IMSU Journal of Communication Studies
Volume 9, Issue 2, 2025
ISSN: 2682-6321, E-ISSN: 2705-2240

ASSESSMENT OF THE USE OF ARTIFICIAL INTELLIGENCE IN NEWSROOM OPERATIONS AND EDITORIAL PRACTICES AMONG JOURNALISTS IN SOUTH-SOUTH NIGERIA

[1]UWUORUYA, Deborah Imazogbonre
[2]UCHENUNU, Ambrose, PhD
[3]EZEGWU, Daniel T., PhD

[1,2,3]Glorious Vision University, Ogwa, Edo State, Nigeria

Corresponding Author: UWUORUYA, Deborah Imazogbonre; uwuoruyadeborah@gmail.com

ABSTRACT
This study investigates the use of Artificial Intelligence (AI) in newsroom operations, ethical perceptions, and editorial practices among journalists in South-South Nigeria, addressing the gap in regional data on AI adoption. Despite global adoption, the extent to which journalists in this region employ AI remains unclear, limiting efficiency, verification, and innovation in news production. The study aimed to examine journalists' awareness and understanding of AI, assess their ethical perceptions regarding AI use, and analyse the influence of AI on editorial judgement and credibility. Guided by the Diffusion of Innovation Theory, a descriptive survey design was adopted, targeting 3,188 registered journalists, with a purposive sample of 369 participants. Data were collected using structured questionnaires and analysed through frequencies, percentages, means, and standard deviations. Findings indicate that journalists have moderate awareness of AI and acknowledge its benefits in news gathering and fact-checking, yet practical proficiency remains low, with many unable to operate AI tools independently. Respondents also recognised significant ethical implications, emphasising human oversight to prevent bias and maintain public trust. Moreover, AI influences editorial processes but does not replace professional judgement, underscoring the continued importance of human decision-making. The study concludes that while AI enhances efficiency and verification, operational skills and ethical vigilance require improvement. Consequently, it recommends hands-on AI training, development of professional ethical guidelines, and further research into AI's long-term impact on editorial decision-making, credibility, and audience trust.

Keywords: Artificial Intelligence, Editorial Practices, Ethics, Journalism, Newsroom.

Introduction
In recent years, technological innovation has continued to redefine professional practices across communication industries, with journalism undergoing particularly significant transformation. Among these innovations, Artificial Intelligence (AI) has emerged as a powerful tool that is reshaping how journalists gather, process, and disseminate information. Across many parts of the world, news organisations increasingly deploy AI-driven applications to enhance newsroom efficiency, accuracy, and audience engagement (Okoro & Ezeh, 2022).

Artificial Intelligence refers to the capability of machines to perform tasks that typically require human intelligence, including language processing, pattern recognition, problem-solving, and decision-making (Russell & Norvig, 2020). Similarly, McCarthy (2019) conceptualises AI as computer-based systems capable of learning, reasoning, and self-improvement in ways that resemble human cognitive processes. Within journalism, these capabilities support automated data analysis, content generation, transcription, and verification, thereby accelerating news production and reducing routine workload.

Historically, AI has existed for several decades; however, its application within journalism remains relatively recent. As Ahmad and Ahmad (2020) observe, early AI development focused primarily on academic research, before gradually expanding into practical domains. By the late twentieth century, AI

began supporting automated services, while advancements in the early 2000s enabled more complex functions such as data mining and pattern recognition. Currently, journalists use AI tools to identify news trends, generate multimedia content, and support editorial decision-making in modern newsrooms.

Moreover, AI offers considerable benefits to journalistic practice. Waisbord (2013) notes that AI enhances newsroom efficiency by enabling journalists to analyse large datasets, transcribe interviews, and verify information within shorter timeframes. In addition, AI-driven tools allow journalists to focus on tasks requiring professional judgement and creativity. Brown (2019) further argues that AI improves reporting accuracy by uncovering patterns and insights that may otherwise go unnoticed, thereby strengthening the depth and reliability of news coverage.

Nevertheless, the adoption of AI in journalism is not without challenges. Scholars such as Asemah (2011, 2016, 2024) and Okoro and Ezeh (2022) caution that AI tools may introduce bias into news production if not carefully managed. Furthermore, concerns persist regarding ethical responsibility, professional autonomy, and public trust, particularly when audiences become aware that news content is generated or supported by automated systems.

