing and structuring relevant datasets to a semantic structure, and publishing the final text on an online or offline platform (Yeung and Dodds, 2024). This technology covers various subfields such as natural language processing, robotics, machine learning, expert systems, and computer vision, collaborating to attain intelligent behaviour (Olanrewaju, 2018; Okocha & Ola-Akuma). AI software (Siri, Alexa, ChatGPT, DALL-E, Netflix, Google Assistant, and many more) enables the automatic production of news stories on TV, radio, or in print via computer programs, as well as organising, interpreting, and presenting data in formats that are understandable to humans. This process entails the utilisation of algorithms that sift through extensive datasets, select from a range of predefined article structures, arrange key points, and incorporate specific details, such as names, locations, rankings, figures, and other statistical information (Guanah et al., 2020). The gains of automated journalism include: saving time, cost, precision, accuracy, speed and many more (Haim and Graefe, 2017).

The widespread adoption of AI in journalism gained momentum around 2013 when the AP pioneered the automation of narrative text stories directly from sports data and expanded this practice to corporate earnings reports (Nsude, 2022). News agencies such as Reuters and Agence France-Presse (AFP) began to boost news distribution through algorithms. Simultaneously, media outlets such as the Los Angeles Times introduced their first AI-driven chatbots in news production and distribution (De-Lima-Santos & Ceron). Furthermore, China, Xinhua introduced AI news and automation to expand news coverage and include reporting (De-Lima-Santos & Ceron, 2022). The importance of

AI in news gathering and production cannot be overemphasised. Its significant benefits include increasing the scale, customisation, and personalisation of news reporting through enhanced accuracy and speed (Nsude, 2022).

Automated journalism in Nigerian media organisations can transform the news sector and improve efficiency, precision, and accessibility. Looking at the development of technology and the use of AI, Nigeria cannot afford to be left out of engaging with media technology. With the level of insecurity, high population density, who are mostly youths and the government's wherewithal to digitise the economy, Nigeria cannot be left out of automation in the media industry. Therefore, there is a need to incorporate AI into media and journalistic methods, and review the readiness of Nigerian print and online media editors to include AI in the process of obtaining news. In this regard, Folayan et al. (2023) believe that media professionals should comprehend the readiness level and primary obstacles they encountered when incorporating AI into their news management procedure.

### AI in journalism in Nigeria

Looking at previous studies on AI and media, Udoth et al. (2022a) in their survey study established that journalists who registered under the Nigerian Union of Journalists (NUJ) in Ebonyi state are aware of AI use in news production. Their study shows that AI has come to stay, but with other areas of potential concerns as technical know-how and job displacement, in the adoption of AI in news production. Udoth et al. (2022b) found that most journalists were willing to be trained in AI skills. However, the preference for AI in news reporting is low due to the traditional role of human journalists. The study also revealed fears associated with the acceptance of AI in news production, including mass unemployment, the belief that only experts can operate AI, the ethics of journalism misappropriation, bias by AI creators, and the possibility of feeding AI with incorrect data, resulting in incorrect output. The majority of the respondents were willing to be trained in AI skills.

Sholola et al. (2024) found positive perceptions and awareness of AI in journalistic practices among journalists. The study found that journalists in Kwara State actively incorporate AI tools into their daily work routines and that AI influences ethical journalism. The study recommended that media organisations should foster public awareness about AI's role in journalism; communicate how AI tools enhance accuracy, storytelling, and data analysis in news reporting; and invest in training programmes to upskill journalists on using AI tools effectively. Okocha and Ola-Akuma (2022) studied how journalists perceive robot journalism. Their findings indicate the need for more public knowledge and approval. Olanrewaju (2018) proposed that Nigerian journalists need substantial time to acclimate to AI, a concept corroborated by Nnamdi and Nwanyanwu (2021). Bello et al. (2023) conducted a study that evaluated the degree of knowledge and implementation of AI in journalism. The study revealed a significant level of awareness among journalists but restricted the adoption of AI owing to issues related to professional standards and ethical considerations. Gbaden et al. (2024) highlighted many obstacles to adopting AI, including limitations in infrastructure, budgetary restrictions, cultural opposition, and ethical issues. They emphasise the need for responsible implementation and the establishment of solid ethical frameworks. The studies jointly emphasise AI's capacity to increase journalism's efficiency, enable data-driven reporting, and counteract disinformation. Additionally, they reveal possibilities for enhancing audience engagement, narrative, and cooperation and resolving challenges related to prejudice and ethics. There is empirical evidence on the usage of AI in media houses; nevertheless, looking at the usage, the

benefits, challenges, and experiences of usage need more empirical studies. Therefore, further inquiries are required to identify how AI has revolutionised the media industry and to know the rate of adoption and use among media houses in Oyo State, Nigeria.

