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ASSESSING THE USE OF ARTIFICIAL INTELLIGENCE BY SELECTED MEDIA ORGANISATIONS IN MINNA, NIGER STATE, NIGERIA

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Abstract
Despite the growing global integration of AI in journalism practice, adoption among media organisations in developing country contexts such as Minna, Niger State, remains limited and understudied, creating a significant gap between AI's transformative potential and its actual deployment in the newsroom. This study examined AI deployment across nine media organisations registered under the Nigeria Union of Journalists (NUJ) in Minna namely, Radio Niger, NTA Minna, Niger State Television, Newsline Newspaper, Ultimate FM, Prestige FM, Niger State Ministry of Information, Maw Radio, and Badeggi FM. Anchored on the Diffusion of Innovation Theory, the Technology Acceptance Model, and Technological Determinism, the study adopted a concurrent triangulation mixed-methods design, combining structured questionnaires administered to 196 journalists with semi-structured interviews conducted with 10 senior media professionals, yielding a response rate of 92.35%. Findings reveal high AI awareness (82.9%) but severely limited organisational adoption (22.1%), with utilisation confined largely to speech-to-text transcription. Reported benefits include faster news production and reduced workload; however, these gains are significantly constrained by poor digital infrastructure, limited technical competence, and the complete absence of institutional training and ethical guidelines across all nine organisations. The study concludes that structural, educational, and policy-related barriers rather than attitudinal resistance are the primary impediments to effective AI integration in Minna's media sector, and recommends targeted investment in infrastructure, capacity-building, and regulatory frameworks to support responsible AI adoption.

Keywords: Artificial Intelligence, journalism, media organisations, technology adoption, Minna, Nigeria, digital transformation

Introduction

The integration of Artificial Intelligence (AI) into journalism represents one of the most consequential technological transformations in the history of the media industry. Across the global media landscape, AI technologies are reshaping how news is gathered, produced, verified, and disseminated, with applications spanning automated content generation, natural language processing, audience analytics, personalised content delivery, and algorithmic fact-checking (Diakopoulos, 2019; Simon, 2024). Leading global media organisations including the Associated Press, Reuters, BBC, and The Washington Post have integrated AI-powered tools into their core editorial workflows, signalling a structural shift in the professional practice of journalism (Newman, 2022; Beckett, 2019; Etumnu & Azubuike, 2024).

However, the pace and depth of AI adoption are not uniform across all global contexts. Advanced AI integration is concentrated in highly resourced media environments in North America, Western Europe, and technologically advanced economies in East Asia, while media organisations across Africa, Latin America, and South Asia lag considerably behind (Kioko, Booker, Chege, &Kimweli, 2022; Westlund & Ekström, 2019). It is important to note that this disparity is structural rather than simply geographic —

media organisations in technologically advanced non-Western economies such as the United Arab Emirates, Israel, and Singapore demonstrate AI integration capacities comparable to many Western counterparts (Simon, 2024).

Within the African context, Kioko et al. (2022) found that while awareness of AI tools among journalists was growing, actual deployment remained limited and confined to basic digital applications, attributing this gap to infrastructural deficits, inadequate technical training, and the absence of editorial AI policies. Amponsah and Atianashie (2024) similarly documented challenges relating to platform costs, connectivity limitations, and the absence of continent-specific AI tools.

In Nigeria specifically, the existing literature on media and technology has focused predominantly on digital media adoption broadly conceived and social media use in journalism, leaving a significant empirical gap in the examination of AI deployment within Nigerian newsrooms (Nwanyanwu & Nwanyanwu, 2021). Most Nigerian research on AI in journalism has been concentrated in Southern Nigeria, (Nwanyanwu & Nwanyanwu, 2021); Etumnu and Azubuike (2024); Enuwah (2024) with only Zakariyyah, Mohammed, and Shadrach (2024) examining AI adoption in a Northern Nigerian context (Kogi State). Limited studieshave examined AI deployment in Minna, Niger State, leaving the experiences of one of Nigeria's most structurally representative state-level media environments entirely undocumented.