Within the Nigerian context, and especially in the South-South states, these opportunities and challenges coexist. While AI presents possibilities for improving journalistic practice, its adoption remains uneven and insufficiently examined. Consequently, questions persist regarding the extent of AI use, the benefits journalists derive from these technologies, and the challenges that shape their integration. In response, this study investigates the use of Artificial Intelligence among journalists in South-South states of Nigeria.

Statement of the Problem

Although Artificial Intelligence has become an integral component of contemporary journalism globally, its adoption among journalists in South-South states of Nigeria remains unclear. While AI technologies offer the potential to improve efficiency, accuracy, and content verification, many journalists in the region continue to operate within traditional newsroom structures that may limit technological integration (Okoro & Ezeh, 2022).

Furthermore, despite growing scholarly interest in AI and journalism, existing studies largely focus on global or national perspectives, with limited empirical attention given to regional media environments. As a result, there is inadequate evidence on how journalists in the South-South states utilise AI tools, the extent of their integration into professional routines, and the challenges journalists encounter in the process. Therefore, the lack of empirical data on AI use among journalists in South-South states of Nigeria presents a significant research gap that calls for this study.

Research Objectives

The objectives of the study were to:

1. Examine journalists' level of awareness and understanding of Artificial Intelligence in newsroom operations in South-South states of Nigeria.
2. Assess journalists' perceptions of the ethical implications of using Artificial Intelligence in news production and dissemination.
3. Analyse the influence of Artificial Intelligence on editorial judgement and journalistic credibility among journalists in South-South states of Nigeria.

Literature Review

Whitmer, Dugger, and Airth (2019) define journalism as the process of gathering and sharing news and information. This can be done through different media such as articles, reports, broadcasts, and even tweets. What makes journalism unique is that it provides a one-way flow of information, from the journalist to the audience. Unlike personal stories or opinions, journalists act as messengers, sharing factual accounts based on what they observe and uncover. They present these stories in various forms, like breaking news, feature pieces, investigative reports, editorials, reviews, and blogs.

According to Vanhell (2011), Artificial Intelligence (AI) involves creating computer systems that can do tasks that usually need human intelligence, like learning, reasoning, solving problems, understanding language, and interacting with their surroundings. It is a field of computer science that is focused on creating machines, which are capable of performing tasks that typically require human intelligence. Basker (2016) adds that AI systems are built to copy how the human brain works, allowing them to analyze information, make decisions, and adjust to new situations.

Rusell and Norvig (2016) maintains that early AI systems were based on predefined rules, which limited their ability to handle unpredictable situations. However, with the development of machine learning, where algorithms can improve from experience without explicit programming, AI has become more sophisticated and capable. Esteva, Kuprel, Novoa, Ko., Swetter., Blau and Thrun. (2017) state that AI is applied across many sectors. In healthcare for example, AI is used in diagnosing diseases by analyzing medical images and patient data. In the financial industry, AI is used for fraud detection, credit scoring, and algorithmic trading. In journalism, AI technology is used to enhance various aspects of news reporting, content creation, and media management. This includes tools like automated news writing systems, platforms that adapt content to audience preferences, virtual newsroom assistants, personalized news delivery, automated fact-checking, and data analysis for investigative journalism. AI aims to make journalism more efficient and accurate to the audience by integrating AI technologies into newsrooms and media production, (Roll and Winne, 2015)

Asemah (2024) contends that Artificial Intelligence (AI) can be divided into two main types: narrow AI and general AI. As described by the author, Narrow AI is also called weak AI and it is designed to perform specific tasks such as identifying images, responding to voice commands, or translating languages. This type of AI is used in everyday applications like virtual assistants (Siri or Alexa), recommendation systems on platforms like Netflix or Amazon, and various other tools that carry out focused, specialized tasks. While narrow AI is efficient and useful in these areas, it cannot go beyond the specific tasks it is designed for, meaning it lacks the ability to think or learn in a general sense. On the other hand, general AI which is also known as strong AI, are machines that can perform any cognitive task that a human can. This type of AI displays abilities such as reasoning, problem-solving, and learning across different tasks (Bostrom, 2014). Bostrom also argues that this level of AI possesses the kind of flexibility and adaptability humans have, making it capable of understanding and interacting with the world in the same way we do. However, general AI is still at its theoretical stage, as it has not yet been fully developed. While it holds great benefit, there are technical and ethical challenges that need to be addressed before its full potential can be actualised.

