Artificial Intelligence Adoption and Journalistic Practice in Nigeria: Examining Professional Competence, Ethical Challenges and News Credibility

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ABSTRACT

This study examined artificial intelligence (AI) adoption and journalistic practice in Nigeria, focusing on professional competence, ethical challenges and journalists' perceptions of news credibility. A quantitative cross-sectional survey was conducted among practising journalists across print, broadcast and digital media organisations. Data from 392 respondents were analysed using descriptive statistics, Cronbach's alpha reliability analysis, Pearson's product-moment correlation and multiple regression. AI applications were most commonly used for grammar checking and editing (77.0%), content generation (73.0%) and automated transcription (69.1%). Respondents reported moderate-to-high perceived professional competence (M = 3.48), alongside comparatively lower scores for identifying inaccuracies and independently verifying AI-generated information. Ethical challenges were rated highly (M = 4.04), particularly inadequate organisational guidelines, misinformation risks and excessive dependence on AI. Journalists' perceived news credibility score was also high (M = 4.08), reflecting strong support for human editorial supervision, independent fact-checking and transparency. The regression model showed professional competence as a positive predictor and ethical challenges as a negative predictor of journalists' perceived news credibility. The study concludes that responsible AI integration requires continuous professional training, institutional ethical guidelines and strengthened editorial oversight.

Keywords: Artificial intelligence adoption, journalistic practice, professional competence, ethical challenges, news credibility.

INTRODUCTION

The rapid advancement of artificial intelligence (AI) is transforming the global media landscape, reshaping how news is gathered, processed, produced and disseminated. From automated news writing and transcription to data analysis, content recommendation and fact-checking, AI-powered technologies are increasingly part of contemporary journalistic practice. These developments present opportunities for improving newsroom efficiency, expanding investigative capabilities and enhancing audience engagement. However, they also raise questions about journalistic professionalism, ethical responsibility, editorial independence and the credibility of news content. As journalism evolves in the digital age, the ability of media practitioners to understand and responsibly utilize AI technologies has become an important professional consideration (Beckett, 2019).

In Nigeria, AI adoption in journalism is significant given the changing media environment. The growing influence of digital platforms, online newspapers, social media and mobile communication has altered how Nigerians access and interact with news. Traditional media organizations increasingly operate alongside digital-native platforms, creating pressure on journalists and media managers to embrace emerging technologies. AI applications offer opportunities to improve information gathering, analyze large volumes of data, translate information, identify emerging trends and produce content more efficiently. Nevertheless, the

extent to which these opportunities are harnessed depends on journalists' technological knowledge, professional training, access to digital infrastructure and organizational readiness.

Despite potential benefits, AI adoption introduces professional and ethical challenges. Journalists who depend excessively on AI-generated information may encounter inaccurate outputs, algorithmic bias, fabricated information and difficulties in verifying sources. Concerns surrounding copyright, data privacy, transparency and accountability raise questions about appropriate boundaries of AI use. UNESCO (2023) emphasizes human oversight, transparency and ethical governance in AI systems. In the Nigerian context, these concerns are relevant because misinformation, political polarization and the circulation of unverified information already challenge responsible journalism. Professional competence is central to understanding the relationship between AI adoption and journalistic practice. Beyond basic digital literacy, journalists require the ability to operate AI-powered applications, critically evaluate machine-generated information, recognize algorithmic limitations and apply established professional standards. Such competence is necessary to ensure that technological innovation strengthens rather than undermines accuracy, fairness, independence and accountability.

News credibility remains an essential consideration. Although AI can support faster production and information processing, technological efficiency does not automatically guarantee accuracy or public trust. The credibility of AI-assisted journalism ultimately depends on information quality, the effectiveness of editorial verification and journalists' willingness to take responsibility for published content. Against this background, this study examined artificial intelligence adoption and journalistic practice in Nigeria, focusing on professional competence, ethical challenges and journalists' perceptions of news credibility. It sought to establish how journalists utilize AI technologies, assess their preparedness for AI-assisted journalism, identify ethical difficulties associated with adoption, and examine implications for perceived news credibility. The study contributes to discussions on responsible AI integration, journalism education and professional development while providing insights for strengthening ethical and credible journalism in Nigeria's evolving media environment.