This study addresses that gap by investigating AI deployment across nine media organisations in Minna, guided by three objectives: to ascertain the current state of AI adoption and utilisation; to identify the benefits and challenges of AI deployment; and to explore the implications of AI adoption for media content creation, dissemination, and consumption.

Literature Review

Artificial Intelligence in Journalism

Artificial Intelligence refers to the simulation of human intelligence processes by computer systems, encompassing learning, reasoning, pattern recognition, and self-correction (Olawuyi &Enuwah, 2024). In journalism, AI technologies are deployed across the full spectrum of newsroom operations including news gathering, content production, editorial decision-making, audience analytics, and content distribution (Dörr, 2016).

In the Nigerian media landscape, Nwanyanwu and Nwanyanwu (2021) argued that conceptual clarity surrounding AI, what it is, what it can do, and how it differs from broader digitalisation remains limited among a significant proportion of media practitioners, with practical consequences for adoption decisions, staff training, and institutional policy development. Etumnu and Azubuike (2024) further established that Nigerian journalists' understanding of AI tends to be shaped by immediate professional experience rather than formal training, producing a partial and tool-specific conceptual framing disconnected from AI's broader transformative potential.

Current State of AI Adoption and Utilisation

Adefioye (2024) found that while awareness of AI tools was relatively high among journalists, actual deployment remained confined to social media monitoring and basic digital automation, with AI-driven investigative analytics and automated content generation largely absent from daily practice. Olawuyi and Enuwah (2024), studying Ekiti and Ondo States, similarly documented a significant gap between reported awareness and demonstrated utilisation, finding that organisational-level factors, institutional support, technology budgets, and editorial champions for AI adoption were stronger predictors of actual utilisation than individual awareness. Etumnu and Azubuike (2024) found that adoption was most advanced in

organisations that had previously invested in broader digital infrastructure upgrades, suggesting that AI adoption is embedded within a broader organisational digital development trajectory. Zakariyyah et al. (2024), in the only published Northern Nigerian study, documented significantly lower awareness and utilisation than Southern Nigerian counterparts, attributing this disparity to infrastructure deficits, limited training access, and the absence of institutional AI policies. Together, these studies establish that AI adoption across Nigerian newsrooms remains at an early stage nationally, with utilisation lagging substantially behind awareness and organisational capacity playing a more determinative role than individual journalist attitudes.

Benefits and Challenges of AI Deployment

On the benefits side, Olawuyi and Enuwah (2024) found that journalists who had adopted AI tools reported tangible improvements in newsroom efficiency including faster transcription, quicker identification of trending stories, and reduced time on routine tasks. Westlund and Krumsvik (2014) documented additional benefits where AI-assisted tools improved the accuracy of audience measurement, enabled targeted content planning, and facilitated content repurposing for digital platforms. Adefioye (2024) further identified reputational benefits, finding that organisations perceived as technologically innovative attracted stronger professional talent and greater audience trust.

On the challenges side, Nwanyanwu and Nwanyanwu (2021) identified inadequate digital infrastructure as the most fundamental constraint, arguing that persistent gaps in broadband connectivity, power supply, and modern hardware create structural environments in which AI tools cannot function reliably. Zakariyyah et al. (2024) documented significant technical capacity challenges, finding that journalists lacked AI-specific training and that skills gaps led to the underuse and eventual abandonment of available tools. Olawuyi and Enuwah (2024) additionally identified the absence of institutional AI policies and ethical guidelines as a critical organisational challenge.