### Theoretical framework

This study is anchored on two theoretical underpinnings, which are the Technology Acceptance Model (TAM) and the Innovation Diffusion Theory (IDT). The TAM, proposed by Davis in 1989, elucidates how people adopt and use technology. According to this concept, the main factors driving technology adoption are perceived utility, ease of use, and attitude towards utilising technology (ATU). The outcomes of this research are consistent with the TAM in the following manner (Paul et al. 2020): Perceived Usefulness (PU): Nigerian media professionals regard AI as beneficial for increasing their job performance due to its ability to enhance efficiency and accuracy, aligning with the concept of PU. Perceived Ease of Use (PEU): Media professionals encounter difficulties, such as technical knowledge and prices associated with PEU. This implies that specific individuals may see AI as brutal and may require more training. The research found that the generally favourable attitude towards adopting AI is consistent with the ATU. Intention to Use (ITU) refers to the inclination to use AI in the future.

IDT was introduced by Everett Rogers in 2003. The theory of Innovation Diffusion describes the process by which people and organisations disseminate and embrace new ideas or technologies. This idea asserts that innovation acceptance is influenced by five main elements: relative benefit, compatibility, complexity, trialability, and observability. In the same vein, Nsude (2022) believes that IDT is relevant to AI in many ways, such as relative advantage, which is the perceived benefits of adopting AI, such as enhanced news collection and distribution, aligning with the relative advantage. AI equally enhances compatibility: Technical knowledge and training are crucial for ensuring compatibility, emphasising the need to align with current skills and experiences. The difficulties media workers encounter, such as financial burdens and job relocation, are associated with complexity, which AI can equally solve. The incremental implementation of AI in some media organisations corresponds to the concept of trialability, which can easily be handled by AI. Also, the degree to which the influence of AI on news collection and distribution is visible is in line with observability. Therefore, IDT is appropriate for the study.

The theories of the TAM and IDT explore a deeper comprehension of the elements that impact the adoption of AI in Nigerian media organisations. Media professionals have to adopt technology to enhance their performance of duties.

### Materials and methods

This study employed a qualitative ethnographic design combining focus group discussion (FGD) to explore the use of AI among media houses in Oyo State. Convenient sampling was used to select participants with AI adoption expertise in media houses, ensuring a rich source of information. The selection criteria included at least five years of experience in the media industry, current employment in a media house, and familiarity with AI applications. The media houses used are six. The participants include two media professionals, each from Fresh FM 105.9, Splash FM 105.5, BCOS TV, National Television Authority (NTA), Oyo, The Tribune Newspaper, and The Punch Newspaper. The researchers scheduled virtual Zoom meetings with the participants because they were located in various parts of Ibadan. The researchers obtained the list of the registered and licensed

media stations in Oyo State from the NUJ, and the professionals were selected for the study.

The study included a diverse group of 12 participants: three journalists/reporters (coded J1-J3), two news managers (coded M1-M2), three editors (coded E1-E3), and four IT Staff (coded IT1-IT4). A virtual text-based FGD was conducted for the study from June 19 to 21, 2024, using a secure online platform in two sessions. The choice of text-based FGD method is particularly useful for gathering feedback on sensitive topics or when anonymity is desired (Richard et al, 2021). In this wise, the need for lower cost, easier recruitment, and the ability to accommodate this sensitive topic accounts for the text-based FGD. Of the participants, three were from the print industry, three from online news outlets, four from radio stations, and two from television houses, representing a reasonably even population among media houses. The media focused on are the dominant media in Oyo State. The researchers moderated the discussion and ensured that all the participants had the opportunity to share their experiences and insights.