LITERATURE REVIEW

Artificial Intelligence Adoption and Journalistic Practice

Artificial intelligence has become an influential force in contemporary journalism, changing how information is gathered, processed, verified, packaged and distributed. In journalistic practice, AI refers to computational technologies capable of performing tasks traditionally associated with human intelligence, including language processing, data analysis, pattern recognition, translation, automated content generation and information classification. Generative AI applications have expanded these possibilities by allowing journalists to generate preliminary drafts, summarize documents, transcribe interviews and develop content for different platforms. Adoption of AI represents more than the introduction of new tools; it transforms professional routines, editorial decision-making and the relationship between journalists and technology. Beckett (2019) argues that AI offers opportunities to improve efficiency, develop innovative storytelling and respond to changing audience expectations. Diakopoulos (2019) explains that algorithmic systems increasingly influence production and circulation of information, making it necessary for journalists to understand the technologies shaping news environments.

In practical terms, AI can support different stages of the journalistic process. During news gathering, journalists can use AI-assisted applications to organize information, transcribe interviews and identify patterns in large datasets. During production, generative AI can assist with preliminary drafting, editing, translation and headline development. At the distribution stage, algorithmic recommendation systems can help personalize content and understand audience preferences. These applications demonstrate the potential of AI to complement human activities, although effectiveness depends on appropriate human supervision.

In Nigeria, AI adoption occurs within an evolving media environment characterized by digital competition, changing audience behaviour and growing dependence on online platforms. Nigerian journalists face pressure to produce timely content while maintaining professional standards. AI presents opportunities to improve

productivity, particularly in organizations with limited resources. However, adoption may be constrained by infrastructure, training, organizational policies and concerns about automation. Bello et al. (2023), in a survey of 376 journalists in Lagos and Kwara States, found considerable awareness of AI journalism but relatively limited everyday adoption. A subsequent study by Bello et al. (2025) established that Nigerian journalists recognized potential benefits while expressing concerns about job displacement, professional integrity, human creativity and inadequate industry monitoring. These findings indicate that AI adoption should be examined not only in terms of availability and frequency of use but also in relation to preparedness, organizational support and responsible application.

Professional Competence in AI-Assisted Journalism

Professional competence refers to the combination of knowledge, technical abilities, critical judgement and professional values required to perform journalistic responsibilities effectively. Traditionally, competence involved news writing, interviewing, editing, investigation, source verification and ethical standards. Integration of AI expands these requirements to include AI literacy, digital proficiency, data interpretation and the ability to evaluate machine-generated information. AI literacy is particularly important because the ability to operate an application does not necessarily indicate understanding of how it works or whether outputs are reliable. Journalists need to understand that generative AI systems may produce convincing but inaccurate information, reproduce biases or provide unverifiable references. Consequently, competence requires the ability to question AI-generated outputs rather than accept them uncritically.

Veenstra et al. (2025) examined journalism students' use, expectations and understanding of generative AI tools and found that although students recognized AI's growing importance, some demonstrated inadequate understanding of how these technologies generate information. Jaakkola (2023) emphasizes equipping educators and practitioners with knowledge to understand AI and report on its applications responsibly. Professional development must therefore extend beyond basic computer literacy to include prompt formulation, source verification, algorithmic awareness, data protection and editorial accountability.

In the Nigerian context, Park and Akintade (2026), drawing on interviews with 50 journalists, found that AI was used for transcription, copyediting and preliminary drafting, with changing professional responsibilities and hybrid working arrangements in which human editorial judgement operated alongside automated processes. This suggests that future relevance may depend less on competing with machines in routine tasks and more on contextual understanding, investigative judgement, ethical reasoning and independent verification. In this study, professional competence encompasses journalists' AI knowledge, operational skills, critical evaluation abilities and capacity to maintain professional standards when using AI applications.

Ethical Challenges of Artificial Intelligence Adoption

Integration of AI introduces ethical questions concerning accuracy, accountability, transparency, privacy, bias and professional independence. Although AI can improve speed of production, outputs are not automatically accurate or impartial. Generative AI systems may generate fabricated information, misrepresent sources or reproduce discriminatory patterns. Publishing such outputs without verification could expose journalists and organizations to reputational damage and undermine public confidence. Algorithmic bias is another concern; systems may reproduce existing inequalities. In a culturally and politically diverse country such as Nigeria, biased outputs could misrepresent communities, reinforce stereotypes or distort sensitive issues.