Implications for Media Content Creation, Dissemination, and Consumption

Etumnu and Azubuike (2024) found that AI adoption had begun to alter content creation workflows, with journalists using transcription and summarisation tools to accelerate production, but that this acceleration created pressure toward speed at the expense of editorial depth. Adefioye (2024) found that algorithmic content recommendation systems were reshaping audience consumption by prioritising content matching established preferences over content that challenged or broadened audience perspectives raising significant implications for journalism's democratic information function. Nwanyanwu and Nwanyanwu (2021) found that the acceleration enabled by digital tools contributed to observable declines in fact-checking rigour, sourcing depth, and editorial review processes in several Nigerian newsrooms. Zakariyyah et al. (2024) additionally documented heightened journalist anxiety about job displacement, with concerns that AI automation of routine reporting tasks could reduce demand for entry-level journalism positions.

Theoretical Framework

This study is anchored on three complementary theories namely, the Diffusion of Innovation (DOI) Theory, the Technology Acceptance Model (TAM), and Technological Determinism, each addressing a distinct dimension of the research problem.

Diffusion of Innovation Theory. Propounded by Rogers in 1962, DOI explains how innovations spread through social systems over time, with adoption shaped by five perceived innovation characteristics: relative advantage, compatibility, complexity, trialability, and observability. In this study, DOI anchors Objective One by providing a framework for examining the organisational factors driving or impeding AI adoption across Minna's nine media organisations, and contributes to Objective Two by mapping the

structural and institutional challenges that constrain utilisation. Adefioye (2024) applied DOI finding relative advantage and compatibility as the strongest adoption predictors, while Zakariyyah et al. (2024) attributed low Northern Nigerian adoption to high perceived complexity and limited trialability.

Technology Acceptance Model. Davis's (1989) TAM posits that individual technology acceptance is determined by perceived usefulness, the belief that a technology enhances job performance and perceived ease of use, the belief that using the technology requires minimal effort. TAM jointly anchors Objective One alongside DOI by explaining individual journalist-level attitudes toward AI tools, and contributes to Objective Two by identifying attitudinal and skills-related barriers that constrain personal adoption even where organisational willingness exists. Etumnu and Azubuike (2024) found both TAM constructs to be significant predictors of AI adoption, while Olawuyi and Enuwah (2024) identified low perceived ease of use as the dominant cognitive adoption barrier.

Technological Determinism. Originating in the work of McLuhan (1964) and extended by Winner (1980), Technological Determinism holds that technology is a primary driver of transformations in social structures, professional practices, and cultural behaviour. Applied to journalism, the theory asserts that AI does not merely assist journalists in existing tasks but actively restructures how news is conceptualised, produced, disseminated, and consumed. Technological Determinism exclusively anchors Objective Three by providing the theoretical basis for examining the implications of AI adoption for content creation, dissemination, and consumption in Minna's media organisations addressing the explanatory gap that neither DOI nor TAM, as adoption-stage theories, can fill.

Methodology

This study adopted a concurrent triangulation mixed-methods design, in which quantitative and qualitative data were collected simultaneously and integrated during interpretation to produce a more comprehensive understanding of AI deployment in media organisations in Minna than either method could achieve independently (Creswell & Plano Clark, 2018). The quantitative strand employed a descriptive survey, while the qualitative strand employed semi-structured interviews with senior media professionals. This design was selected because the research objectives require both statistical documentation of AI adoption patterns across a defined professional population and contextual, experience-based insights from practitioners in positions of institutional responsibility — dimensions of inquiry that are complementary rather than substitutable.

The study population comprised all journalists registered with the Nigeria Union of Journalists (NUJ) across nine media organisations in Minna, Niger State — Radio Niger, NTA Minna, Niger State Television, Newsline Newspaper, Ultimate FM, Prestige FM, Niger State Ministry of Information, Maw Radio, and Badeggi FM — totalling 206 registered journalists (NUJ, 2025). Given the small and professionally bounded nature of this population, a census approach was adopted for the quantitative component to eliminate sampling error and enable robust subgroup analysis by organisation type, job role, and years of experience. Of the 206 registered journalists, 10 senior professionals serving as key informants for the qualitative component were deliberately excluded from the questionnaire administration to prevent response duplication across instruments, yielding a questionnaire target population of 196 journalists. The questionnaire was administered through a combination of face-to-face and online channels; physical copies were distributed directly to journalists across the nine organisations, while a digital version was simultaneously circulated via institutional WhatsApp platforms. Of the 196 questionnaires administered, 181 were properly completed and returned, representing a response rate of 92.35%.