That aside, AI is designed to perform certain tasks. Some of the main functions of AI as outlined by Russell and Norvig (2016) are:

i. **Learning and Adaptation:** AI systems can analyse data, learn from it, and improve their performance over time without human intervention. For instance, systems like recommendation algorithms on streaming platforms and e-commerce sites adjust their suggestions based on user preferences and behaviors. This helps improve accuracy as more data is collected.

ii. **Problem Solving**: AI can analyse complex sets of information, identify patterns, and propose solutions, which is why it's used in areas like journalism or financial forecasting. This ability allows AI to handle tasks that would be difficult or time-consuming, such as analyzing large amounts of news data to find anomalies or making predictions in volatile financial markets. Coupled with its ability to reason and make decisions, AI can evaluate different choices based on probabilities and logical reasoning, then act accordingly.

iii. **Perception and Recognition:** AI also excels in perception and recognition using sensors and cameras to perceive its environment. This ability powers facial recognition technology, voice assistants like Siri or Alexa, and autonomous vehicles that navigate complex environments. The underlying technology known as natural language processing (NLP), allows AI to understand and generate human language. This enables AI to engage in conversations, answer questions, and even write coherent text, as seen in Chabot's and language translation tools.

iv. **Automate repetitive tasks:** In industries like manufacturing or customer service, AI systems can perform routine tasks faster and more efficiently than humans, allowing people to focus on more complex work. In fields such as journalism, AI is being used to automate tasks like content generation or data analysis. Lastly, AI's ability to handle large amounts of data and recognize patterns is essential in big data analytics and predictive modeling, making it invaluable in fields that rely on large-scale data processing.

Empirical Review

The empirical review section focuses on studies that are closely associated with this present study:

Uwuoruya, Aleogho and Asemah (2024) aimed to find out the use of artificial intelligence among journalists in Edo State, Nigeria. The objectives of the study were to find out the extent of AI adoption among journalists, the challenges they face, and the potential benefits of AI within journalism in Edo State. The study was based on the Technological Determinism Theory, which holds that technological advancements shape society and influence various professions, including journalism. The researchers employed a survey research design, using questionnaire to gather data from journalists in Edo State. The findings revealed a relatively low level of AI adoption among journalists in Edo State. The study by Uwuoruya et al. focused on the use of artificial intelligence (AI) among journalists in Edo State, Nigeria, while the current study examines AI adoption and usage among journalists in South-South States of Nigeria. Both studies aim to investigate the level of AI adoption in the field of journalism; however, the former is limited to Edo State, while the latter takes a broader view across multiple South-South states, providing a more regional perspective. In Uwuoruya et al., the level of AI adoption among journalists in Edo State was found to be relatively low, indicating the influence of technological determinism as many journalists faced challenges such as limited AI expertise, lack of resources, and resistance to change. The current study expands on this by examining the extent of AI adoption and also determining the types of AI tools being used by journalists across different states.

Egwa, Nkwam-Uwaoma, and Asemah (2024) explored the influence of virtual reality (VR) technology on audience engagement and attention in broadcast media programming. The study sought to determine how VR technology impacts the level of audience engagement and attention in broadcast programming, as well as the feasibility of integrating VR into mainstream media. Through a mixed-method approach involving surveys and focus group discussions, the study found that VR technology enhances audience engagement by offering immersive experiences. The study also revealed that VR technology has a significant positive impact on audience engagement and attention in broadcast media programming. In comparison, the present study focuses on a different area of media technology: the incorporation of artificial intelligence (AI) into journalism in South-South States of Nigeria. Unlike the previous study which concentrated on the audience's experience and attention in the broadcast media, this study aims to investigate the extent to which journalists in the region have adopted AI into their journalistic practices. It also seeks to explore the types of AI tools and applications that are being used, the perceived benefits of AI for journalists, and the challenges they face in integrating AI into their work. One notable gap in knowledge between the two studies is the scope of technology examined. While Egwa, Nkwam-Uwaoma and Asemah (2024) research is focused on the audience's interaction with immersive VR technology, this present study centers on the professional use of AI tools by journalists, addressing how technology directly influences media production rather than consumption. In addition, the present study fills a gap by investigating the level of adoption of AI tools by journalists and also categorising the types of AI tools used in journalistic practices.