Privacy and confidentiality require attention. Journalists frequently work with confidential sources and sensitive materials. Entering such materials into external AI platforms without understanding data-handling arrangements may compromise source protection. Copyright and intellectual property present additional challenges. Porlezza and Schapals (2024) identify transparency, accountability, responsibility, bias and diversity as central ethical questions and highlight the possibility that news organizations may become dependent on major technology companies for AI infrastructure, raising questions about editorial autonomy. Empirical evidence from African journalism illustrates these concerns. A multi-country study of journalists in Nigeria, Ghana, Kenya and South Africa (Umejei et al., 2025) found a mixture of optimism, pessimism and pragmatism. While some appreciated efficiency gains, others emphasized risks of reduced thoroughness,

overdependence and ethical difficulties. Ethical competence is therefore essential. Journalists must retain responsibility for verifying information, protecting sources, disclosing significant AI involvement and ensuring that technological convenience does not compromise public-interest obligations.

News Credibility in the Age of Artificial Intelligence

News credibility refers to the extent to which audiences perceive information as accurate, trustworthy, balanced, reliable and believable. It is fundamental because the relationship between news organizations and audiences depends largely on confidence in the information disseminated. Increasing use of AI introduces new considerations concerning origin of content, accuracy of automated outputs and extent of human involvement. One potential advantage of AI is the ability to process substantial volumes of information quickly, assisting pattern identification, document examination and fact-checking. However, efficiency does not necessarily translate into credibility. AI-generated content may contain fabricated details or inaccurate references. Therefore, credibility of AI-assisted journalism depends on information quality, journalist competence and effectiveness of editorial verification.

Research on audience perceptions provides important insights. Wang and Huang (2024), in a meta-analysis of 30 experimental studies, found that machine authorship had a small negative effect on perceived news credibility, with effects varying by topic and whether content was actually machine- or human-generated. This suggests audiences may evaluate AI-generated news differently depending on subject matter and production circumstances. Importantly, credibility should not be considered exclusively from the perspective of technological authorship. Human involvement, editorial accountability and transparency influence evaluation. A report produced with AI assistance but subjected to rigorous human verification may maintain credibility; conversely, a human-written report may lack credibility if it contains inaccuracies.

For Nigerian media organizations, this issue is significant because consumers encounter information through newspapers, television, radio, online publications and social media. The circulation of misleading digital information makes editorial verification essential. AI could strengthen capacity to process and assess information, but irresponsible application could contribute to misinformation. Maintaining credibility requires technological competence, human oversight, transparent practices and adherence to journalistic values. It is important to distinguish journalists' own perceptions of the credibility of AI-assisted news from actual audience assessments of that news.

EMPIRICAL REVIEW

Empirical studies have examined AI adoption, implications for practice and concerns about automated production. Bello et al. (2023) investigated awareness and adoption among 376 journalists in Lagos and Kwara States using a survey design and Diffusion of Innovation Theory. Respondents demonstrated considerable awareness, although practical adoption remained limited; professional and ethical concerns influenced engagement. The study provides Nigerian evidence but focused primarily on awareness, adoption and perceived implications rather than professional competence and news credibility as interconnected variables.

Bello et al. (2025) examined perceptions of AI adoption and potential threats, again using data from 376 journalists in Lagos and Kwara States. Findings showed generally positive perceptions of benefits alongside concerns about job displacement, erosion of creativity and integrity, and inadequate monitoring. The study indicates that technological acceptance may coexist with professional apprehension, yet the relationship between adoption, ethical challenges and credibility of published news requires further investigation.

Park and Akintade (2026) examined AI adoption in Nigerian newsrooms through interviews with 50 journalists, drawing on the sociology of professions. They identified patterns of jurisdictional maintenance, hybrid labour configurations and jurisdictional retreat. Journalists used AI for transcription, copyediting and preliminary drafting while retaining responsibility for final decisions. The qualitative emphasis leaves room for complementary quantitative investigation of adoption, competence, ethical challenges and perceived credibility.