For the qualitative component, 10 senior media professionals were purposively selected from across the nine organisations on the basis of three explicit inclusion criteria: a minimum of five years of professional experience in their current organisation, occupancy of a supervisory or decision-making role

with direct relevance to technology adoption or editorial operations, and firsthand exposure to or responsibility for digital tools within their newsroom. The selected participants comprised two ICT professionals from Prestige FM and Newsline Newspaper; three organisation heads from Prestige FM, Niger State Television, and Radio Niger; and five editors from NTA Minna, Maw Radio, Badeggi FM, Newsline Newspaper, and Prestige FM — each with a minimum of five years of professional experience. Their seniority and institutional positioning ensured that qualitative data captured organisational decision-making perspectives, technology governance realities, and strategic assessments of AI deployment that frontline journalists are not positioned to provide. Semi-structured interviews were conducted face-to-face at each participant's organisation, with each session lasting between 45 and 60 minutes, audio-recorded with informed consent, and transcribed verbatim for analysis.

Two instruments were developed for data collection. The quantitative instrument was a structured, closed-ended questionnaire comprising 20 items organised into four sections: sociodemographic information, AI adoption and utilisation, benefits and challenges of AI deployment, and implications for journalism practice. The qualitative instrument was an 11-item semi-structured interview guide designed to elicit in-depth responses on AI awareness, organisational adoption decisions, perceived benefits and constraints, and implications for editorial practice and content production. Content validity for both instruments was established through expert review by six subject matter experts in mass communication, journalism practice, and AI applications, yielding a Scale Content Validity Index average (S-CVI/Ave) of 0.94 for the questionnaire and 0.92 for the interview guide both exceeding the 0.80 threshold recommended by Polit and Beck (2006). Reliability was assessed using the test-retest method administered to 30 journalists not included in the main study sample over a two-week interval, yielding a Cronbach's Alpha coefficient of 0.70, indicating satisfactory internal consistency (Nunnally, 1978).

Quantitative data were analysed using simple descriptive statistics; frequency counts, percentages, and mean scores computed with the aid of Microsoft Excel and presented in tabular form to document the distribution of AI awareness, adoption levels, reported benefits, and identified challenges across the study population. Qualitative interview data were analysed using Braun and Clarke's (2006) six-phase thematic analysis framework, progressing from data familiarisation and initial code generation through to theme development and interpretive reporting. Quantitative and qualitative findings were integrated during the discussion phase through a convergent triangulation approach, with qualitative themes used to explain, contextualise, and enrich the patterns identified in the quantitative data.

Results

Demographic Profile

The majority of respondents were male (55.2%), aged 25–44 years (80.1%), holding Bachelor's degrees or HND qualifications (60.8%). Most were reporters (38.7%) or editors (24.9%) with six to ten years of professional experience (63.5%). Prestige FM had the highest organisational representation (22.1%), followed by Niger State Television (13.8%) and NTA Minna (12.2%).

AI Awareness and Organisational Adoption

Table 1 *AI Awareness and Organisational Adoption*

Variable	Response	*n*	%
Awareness of AI	Yes	150	82.9
	No	31	17.1
Organisation Has Adopted AI	Yes	40	22.1
	No	125	69.1
	Not sure	16	8.8

Note. $N = 181$.

The data reveal a striking 60-percentage-point gap between individual awareness (82.9%) and organisational adoption (22.1%). The finding that 69.1% the highest proportion across all response categories reported no organisational AI adoption indicates that the dominant experience of AI among Minna's media professionals is one of personal familiarity coexisting with institutional inaction. The 8.8% unsure whether their organisations had adopted AI further signals a communication deficit regarding technology strategy itself an indicator of weak institutional governance.