Data from the FGD were manually coded into Microsoft Word for analysis. The researchers used coding and theme identification techniques to analyse the data, ensuring a systematic and transparent approach. Intercoder reliability was used in fact-checking to ensure the accuracy of findings. The researchers also ensured that the study complied with ethical guidelines and regulations, obtained informed consent from all participants before the study, and ensured confidentiality and anonymity with the codes used to protect their identities.

## Results

Themes were developed before the FGD; therefore, four themes representing the objectives of this study were used to present the findings.

### Theme 1: Use of AI in Media Houses

Data from the FGD revealed that AI is used in various ways in media houses, including content generation and analysis, fact-checking, and social media handle management. Although the frequency of use varied, it was established that it is growing as an integral part of the daily routine for some participants.

M2 explained that "AI is used when it comes to how I generate content for my show, which is almost daily. I have to rely on AI to help with text-based content, like a script to do programmes with... AI-powered tools also suggest headlines for us in the newsroom."

In addition, in explaining how AI helps in content creation, two participants quipped that it aids them in getting "trending topics" and angles to tackle their programs. Others thought that AI generates their blogs: "...it generates my podcast episodes, thumbing content, such as

Participant J3 noted, "We often use AI for content generation and data analysis."

### Participant J1 buttresses

"...For instance, in our newsroom, especially the sports and financial beat guys, they use AI like ChatGPT and even the recent Meta-AI to generate summaries of sports stories and even stock exchanges and forex. These numbers can be difficult to understand, but can be interpreted by AI." (J3, 2024).

Also, a participant quipped: "AI helps to generate breaking news, especially foreign news, faster with a better and simpler sense of readership." Explaining the frequency of usage, J2 noted that she used "most times when I am brain clogged in editing and also behind in my beat" (J2, 2024).

This finding implies that the usage of AI in media houses is growing, and suggests that AI is transforming the media industry, necessitating investment in infrastructure and training, ethical

use, AI literacy development among professionals, and embracing AI as a tool to enhance journalism rather than replacing it.

### Theme 2: Benefits of the Use of AI

For the second theme, data from FGD revealed the benefits of AI usage in media houses. The discussion showed that some participants found AI to improve their work experience, whereas others did not.

For instance, participant IT1, discussing his experience, noted:

"AI has improved my creativity. I can now try new things, especially with sound and edited AIs. If a talent is not around, I can ask AI to do voiceovers using voice cloning or voice-over AI apps like Fliki, Murf AI, Play HT, and Resemble AI".

In the same vein, E3 noted, "Our news stories are now more accurate thanks to AI. This improves the credibility of the news, allowing us to identify biases and errors".

However, participant M2 explained how AI had not improved their work experience: 'I have not seen any major impact from AI on the work that I do. The bulk of the work is still done by hand... Can AI manage other people? No now" (M2, 2024). Similarly, IT2 quipped, "The AI tool we used is difficult to understand and use. They are making things take longer than they should take much more time (IT2, 2024).

This implies that AI provides users with a more comprehensive package of benefits through its ability to improve their efficiency, accuracy, and creativity.

### Theme 3: Challenges

The third theme discussed was participants' opinions of the problems or challenges faced while employing AI. The relevance of this issue lies in its ability to uncover the obstacles participants face when using AI.

During the discussion, it was revealed that some participants had intermittent technical problems, whereas others faced challenges in exploring the features of AI.

While discussing his experience, participant IT1 stated: "The typical problem was that the AI tool would just freeze, much like my phone. Sometimes I have to reboot the computer to get it to function again".

While Participant E2 could not remember any specific challenges, he promptly mentioned the problem of privacy: "I cannot recall any negative incidents involving AI. Undoubtedly, my experience has been exceptional since I began to use it. The only concern for me is the matter of privacy" (E2, 2024).

This finding suggests that technical issues and a lack of expertise may be the main obstacles. It can be inferred that debugging and reaching out to the customer support services of a particular AI brand are practical approaches to resolving these issues.

### Theme 4: Impact on Work Experiences and Practices

The discussion showed AI's impact of AI on work processes, job satisfaction, and motivation. Participants shared changes in their work routines and expectations.

Participant M2, while discussing her experience, noted: "AI will change the future of journalism. We need to adapt to stay relevant." (M2, 2024). In addition, E1 noted that "I anticipate AI to become an essential part of the newsroom shortly. I know Nigeria will be in the driver's seat of AI in journalism when we talk about Africa".