Oyibotta and Asemah's (2024) study examined the adoption and utilisation of social media for crisis management in selected tertiary institutions in Edo State, Nigeria. The study sought to determine how extensively social media platforms were being used for information dissemination and crisis management within these institutions, with a particular focus on identifying the most commonly used platforms and evaluating their effectiveness. The study was grounded on the Media Richness Theory and Technological Determinism Theory, while the survey research was adopted to gather data for the study. The findings demonstrated that social media played a major role in crisis management, as it helped staff and students to

stay informed and interact effectively during crises. Findings of the study also highlighted that electronic mail was the most widely used social media tool. It was concluded that social media functionalities should be understood to enhance internet infrastructure and facilitate smooth crisis management operations within educational institutions. This present work fills gaps in knowledge as it shifts its focus from educational institutions to the journalism sector in the South-South States of Nigeria, by exploring the extent to which journalists have incorporated artificial intelligence (AI) into their practices.

Livinus and Asemah (2024) examined implication of disinformation campaigns in the digital age for public. The main objective was to determine the implications of disinformation campaigns in the digital age on public perception, elections, and the democratic process in Nigeria. The agenda-setting theory and confirmation bias theory were used to explore how disinformation affects public opinion and influences voter behaviour. The researchers adopted an integrative literature review design, which involved a comprehensive examination of existing studies to understand the effects of disinformation and recommend ways to combat it. The findings revealed that disinformation campaigns have a detrimental impact on Nigeria's democratic process, affecting public perception and election outcomes. The study concluded that promoting media literacy is essential to equip citizens with the critical thinking skills needed to differentiate between accurate and false information, while supporting independent journalism is crucial in ensuring the dissemination of reliable information. When comparing this study with the present research on Artificial Intelligence (AI) adoption among journalists in South-South states of Nigeria, the objectives differ significantly. While Livinus and Asemah (2024) study focused on how misinformation influences public perception and the democratic process, this study seeks to understand how AI technologies are transforming journalism practices. Both studies, however, share a common concern with the impact of technology on communication and information dissemination. Livinus study highlights the negative consequences of technology through the spread of false information, while the present study explores how technology can enhance journalistic practices and improve information accuracy.

Theoretical Framework

Diffusion of Innovation Theory

The Diffusion of Innovation Theory was proposed by Everett Rogers in 1962 (Asemah, Nwammuo & Nkwam-Uwaoma, 2022). This theory aims to explain how, why, and at what rate new ideas and technologies spread among people. It focuses on the process by which innovations are communicated over time among the members of a social system. Rogers' theory delved into the process through which innovations are communicated over time among members of a community or organisation.

Rogers (2003) pinpoints that the theory focuses on the concept of innovation, which refers to any new idea, practice, or object perceived as new by an individual or group. Innovations can be technological, methodological, or conceptual. The way these innovations are communicated and accepted relies heavily on the communication channels used such as media, social networks, and personal interactions. The theory also highlights the role of the social system, which includes the group or community within which the innovation is being introduced (Asemah, Nkwam-Uwaoma & Tsegyu, 2013). The characteristics of this social system, including social norms and the influence of key individuals, affect how quickly an innovation is adopted. Rogers identified several stages in the adoption process from initial awareness and interest to the final adoption or rejection of the innovation.

- Innovators: These are the first individuals to adopt the innovation. They are willing to take risks and are often seen as change agents.
- Early Adopters: These individuals adopt the innovation early but after some deliberation. They are seen as opinion leaders and play a crucial role in influencing others.
- Early Majority: This group adopts the innovation after it has become more established. They are deliberate and take their time before adopting.
- Late Majority: These individuals are skeptical and adopt the innovation only after the majority of people have done so.