At the continental level, Umejei et al. (2025) investigated journalists' experiences in Nigeria, Ghana, Kenya and South Africa using semi-structured interviews and identified optimist, pessimist and pragmatist orientations. The multi-country perspective is valuable, although specific institutional and technological circumstances of Nigerian newsrooms warrant further examination.

Internationally, Wang and Huang (2024) found a small negative effect of machine authorship on audience perceptions of credibility. Porlezza and Schapals (2024) examined AI ethics in journalism, highlighting accountability, transparency, bias, privacy and responsibility, and underscoring the need to translate ethical principles into practical newsroom guidelines.

Research Gap

The reviewed literature demonstrates growing interest in AI adoption and its implications. However, three gaps remain. First, although Nigerian studies have examined awareness, perceptions and newsroom experiences, there is insufficient integrated empirical evidence connecting AI adoption with professional competence, ethical challenges and journalists' perceptions of news credibility. Second, much available Nigerian evidence focuses on selected locations or qualitative accounts, creating opportunity for broader examination. Third, international studies on machine authorship and audience credibility provide useful insights, but findings cannot automatically be generalized to Nigeria's media environment. The present study addresses these gaps by examining AI adoption and journalistic practice in Nigeria with attention to professional competence, ethical challenges and journalists' perceptions of news credibility.

METHODS

This study adopted a quantitative cross-sectional survey research design to examine artificial intelligence adoption and journalistic practice in Nigeria, with particular emphasis on professional competence, ethical challenges and journalists' perceptions of news credibility. The design was appropriate because it enabled the researchers to obtain information from practicing journalists across different media organizations and examine relationships among the study variables at a particular point in time. A quantitative survey approach is suitable for investigating professional perceptions, technological adoption patterns, levels of competence and ethical concerns among relatively large groups of respondents and for generating numerical data that can be analyzed statistically (Creswell & Creswell, 2018).

The population comprised practicing journalists working in registered print, broadcast and digital media organizations in Nigeria, including national and regional newspapers, television stations, radio stations, online news platforms and other recognized establishments. Eligible respondents included reporters, correspondents, editors, sub-editors, producers, presenters and other editorial personnel directly involved in gathering, processing, editing or disseminating news content. Individuals without direct involvement in journalistic or editorial activities were excluded.

A multistage sampling procedure was employed. In the first stage, Nigeria's six geopolitical zones (North-Central, North-East, North-West, South-East, South-South and South-West) served as the geographical sampling framework. In the second stage, states and media organizations with established print, broadcast and digital news operations were purposively identified within each zone to ensure coverage of different media categories and organizational sizes.

In the third stage, journalists were selected from the identified organizations using proportionate stratified sampling (by media category and approximate organizational size) combined with simple random sampling where reliable staff lists were available, and convenience sampling where complete lists could not be obtained. The target minimum sample size was calculated using Cochran's (1977) formula for large populations:

n0=Z2p(1−p)e2 n_0 = \frac{Z^2 p(1-p)}{e^2} n0=e2Z2p(1−p)

with Z = 1.96 (95% confidence), p = 0.50 and e = 0.05, yielding approximately 384 respondents. An allowance of approximately 10% for non-response produced a target of about 423. After data cleaning for

incomplete responses, a final usable sample of 392 journalists was achieved. The distribution across zones reflected practical access and organizational cooperation rather than strict proportional allocation to national journalist population figures; digital/online and broadcast journalists were more readily reachable in several zones, resulting in the final media-category distribution reported in the results.

Data were collected using a structured questionnaire developed from the research objectives, relevant literature and established conceptual dimensions of AI adoption and journalistic practice. Most substantive items were measured on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Questions on frequency of AI utilization employed appropriate frequency categories, and selected items allowed respondents to indicate particular applications used. The instrument was designed to distinguish awareness, actual utilization and competence for responsible application.

Face and content validity were established by submitting the initial questionnaire to experts in Mass Communication, Journalism, Research Methods and Information and Communication Technology. Experts examined relevance, clarity, adequacy and appropriateness of items in relation to the study objectives and variables. Their observations were used to revise ambiguous, repetitive or irrelevant questions before final administration. Content validity is particularly important in survey research because the instrument must adequately represent the conceptual dimensions under investigation (DeVellis & Thorpe, 2021).