Regarding motivations, J2 noted, "AI has motivated me to learn new skills and stay up-to-date with the latest technologies." Meanwhile, E3 noted that AI gives me a sense of accuracy and fulfilment knowing I am contributing to society's impact."

This finding implies that AI significantly affects work experiences and practices, making participants more efficient and productive. AI changed job satisfaction and motivation for participants, making them more engaged in their work. Nevertheless, obstacles such as technological complexities, insufficient training,

and ethical considerations remain. Concerns about job displacement among media professionals arise when AI assumes control over mundane jobs. E1-3 could not hide their feelings, stating: "This AI simplifies things, but with them, who will now need a desk editor... China has started robot presentation, although we are not there yet, trust Nigeria, we will soon have them here". Responses from the participants point in the same direction that AI may soon drastically reduce human involvement in media content production.

AI is used in print and electronic media for many activities, including data analysis, content development, and social media administration. For example, the visited media organisation uses an AI-driven system to monitor website traffic and assess reader involvement on their online platforms. In contrast, others employ AI to produce content such as sports and financial reports.

AI use in media firms offers advantages, such as heightened efficiency, accuracy, and innovation. AI has also empowered media practitioners to concentrate on more intricate jobs, such as investigative journalism and comprehensive analysis of stories. The influence of AI on the work experience and practices of media professionals is significant. The advent of AI has revolutionised journalists' working methods, resulting in some reporting a sharp sense of efficiency and productivity, though at a very low level. By contrast, others struggle to feel overwhelmed by novel technological advancements. Training and capacity development are necessary to guarantee that media professionals have the necessary skills and knowledge to properly collaborate with AI. Media professionals are not too comfortable with the latest development in AI, with the fear that it could displace them from their earnings, but they are optimistic that the same technology will ease the burden in the course of their duties.

The use of AI in Oyo State media houses is expanding, resulting in enhanced efficiency and heightened precision. Nevertheless, there are ongoing difficulties, and it is crucial to provide training and enhance skills to enable media professionals to properly collaborate with AI.

## Discussion of findings

The research uncovered the growing use of AI in media organisations in Oyo State, including diverse applications such as content development and analysis, fact-checking, and social media administration. The FGD participants said that AI enhanced their work experience, allowing them to concentrate on the more imaginative aspects of their occupations. Therefore, the relative advantage, which is the perceived benefits of adopting AI, such as enhanced news collection and distribution, aligns with the relative advantages of the innovation of diffusion theory. The results of the study revealed that AI is used in print and electronic media for various tasks such as data analysis, content creation, and social media platform management. Indications point to AI revolutionising the media sector, necessitating media organisations to adjust to maintain competitiveness. Therefore, IDT has come to stay about AI use in the media houses explored for the study, as explained by Everett Rogers (2003). Though media have incorporated the TAM, the rate at which AI is adopted is still slow in media houses, and this may be due to the challenges encountered and the scepticism involved in adopting a technology. This further confirms the assertions of Jaiyeola (2023) regarding the slow rate of the Internet that has affected AI adoption in Nigeria. This study also complements the call by Folayan et al. (2023) for the need for enhanced readiness and incorporation of AI into Nigeria's news management. Similarly, Udo et al. (2022a) found that awareness of AI did not translate to its adoption, thus pointing to the slow rate of usage of AI in Nigeria.

The results also reveal that AI utilisation in media houses offers enhanced efficiency, precision, and ingenuity. Participants in the FGD said that AI had expanded their creativity, provided them with opportunities to explore new ideas, and increased the reliability of news sources. Nevertheless, several individuals said that their job experience was not enhanced by AI, attributing this to technical challenges and their limited comprehension of AI technologies. The results from the study also indicated that using AI in media houses provides benefits, such as increased efficiency, precision, and creativity. This finding supports the empirical and extant literature, which is inundated by the potential of AI to increase productivity, accuracy, and other factors (Folayan et al., 2023; Udo et al., 2022a).

The study also identified the difficulties encountered by the participants when using AI, such as technical issues and a shortage of knowledge. FGD participants had sporadic technical difficulties; however, the study revealed that some media professionals encountered challenges with the technical components of AI technologies. Nevertheless, the results indicate that troubleshooting and contacting customer support services can effectively address these difficulties. Furthermore, there were worries about the displacement of jobs and ethical issues that arose, emphasising the need to use AI responsibly. This aligns with the findings of Udo et al. (2022a), who noted the challenges faced by media houses employing AI, such as technical problems and a lack of expertise. This study also supports empirical studies (Sholola et al. 2024 and Udo et al. 2022b), highlighting the need for training and support in AI adoption and usage in media houses.