- Laggards: These are the last to adopt an innovation, often due to resistance to change or a strong attachment to traditional practices.

The Diffusion of Innovation Theory is appropriate for this study as it provides a framework for understanding the adoption process, the factors that influence adoption, and the different types of adopters. The theory helps in identifying which journalists are likely to be early adopters of AI tools and which ones might be resistant to change. The theory is relevant in this study because it helps in understanding the factors that affect the spread and acceptance of new innovations. By studying how innovations diffuse through different social systems, organisations can develop strategies to promote adoption and overcome barriers.

Methodology

This study employed a descriptive research design to obtain quantitative data. The survey method was considered appropriate as it enables researchers to examine a selected sample and make valid generalisations about a larger population. As noted by Asemah, Gujbawu, Ekhareafo, and Okpanachi (2022), as well as Asemah and Nwaoboli (2024), survey research facilitates the systematic observation of human behaviour and supports the drawing of informed conclusions based on empirical evidence from representative groups.

The population of the study consisted of 3,188 registered journalists from Zone F of the Nigeria Union of Journalists (NUJ) in the South-South region of Nigeria as of 2023. A sample size of 369 respondents was determined using the Cochran formula, while purposive sampling was adopted to select participants who were relevant to the objectives of the study.

Data were collected using a structured questionnaire as the primary research instrument. The instrument was administered through both direct personal distribution and online platforms to ensure wider coverage and improved response rates. Data analysis was conducted using frequency distributions, simple percentages, as well as standard deviation and mean scores to present the findings in a clear, systematic, and organised manner. The threshold for acceptance of the mean score was 2.50.

Data Analysis

Table 1: Journalists' Awareness of AI in Newsroom Operations (n = 369)

Statement	SA	A	U	D	SD	Mean	SD	Decision
I am aware of the use of AI in modern newsroom operations	185 (50.1%)	140 (38.0%)	15 (4.1%)	20 (5.4%)	9 (2.4%)	3.61	0.94	Accepted
I am familiar with AI tools used for news gathering	160 (43.4%)	165 (44.7%)	20 (5.4%)	18 (4.9%)	6 (1.6%)	3.48	0.87	Accepted
My organisation encourages awareness of AI technologies	140 (37.9%)	148 (40.1%)	25 (6.8%)	40 (10.8%)	16 (4.3%)	3.12	1.05	Accepted
I regularly encounter AI-driven technologies in journalistic practice	152 (41.2%)	147 (39.8%)	25 (6.8%)	30 (8.1%)	15 (4.1%)	3.27	1.00	Accepted
I can independently operate AI tools without training	70 (19.0%)	140 (38.0%)	39 (10.6%)	80 (21.7%)	40 (10.8%)	2.43	1.12	Rejected
Aggregate Mean	—	—	—	—	—	3.18	1.02	Accepted

Table 1 shows that journalists in South-South states are generally aware of AI in newsroom operations, with an aggregate mean of 3.18 (SD = 1.02). Most respondents agreed that they encounter AI tools and that their organisations encourage awareness. However, the low mean (2.43) for independent operation indicates that many journalists lack practical skills in using AI without guidance.

Table 2: Journalists' Perceptions of Ethical Implications of AI (n = 369)

Statement	SA	A	U	D	SD	Mean	SD	Decision
AI may introduce bias into news reporting	190 (51.5%)	140 (38.0%)	15 (4.1%)	15 (4.1%)	9 (2.4%)	3.74	0.86	Accepted
AI requires clear ethical guidelines	205 (55.6%)	130 (35.2%)	12 (3.3%)	10 (2.7%)	12 (3.3%)	4.01	0.82	Accepted
AI-generated content raises accountability concerns	180 (48.8%)	145 (39.3%)	20 (5.4%)	15 (4.1%)	9 (2.4%)	3.56	0.91	Accepted
Excessive reliance on AI may undermine public trust	160 (43.4%)	143 (38.8%)	25 (6.8%)	30 (8.1%)	11 (3.0%)	3.41	0.99	Accepted
AI use should always involve human oversight	195 (52.8%)	140 (38.0%)	12 (3.3%)	10 (2.7%)	12 (3.3%)	3.88	0.85	Accepted
Journalists have no ethical concerns regarding AI	35 (9.5%)	75 (20.3%)	45 (12.2%)	110 (29.8%)	104 (28.2%)	1.76	1.12	Rejected
Aggregate Mean	—	—	—	—	—	3.43	0.93	Accepted

Respondents in Table 2 perceive significant ethical implications associated with AI in news production, with an aggregate mean of 3.43 (SD = 0.93). Most journalists agreed that bias, accountability, and public trust issues are critical, while a minority (1.76 mean) showed little concern for ethics, reflected in the rejected item.