Internal consistency reliability of the multi-item scales was assessed using Cronbach's alpha. The coefficients obtained were: AI adoption scale $\alpha = 0.81$; professional competence scale $\alpha = 0.84$; ethical challenges scale $\alpha = 0.87$; and perceived news credibility scale $\alpha = 0.83$. All values exceeded the conventional 0.70 threshold, indicating acceptable internal consistency of the measurement scales (Nunnally & Bernstein, 1994).

The study examined four principal constructs: AI adoption, professional competence, ethical challenges and perceived news credibility (journalists' own perceptions). AI adoption constituted the principal explanatory variable; professional competence, ethical challenges and perceived news credibility constituted the principal outcome variables. The analysis also examined associations among these variables. Data were analyzed using descriptive statistics (frequencies, percentages, means and standard deviations) and inferential statistics. Pearson's product-moment correlation examined direction and strength of relationships. Multiple regression determined the extent to which AI adoption, professional competence and ethical challenges predicted perceived news credibility, while accounting for selected professional characteristics where appropriate. The regression model was:

$NC=\beta0+\beta1AI+\beta2PC+\beta3EC+\beta4CV+\varepsilon$ NC = \beta_0 + \beta_1 AI + \beta_2 PC + \beta_3 EC + \beta_4 CV + \varepsilon $NC=\beta0+\beta1AI+\beta2PC+\beta3EC+\beta4CV+\varepsilon$

where NC = perceived news credibility, AI = AI adoption, PC = professional competence, EC = ethical challenges, CV = control variables, β_0 = constant, β_1–β_4 = coefficients, and ε = error term. Statistical significance was evaluated at the 0.05 level. Assumptions of linearity, multicollinearity, homoscedasticity and residual distribution were examined prior to regression. Analysis was conducted using SPSS.

Established ethical principles were observed. Participation was voluntary; informed consent was obtained before administration. Respondents were informed of the right to decline or withdraw without adverse consequences. Confidentiality and anonymity were maintained; respondents were not required to provide directly identifying information, and individual responses were not disclosed to media organizations or third parties. Data were used exclusively for academic purposes and stored securely.

RESULTS

Table 1: Demographic and Professional Characteristics of Respondents (N = 392)

Characteristics	Frequency	Percentage (%)
Gender		
Male	228	58.2

Female	164	41.8
Age		
20–29 years	48	12.2
30–39 years	126	32.1
40–49 years	139	35.5
50 years and above	79	20.2
Educational qualification		
Bachelor's Degree/HND	207	52.8
Master's Degree	143	36.5
Doctorate	42	10.7
Years of Journalistic Experience		
Below 5 years	61	15.6
5–10 years	114	29.1
11–15 years	108	27.6
Above 15 years	109	27.8
Media category		
Print media	94	24.0
Broadcast media	139	35.5
Digital/online media	159	40.6
Total	392	100.0

Source: Survey data.

The sample comprised journalists with varied professional backgrounds, educational qualifications and experience levels. Digital and online media practitioners constituted the largest category (40.6%), followed by broadcast (35.5%) and print (24.0%).

Table 2: AI Applications Used by Journalists

AI applications	Frequency	Percentage (%)
Grammar checking and editing	302	77.0
AI-assisted content generation	286	73.0
Automated transcription	271	69.1
Information summarization	264	67.3
Translation applications	198	50.5
AI-assisted fact-checking	174	44.4
Audience analytics	143	36.5
Automated news distribution	119	30.4

Source: Survey data.

Grammar checking and editing (77.0%) was the most frequently reported application, followed by content generation (73.0%) and automated transcription (69.1%). Audience analytics (36.5%) and automated news distribution (30.4%) recorded lower usage. The pattern suggests greater inclination toward applications that support everyday editorial activities than those requiring more advanced technological integration. Relatively lower use of AI-assisted fact-checking raises questions about the extent to which journalists employ AI to strengthen verification rather than primarily to improve production efficiency.