The results of this study revealed that the influence of AI on work experience and practice is substantial, enhancing workers' efficiency and productivity. Participants in the FGD revealed alterations in their work routines and anticipation of the future. Some individuals have said that AI has motivated them to acquire new skills and remain informed about recent technology. The outcome of the finding is supported by the TAM, which explains how people adopt and use technology as a result of perceived utility, ease of use, and ATU. The study also revealed that AI has enabled media practitioners to focus on more complex tasks, such as investigative journalism and in-depth analysis. This finding is consistent with those (of Sholola et al., 2024; Nusude, 2022; Bello et al., 2023; Folayan et al., 2023), who echoed concerns about job displacement, ethical considerations, thereby emphasising the need for responsible AI use in the media industry. In terms of the theoretical perspective of the TAM proposition of PU, the result suggests that media professionals perceive AI as a valuable technology that enhances their work experience, leading to increased efficiency, accuracy, and creativity. Although they may have faced earlier difficulties with AI tools, the result showed that the media professionals showed a willingness to adapt and learn. This implies a likelihood of continued AI adoption in media houses, driven by the perceived benefits they will get. Also, from the postulations of IDT, of relative advantage. The findings of this study showed that AI has a relative advantage over traditional methods because of its efficiency, accuracy, and creativity. Also, there was evidence of AI's compatibility with the existing media practices as media professionals integrate AI into their daily work routines. Therefore, Nigerian media should embrace a more thorough and unbiased approach to reporting on AI to enhance the public's comprehension of AI and facilitate well-informed judgments on its implementation and utilisation (Nsude, 2022).

## Conclusion and recommendations

This study examined the use of AI among media houses in Oyo State, Nigeria, revealing its potential to improve efficiency, accuracy, and creativity. However, technical difficulties and lack

of expertise have been reported, along with concerns about job displacement and ethical implications. This study suggests that media houses should invest in AI literacy and training programs, ensure responsible AI use, and address ethical implications. While there is momentum towards embracing AI in Nigerian media, the journey towards full integration is still unfolding. Adoption of AI requires strategic investments in infrastructure, training, and ethical guidelines to overcome the existing barriers and ensure a responsible and effective adoption of AI in Oyo State media houses to ultimately enhance the quality and sustainability of journalism in the country.

The study recommends that media houses develop strategies to address technical difficulties, provide support services for staff struggling with AI tools, prioritise investing in AI literacy and training initiatives, promote responsible utilisation of AI, and tackle ethical concerns to exploit its capabilities thoroughly. They should also explore ways to harness AI's potential to enhance journalism's quality and efficiency, such as fact-checking, research, and data analysis. Future studies should investigate the long-term impact of AI on the media industry, establish guidelines and standards for ethical AI use, collaborate with AI developers to create customised tools, establish multidisciplinary teams to develop AI strategies and ensure effective implementation.

## Data availability

No datasets were generated or analysed during the current study.

Received: 24 December 2024; Accepted: 10 November 2025;