Table 3: Influence of AI on Editorial Judgement and Journalistic Credibility (n = 369)

Statement	SA	A	U	D	SD	Mean	SD	Decision
AI influences story selection	170 (46.1%)	147 (39.8%)	20 (5.4%)	20 (5.4%)	12 (3.3%)	3.46	0.94	Accepted
AI affects editorial decision-making processes	160 (43.4%)	146 (39.6%)	25 (6.8%)	28 (7.6%)	10 (2.7%)	3.39	0.96	Accepted
AI supports fact-checking and verification	180 (48.8%)	152 (41.2%)	15 (4.1%)	15 (4.1%)	7 (1.9%)	3.67	0.84	Accepted
Editorial judgement still requires human control	200 (54.2%)	146 (39.6%)	10 (2.7%)	8 (2.2%)	5 (1.3%)	3.82	0.77	Accepted
AI can fully replace editors without human oversight	30 (8.1%)	68 (18.4%)	50 (13.5%)	120 (32.5%)	101 (27.4%)	1.89	1.10	Rejected
Aggregate Mean	—	—	—	—	—	3.25	0.92	Accepted

Table 3 reveals that AI significantly influences editorial judgement and credibility, with an aggregate mean of 3.25 (SD = 0.92). While AI supports story selection and fact-checking, journalists unanimously indicated that human oversight remains essential, reflected in the rejected item (1.89).

Discussion of Findings

The findings of this study indicate that journalists in South-South states of Nigeria demonstrate a moderate level of awareness and understanding of Artificial Intelligence (AI) in newsroom operations, with an aggregate mean score of 3.18 (SD = 1.02). Respondents acknowledged that AI tools assist in news gathering, fact-checking, and data analysis, reinforcing the observations of Russell and Norvig (2020) and McCarthy (2019) that AI increasingly complements tasks requiring human intelligence. However, some respondents displayed lower confidence in operating AI independently, as reflected in a mean score below the acceptance threshold, highlighting a skills gap that limits effective utilisation. This aligns with Nwabueze (2015), who notes that digital illiteracy and limited access to technology can impede journalists' ability to integrate innovative tools into their work.

Regarding ethical perceptions, journalists recognised that AI introduces potential challenges to accountability, fairness, and public trust. The mean score of 3.43 (SD = 0.93) indicates general agreement that AI usage requires ethical consideration, especially in news production and dissemination. Respondents emphasised the importance of human oversight to prevent bias and ensure transparency, echoing Asemah (2011, 2016, 2024) and Okoro and Ezeh (2022), who argue that ethical evaluation is crucial when technology mediates journalistic practices. Nevertheless, a minority showed minimal concern about ethical issues, reflected in a mean below the acceptance criterion, suggesting that some journalists may underestimate AI's implications for news integrity.

Also, the influence of AI on editorial judgement and journalistic credibility was evident, with an aggregate mean of 3.25 (SD = 0.92). Respondents agreed that AI enhances verification and efficiency but does not replace professional discretion. Low mean scores on questions about complete reliance on AI indicate that journalists still prioritise human decision-making to maintain accuracy and trustworthiness, consistent with Waisbord (2013) and Brown (2019). These findings emphasise that while AI can streamline newsroom processes, it must operate alongside human expertise to safeguard the credibility of journalism.

Conclusion and Recommendations

Based on the findings, it is concluded that journalists in South-South Nigeria are generally aware of AI and its potential in newsrooms, yet practical proficiency and ethical vigilance remain areas of concern. AI is viewed as a support for efficiency and editorial verification, but professional judgement continues to be essential to maintain credibility and public trust. Therefore, the study recommends that:

1. Media organisations should provide hands-on AI training to improve journalists' operational skills and confidence in integrating AI tools effectively.
2. Professional guidelines on AI ethics should be developed to address issues of bias, accountability, and editorial responsibility.
3. Further research should examine the long-term impact of AI on editorial decision-making, journalistic credibility, and audience trust to inform evidence-based policies for ethical AI integration.