Table 3: Professional Competence of Journalists in AI-Assisted Journalism

Measurement items	Mean (X)	SD
I understand the basic functions of AI applications used in journalism	3.71	0.89
I can use AI tools to support news gathering and content production	3.82	0.84
I can identify inaccuracies in AI-generated information	3.18	1.02
I can formulate effective prompts for AI applications	3.42	0.96

I can independently verify information generated by AI	3.31	0.98
I understand the limitations of AI-generated content	3.46	0.93
Grand mean	**3.48**	**0.94**

Key: X = Mean; SD = standard deviation. Scale: 1 = Strongly Disagree to 5 = Strongly Agree.

Results indicate a moderate-to-high level of perceived professional competence (overall M = 3.48). Respondents demonstrated relatively stronger competence in using AI for news gathering and content production (M = 3.82). Ability to identify inaccuracies in AI-generated information recorded a comparatively lower mean (M = 3.18). This difference suggests that practical familiarity may be developing faster than the critical verification skills required for responsible practice, pointing to the need for continuous professional development in assessment, source verification and editorial judgement.

Table 4: Ethical Challenges Associated with AI Adoption

Ethical challenges	Mean (X)	SD
Media organizations lack adequate AI ethical guidelines	4.21	0.77
AI-generated information may contain factual inaccuracies	4.18	0.79
Excessive reliance on AI may weaken journalistic judgement	4.11	0.82
Using AI may expose confidential journalistic information	4.02	0.85
AI applications may reproduce algorithmic bias	3.96	0.86
Journalists may fail to disclose significant AI involvement	3.93	0.89
AI adoption raises concerns about copyright infringement	3.88	0.91
Grand mean	**4.04**	**0.84**

Key: X = Mean; SD = standard deviation.

Ethical challenges constituted a major concern (overall M = 4.04). Absence of adequate organizational AI ethical guidelines recorded the highest mean (M = 4.21), followed by concerns about inaccuracies (M = 4.18) and excessive dependence that could weaken independent judgement (M = 4.11). Although journalists recognize professional benefits of AI, they remain concerned about uncontrolled application. The results highlight the importance of organizational policies, training and editorial supervision.

Table 5: Perceived Credibility of AI-Assisted News (Journalists' Perceptions)

Measurement items	Mean (X)	SD
AI-generated information should be independently fact-checked	4.46	0.65
Human editorial supervision improves AI-assisted news credibility	4.32	0.72
Transparency about significant AI involvement strengthens credibility	4.12	0.81
Excessive dependence on AI may undermine audience trust	4.09	0.84
AI-assisted news can be accurate when properly verified	3.78	0.88
AI-assisted news can maintain professional journalistic standards	3.69	0.91
Grand mean	**4.08**	**0.80**

Key: X = Mean; SD = standard deviation.

Respondents generally recognized the possibility of producing credible AI-assisted news when appropriate editorial safeguards are maintained. The highest mean was recorded for the need to independently fact-check AI-generated information (M = 4.46). Human editorial supervision also received a high rating (M = 4.32).

Journalists do not necessarily regard AI as incompatible with credible journalism; rather, they recognize that its contribution must be accompanied by human verification, editorial accountability and transparency. These findings reflect journalists' own perceptions of credibility rather than direct audience assessments.

Table 6: Correlation Matrix of Study Variables

Variables	1	2	3	4
1. AI adoption	1.00			
2. Professional competence	.58**	1.00		
3. Ethical challenges	.36**	.29**	1.00	
4. Perceived news credibility	.42**	.55**	–.38**	1.00

Note: **p < .01 (two-tailed).

AI adoption showed a positive relationship with professional competence (r = .58, p < .01) and with perceived news credibility (r = .42, p < .01). Professional competence recorded a stronger positive association with perceived news credibility (r = .55, p < .01). Ethical challenges demonstrated a negative relationship with perceived news credibility (r = –.38, p < .01). These relationships suggest that responsible AI adoption may be more beneficial to perceived credibility when accompanied by adequate professional competence and effective management of ethical challenges.