Published online: 27 November 2025

## References

- Abdel-Latif M (2021) Adoption of Egyptian press institutions to AI technology in producing and editing news and journalistic topics: Experiences of some foreign newspapers. *Egypt J Public Opin Res* 20(3):1–68
- Aderoju, N (2024) Opportunities to learn AI in journalism. <https://mediacareerng.org/2024/04/09/opportunities-to-learn-ai-in-journalism/>
- Aderoju, N (2024) Need for more balanced reportage about AI by media in Nigeria. <https://mediacareerng.org/2024/06/07/need-for-more-balanced-reportage-about-ai-by-media-in-nigeria/>
- Akinola, SA (2023) Capabilities and apparent implications of AI adoption in Nigerian Academic Libraries. University library at a new stage of social communications development. *Conference Proceedings* (8) 283–289
- Alade MO, Daniel HA (2023) Influence of AI on research among nigerian post-graduate students. *Fuoye J Commun* 7(1):203–214
- Ashfaq R, Nabi MZ, Rohit D (2022) AI and the Indian media industry: the future is now. *J AI Mach Learn Neural Netw* 2(06):24–31. 2799–1172
- Bailer, W, Thallinger, G, Krawarik, V, Schell, K, Ertelthaler, V (2022) AI for the media industry: application potential and automation levels. In: B. Pór Jónsson et al. (Eds.), *MultiMedia Modelling* (pp. MMM 22) *Lect Notes Comput Sci*, 13141. Springer, Cham
- Bello S, Salaudeen A, Umeaku PC (2023) A survey of awareness and adoption of AI journalism among Lagos and Kwara States journalists. *Indonesian J Commun Stud* 16(2):96–105
- Busayo T, Igbekeyi O, Oluwagbade O, Adewara Y, Dagunduro M, Boluwaji Y (2023) AI and service quality of telecommunication firms in Nigeria. *J Econ Financ Account Stud* 5(3):203–214
- Cioffi R, Travaglioni M, Piscitelli G, Petrillo A, De Felice F (2020) AI and machine learning applications in smart production: progress, trends, and directions. *Sustainability* 12(2):492
- De-Lima-Santos MF, Ceron W (2022) AI in news media: current perceptions and future outlook. *J Media* 3:13–26
- Eynon R, Young E (2021) Methodology, legend, and rhetoric: the constructions of AI by academia, industry, and policy groups for lifelong learning. *Sci Technol Hum Values* 46(1):166–191. <https://doi.org/10.1177/0162243920906475>
- Folayan BF, Ajibade O, Onayinka TS, Obi-Okoye A (2023) Attitude of lagos editors towards use of AI in news management. *Inf Knowl Manag* 13(3):1–10
- Gbaden CJ, Gambo S, Shem W (2024) Challenges and prospects of AI in Nigerian journalism practice: a narrative review. *ALSYSTECH J Educ Technol* 2(2):110–124. <https://doi.org/10.58578/alsystech.v2i2.2946>
- Guanah J, Obi I. & Ginakachukwu, A (2020) International Journal of Language and Literary Studies 2(2):45–61
- Haim M, Graefe A (2017) Automated news: better than expected? *Digit Journal* 5(8):1044–1059
- Jaiyeola, T. Slow Internet to affect AI adoption in Nigeria. *The Punch*. [https://punchng.com/slow-internet-to-affect-ai-adoption-in-nigeria/#google\\_vignette](https://punchng.com/slow-internet-to-affect-ai-adoption-in-nigeria/#google_vignette)
- Jamil, S (2020). AI and journalistic practice: the crossroads of obstacles and opportunities for the Pakistani journalists. *Journal Pract*, <https://doi.org/10.1080/17512786.2020.1788412.29>
- Lee M, He G (2021) An empirical analysis of applications of AI algorithms in wind power technology innovation during 1980–2017. *J Clean Prod* 297:126536
- Lyu, S (2020) AI and machine learning. In: *Practical Rust Projects*. Apress, Berkeley, CA, 2020. [https://doi.org/10.1007/978-1-4842-5599-5\\_6](https://doi.org/10.1007/978-1-4842-5599-5_6)
- Mahmood, H (2024) Media production with AI: 7 fields of creativity in the industry. Retrieved from <https://datasciencedojo.com/blog/media-production-with-ai/>
- Nnamdi NC, Nwanyanwu M (2021) Utilisation of AI in journalism in Nigeria. *KIU J Soc Sci* 7(2):205–212
- Noain-Sánchez A (2022) Addressing the impact of artificial intelligence on journalism: the perception of experts, journalists and academics. *Commun Soc* 35(3):105–121
- Nsude, I (2022) AI, the media and security challenges in Nigeria. *Commun Technol Dev* (11). <https://doi.org/10.4000/ctd.6788>
- Okiyi GO, Nsude I (2019) Adopting AI to journalistic practices in Nigeria. *Univ Niger Interdiscip J Commun Stud* 24(1):151–164
- Okocha DO, Ola-Akuma RO (2022) Journalistic metamorphosis: robot journalism adoption in Nigeria in a digital age. *Igwebuikpe: Afr J Arts Humanit* 8(1):255–294. <https://doi.org/10.13140/RG.2.2.29105.45929.25>
- Olanrewaju, B. AI and Nigeria's dearth system, 2018. Retrieved from <http://nigeriannewsdirect.com/96246-2/26>
- Paul, SK, Riaz, S, Das, S (2020) Organisational adoption of AI in supply chain risk management. In: Re-imagining diffusion and adoption of information technology and systems: a continuing conversation: IFIP WG 8.6 International Conference on Transfer and Diffusion of IT, TDIT 2020, Tiruchirappalli, India, December 18–19, 2020, Proceedings, Part I, pp. 10–15. Springer International Publishing
- Radcliffe, D (2025) Journalism in the AI era: Opportunities and challenges in the Global South and emerging economies. Thomson Reuters Foundation. <https://www.trust.org/wp-content/uploads/2025/01/TRF-Insights-Journalism-in-the-AI-Era.pdf>
- Richard B, Sivo SA, Ford RC, Murphy J, Boote DN, Witta E, Orlowski MA (2021) Guide to conducting online focus groups via Reddit. *Int J Qual Methods* 20:1–9
- Sharma, A, Mittal, K, Kumar, S, Sharma, U, Upadhyay, P (2022) Impact of AI and machine learning in the food industry: a survey. In *AI Applications in agriculture and food quality improvement*, pp. 190–215. IGI Global
- Sholola YA, Banjo YO, Saliu-Yusuf MJ, Ogundeyi TS, Ayanunji KAA (2024) Perceived effect of AI on ethical journalism among journalists in Kwara State. *Int J Res Innov Soc Sci* 8(2):2051–2063
- Tolnaiová, SG (2023) Determinants of journalism using the potential of AI in axiological-ethical perspectives. *Market Identity*, 122
- Udoh WA, Nsude I, Oyeleke SA (2022a) Awareness of AI for news production among journalists in Ebonyi State, Nigeria. *Int J Netw Commun Res* 7(1):33–45
- Udoh WA, Nsude I, Oyeleke AS, Ezeali CT (2022b) Perception of journalists in Ebonyi State on AI for news writing. *RUJMASS* 8(2):12–19. <https://doi.org/10.1177/08944393231212251>
- Wilson, J, Jibrin, R (2019) Mitigating hate speech in Nigeria: the possibilities of AI. *Análisi*, 17–30
- Ye C, Ganbat T, Xu L (2023) Research on the application of AI-generated AI technology in new media art. *Highl Sci Eng Technol* 68:313–319. <https://doi.org/10.54097/hset.v68i.12112>
- Yeung, WN and Dodds, T (2024) Automated journalism. In A. Nai, M. Grönning D. Wirz (Eds.), *Elgar encyclopedia of political communication*, pp. 1–7. Edward Elgar Publishing
- Yu, M (2023) Exploring the problems of applying intelligent media in Chinese journalism based on the perspective of AI. In *SHS Web of Conference*, 174:02008. EDP Sciences