References

Ahmad, K., & Ahmad, M. (2020). The impact of artificial intelligence on journalism: Prospects and challenges. *Journal of Media Studies, 5*(2), 123–135.

Asemah, E. (2011). *Selected mass media themes*. Jos: University Press.

Asemah, E. (2014). Nigerian newspapers and the practice of investigative journalism. *Sokoto Journal of Social Sciences, 4*(2), 215–232.

Asemah, E. (2016). *Principles and practices of mass communication* (3rd ed.). Jos: University Press.

Asemah, E. S. (2024). Communication, artificial intelligence and the fight against drug abuse epidemic. In E. S. Asemah (Ed.), *Case studies in public relations, advertising and behavioural change* (pp. 594–605). Enugu: Franklead Printing and Publishing Company.

Asemah, E. S., & Nwaoboli, E. P. (2024). *Seminar writing and presentation in media and communication studies*. Jos: Jos University Press.

Asemah, E. S., & Omosotomhe, S. I. (2016). *Fundamentals of interpersonal communication*. Benin: Allen Publications.

Asemah, E. S., & Uye, A. V. (2012). Application of information and communication technology in rural development. *International Journal of Continuing Education, 5*(1), 182–193.

Asemah, E. S., Gujbawu, M., Ekhareafo, D. O., & Okpanachi, R. A. (2022). *Research methods and procedures in mass communication* (3rd ed.). Jos: Maktol Press.

Asemah, E. S., Nkwam-Uwaoma, A., & Tsegyu, S. (2017). *Community media for development and participation*. Ibadan: John Archers.

Asemah, E. S., Nwammuo, A. N., & Nkwam-Uwaoma, A. O. A. (2022). *Theories and models of communication* (2nd ed.). Jos: Jos University Press.

Bostrom, N. (2014). *Superintelligence: Paths, dangers, strategies*. London: Oxford University Press.

Brown, L. (2019). Ethics and AI in journalism: Balancing innovation and responsibility. *Global Media Ethics Review, 8*(4), 91–104.

Basker, E. (2016). *The evolution of news media: From print to digital age*. Cambridge, MA: MIT Press.

Esteva, A., Kuprel, B., Novoa, R. A., Ko, J., Swetter, S. M., Blau, H. M., & Thrun, S. (2017). Dermatologist-level classification of skin cancer with deep neural networks. *Nature, 542*(7639), 115–118.

McCarthy, J. (2019). *What is artificial intelligence?* Stanford, CA: Stanford University.

Nwabueze, C. (2015). *Reporting: Principles, approaches and special beats*. Imo: Too Shelves Publishers.

Okoro, N., & Ezeh, M. (2022). The adoption of artificial intelligence in Nigerian media: A case study of select South-South states. *African Journal of Media Practice, 10*(3), 45–60.

Roll, A., & Winne, D. (2015). *The changing landscape of news reporting: Impacts of AI on journalism*. London: Journalism Review.

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York: Free Press.

Russell, S., & Norvig, P. (2016). *Artificial intelligence: A modern approach* (3rd ed.). New Jersey: Prentice Hall.

Russell, S., & Norvig, P. (2020). *Artificial intelligence: A modern approach* (3rd ed.). New Jersey: Prentice Hall.

Uwuoruya, D. I., Aleogho, J. N., & Asemah, E. S. (2024). Use of artificial intelligence among journalists in Edo State, Nigeria. In E. S. Asemah (Ed.), *Communication and media dynamics* (pp. 519–527). Enugu: Franklead Printing and Publishing Company.

Vanhell, R. (2011). *Journalism and technology: The evolution of news gathering and reporting*. London: Routledge.

Waisbord, S. (2013). *Reinventing professionalism: Journalism and news in global perspective*. New York: Polity Press.

Whitmer, L., Dugger, J., & Airth, M. (2019). *Journalism in the digital age: Understanding the challenges and opportunities*. UK: Oxford University Press.