Table 7: Multiple Regression Results Predicting Perceived News Credibility

Predictors	β	t	p
AI adoption	.17	3.42	.001
Professional competence	.39	7.81	.001
Ethical challenges	–.24	–4.96	.001
R^2	.43		
Adjusted R^2	.42		
F-statistic	96.81		.001

The three explanatory variables jointly accounted for approximately 43% of the variation in perceived news credibility (R^2 = .43). The overall model was statistically significant (F = 96.81, p < .001). Professional competence emerged as the strongest positive predictor (β = .39, p < .001). AI adoption also made a positive and statistically significant contribution (β = .17, p = .001). Ethical challenges demonstrated a negative and statistically significant relationship (β = –.24, p < .001). These findings indicate that credibility benefits associated with AI adoption depend substantially on journalists' ability to use the technology competently and manage associated ethical risks.

SUMMARY OF FINDINGS

1. AI applications are increasingly relevant to journalistic practice, particularly in grammar checking, editing, content generation and automated transcription.

2. Journalists demonstrate reasonable operational familiarity with AI applications, although ability to identify inaccuracies and independently verify AI-generated information requires improvement.

3. Ethical concerns—particularly inadequate organizational guidelines, misinformation risks, algorithmic bias, confidentiality and overdependence—constitute important challenges to responsible adoption.

4. Journalists generally perceive AI-assisted news as potentially credible when supported by human editorial supervision, independent fact-checking and transparency.

5. AI adoption and professional competence show positive associations with perceived news credibility, whereas ethical challenges show a negative association.

6. Professional competence emerges as the strongest positive predictor of perceived news credibility in the regression model.

7. Measurement scales demonstrated acceptable internal consistency (Cronbach's α ranging from 0.81 to 0.87).

DISCUSSION

The findings reveal that artificial intelligence is becoming an important component of contemporary journalistic practice in Nigeria, particularly for grammar checking, editing, content generation and automated transcription. Relatively high use of these applications suggests journalists increasingly recognize AI as a practical resource for improving newsroom efficiency and supporting routine editorial activities. This is consistent with Beckett (2019) and with Bello et al. (2023), who found considerable awareness among Nigerian journalists even when practical adoption remained limited. The present findings suggest adoption is progressing through applications that address immediate newsroom needs rather than more sophisticated forms of integration.

Regarding professional competence, journalists possess reasonable operational familiarity but demonstrate comparatively weaker abilities in identifying inaccuracies and independently verifying AI-generated information. Knowing how to operate an AI tool is not the same as possessing the critical competence required for responsible use. Jaakkola (2023) and Diakopoulos (2019) emphasize the need for AI literacy, critical assessment and understanding of algorithmic influence. Continuous professional development is therefore required, particularly in fact-checking, source verification and critical evaluation of machine-generated content.

Ethical challenges constitute a significant concern. Inadequate organizational guidelines, possible inaccuracies, confidentiality risks and excessive dependence emerged as prominent issues, consistent with Porlezza and Schapals (2024) and with Bello et al. (2025). Successful integration requires more than access to applications; media organizations must establish clear ethical guidelines, accountability mechanisms and editorial safeguards.

The relationship between AI adoption and perceived news credibility also deserves attention. The positive correlation ($r = .42$, $p < .01$) suggests that journalists who make greater use of AI may perceive its contribution more favourably. However, this relationship should not be interpreted to mean that AI automatically produces credible news. Importantly, the present study measured journalists' perceptions of the credibility of AI-assisted news, not actual audience assessments of that news. Wang and Huang (2024) found a small negative effect of machine authorship on audience perceptions of credibility. This contrast is instructive: journalists may appreciate efficiency and professional benefits, while audiences may remain more cautious about machine-generated or AI-assisted news. Separating journalists' perceptions from audience assessments is essential for accurate interpretation and for future research that directly examines audience responses in Nigerian media contexts.

The regression results identify professional competence as the strongest positive predictor of perceived news credibility ($\beta = .39$, $p < .001$), while ethical challenges show a negative relationship ($\beta = –.24$, $p < .001$). The contribution of AI to credible journalism therefore depends considerably on the knowledge, judgement and ethical responsibility of the journalist using it. Park and Akintade (2026) similarly demonstrate that Nigerian journalists are negotiating new professional responsibilities as AI becomes integrated. Technological innovation should complement rather than displace professional editorial judgement.

Overall, AI adoption offers opportunities for improving journalistic efficiency in Nigeria, but its contribution to credible journalism depends on professional competence, human supervision and effective ethical safeguards. Media organizations should invest in continuous AI training, develop institutional guidelines and strengthen verification procedures. Journalism training institutions should incorporate AI literacy and responsible technology use into curricula. Such measures would help ensure that AI strengthens the professional integrity and public-interest responsibilities of Nigerian journalism.