## Author contributions

Felix Olajide TALABI conceived the topic, participated in the literature review, data curation and the discussion of the findings. Christiana Shade ADE-JOHNSON participated in writing the literature and data curation. Joseph Moynoluwa TALABI was involved in writing the introduction and proofreading. Pauline Oghenekaro ADENIRAN participated in data curation and analysis. Samson Adedapo BELLO participated in the gathering of data, analysis and proofreading. Stephen Afam KENECHUKWU contributed to the writing of the literature, data analysis and the discussion of findings. Joshua Kayode OKUNADE participated in the data curation and the discussion of

findings. Omowumi Bukola OLASEINDE was involved in writing the literature, analysis and writing the reports. Ayodeji Boluwatife AIYESIMOJU was involved in writing the literature, data curation and discussion of findings.

### Competing interests

The authors declare no competing interests.

### Ethical approval

The authors received ethical approval for the study, with reference number RUN/REC/2023/065, from the Redeemer's University Ethics Committee on 29th December, 2023. We also confirm that the research followed relevant guidelines in the Declaration of Helsinki.

### Informed consent

Informed consent was verbally obtained from all the participants. Consent of the dis- cussants was sought, and the purpose of the study was explained to the participants before the kick-off of the group discussions from June 19 to 21, 2024.

### Additional information

Correspondence and requests for materials should be addressed to Felix Olajide Talabi.

Reprints and permission information is available at <http://www.nature.com/reprints>

**Publisher's note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

© The Author(s) 2025