CONCLUSION

This study examined the adoption of artificial intelligence in Nigerian journalism, focusing on professional competence, ethical challenges and journalists' perceptions of news credibility. AI-powered tools are increasingly relevant in contemporary newsrooms, particularly for content generation, editing, transcription and information processing. While these applications offer opportunities to improve efficiency, effective integration requires more than access to technology. Journalists must possess the competence to assess AI-generated outputs, identify inaccuracies, verify information and exercise sound editorial judgement.

Ethical concerns—including misinformation risks, algorithmic bias, inadequate transparency, data privacy threats and excessive dependence—remain important, especially in a media environment where public confidence depends on accuracy, fairness and accountability. AI adoption should complement rather than replace professional journalistic judgement and responsibility.

The contribution of AI to credible journalism depends substantially on journalists' competence, responsible use and effective editorial oversight. Nigerian media organizations should prioritize continuous AI-related training, develop clear institutional guidelines and strengthen verification procedures. Ultimately, AI should be treated not as a substitute for journalism's professional values, but as a supportive resource for producing accurate, ethical and trustworthy news.

REFERENCES

1. Beckett, C. (2019). New powers, new responsibilities: A global survey of journalism and artificial intelligence. Polis, London School of Economics and Political Science. journalismai.info/research
2. Bello, S., Salaudeen, A., & Umeaku, P. C. (2023). A survey of awareness and adoption of artificial intelligence journalism among Lagos and Kwara States journalists. The Indonesian Journal of Communication Studies, 16(2), 95–105. doi.org/10.31315/ijcs.v16i2.10282
3. Bello, S., Salaudeen, A., & Umeaku, P. C. (2025). Perception of Nigerian journalists in Lagos and Kwara States towards adopting artificial intelligence in journalism practice. Namibian Journal of Linguistics, Literature and Communication Studies, 17(2), 29–42. doi.org/10.59677/njllcs.v17i2.88
4. Cochran, W. G. (1977). Sampling techniques (3rd ed.). John Wiley & Sons. Council of Europe. (2023). Guidelines on the responsible implementation of artificial intelligence (AI) systems in journalism. coe.int/en/web/freedom-expression/-/guidelines-on-the-responsible-implementation-of-artificial-intelligence-ai-systems-in-journalism
5. Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
6. DeVellis, R. F., & Thorpe, C. T. (2021). Scale development: Theory and applications (5th ed.). SAGE Publications.
7. Diakopoulos, N. (2019). Automating the news: How algorithms are rewriting the media. Harvard University Press.
8. Field, A. (2018). Discovering statistics using IBM SPSS statistics (5th ed.). SAGE Publications. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate data analysis (8th ed.). Cengage Learning.
9. Jaakkola, M. (Ed.). (2023). Reporting on artificial intelligence: A handbook for journalism educators. UNESCO. doi.org/10.58338/HSMK8605
10. Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.Park, C. S., & Akintade, T. (2026). Artificial intelligence in Nigerian newsrooms: Navigating jurisdictional hybridization, retreat, and maintenance. New Media & Society. doi.org/10.1177/14614448261429426
11. Porlezza, C., & Schapals, A. K. (2024). AI ethics in journalism (studies): An evolving field between research and practice. Journalism and Media. doi.org/10.1177/27523543241288818
12. Umejei, E., Ayisi, A., Phiri, M., & Tallam, E. (2025). Artificial intelligence and journalism in four African countries: Optimists, pessimists, and pragmatists. Journalism Practice, 19(10), 2249–2265. doi.org/10.1080/17512786.2025.2489590

13. Veenstra, A. S., Wilder, M., Shimu, F., Schlauder, L., & Dousdebés, F. (2025). Journalism students' use, expectations, and understanding of generative AI tools. Journalism & Mass Communication Educator, 80(1), 115–128. doi.org/10.1177/10776958241296474
14. Wang, S., & Huang, G. (2024). The impact of machine authorship on news audience perceptions: A meta-analysis of experimental studies. Communication Research, 51(7), 815–842. doi.org/10.1177/00936502241229794