AI Tools and Usage Patterns

Table 2*AI Tools Used by Respondents (Multiple Responses)*

Tool	*n*	%
Speech-to-text tools	90	49.7
AI-driven analytics	30	16.6
AI-powered editing	25	13.8
Automated news writing	20	11.0
Chatbots/virtual assistants	15	8.3
AI imaging	5	2.8

Note. $N = 181$. Multiple responses permitted.

Speech-to-text transcription dominates usage (49.7%), while AI imaging the most infrastructure-intensive and technically demanding application records the lowest utilisation (2.8%), signalling that adoption remains confined to low-threshold personal productivity tools rather than strategically deployed organisational assets. The finding that 27.6% used AI tools rarely and 22.1% never — together representing

half the study population confirms that adoption is episodic rather than embedded in routine practice. That 71.8% rated themselves as non-proficient or only at basic proficiency confirms that even among users, depth of utilisation is severely constrained by skills deficits.

Benefits and Challenges

Table 3*Perceived Benefits of AI (Multiple Responses)*

Benefit	***n***	**%**
Faster news production	110	60.8
Reduced workload	70	38.7
Innovation in content	65	35.9
Improved accuracy	60	33.1
Better audience targeting	50	27.6

Note. N = 181. Multiple responses permitted.

Table 4 *Challenges of AI Adoption (Multiple Responses)*

Challenge	***n***	**%**
Poor infrastructure	120	66.3
Lack of technical know-how	100	55.2
High cost of tools	85	47.0
Fear of job loss	70	38.7
Resistance to change	50	27.6

Note. N = 181. Multiple responses permitted.

Faster news production (60.8%) is the most widely recognised benefit, directly reflecting AI's perceived usefulness in the dimension most immediately relevant to daily professional demands. Conversely, better audience targeting (27.6%) the least recognised benefit reveals that the more strategically sophisticated AI applications remain outside the experiential frame of most respondents. On challenges, poor infrastructure (66.3%) and lack of technical know-how (55.2%) together constitute a dual structural deficit: neither the physical environment nor the human capital required for AI utilisation is adequately present. That 71.8% reported receiving no adequate training confirms that the skills deficit is a direct consequence of institutional neglect rather than individual disinterest.

Impact on Journalism Practice

Regarding AI's overall impact, 49.7% found it made their work easier, 36.5% observed no difference, and 13.8% found it more difficult indicating that AI's practical benefits are experienced positively by approximately half the workforce but remain invisible or counterproductive to the other half. For content creation, 44.2% saw a positive impact while 38.7% observed none. Regarding dissemination, 55.2% believed AI influenced how content is distributed the strongest indication in the quantitative data of AI's structural effects on journalism practice irrespective of deliberate adoption decisions. Notably, 38.7% believed AI could eventually replace human journalists, 33.7% were unsure, and 27.6% disagreed.

Thematic Analysis

Thematic analysis of semi-structured interviews yielded six themes, presented with sustained analytical commentary and integrated with quantitative findings in the discussion section.

Theme 1: Awareness Without Enablement. All participants demonstrated clear conceptual familiarity with AI yet described complete organisational silence on adoption strategy. An ICT Officer at Ultimate FM confirmed: *"We know about Artificial Intelligence for a while now. We use it from time to time even in our daily lives."* A journalist at Prestige FM articulated the institutional gap explicitly: *"It's more of an individual thing, not something backed by management or integrated into our workflow."* This reveals that professional development is driven by individual initiative against a backdrop of organisational abdication.

Theme 2: AI as Personal Workaround. AI functions not as a strategically deployed asset but as an individually improvised workaround. A journalist at Newsline Newspaper captured the pragmatic adoption logic: *"It's not perfect, but it saves me time."* A Senior Editor at Radio Niger confirmed productivity gains: *"Tasks that used to take hours now take minutes."* However, individually improvised AI use is inherently inconsistent, unaccountable, and unsustainable without organisational governance.

Theme 3: Infrastructure Deficits as an Existential Barrier. A journalist at Radio Niger situated the structural preconditions plainly: *"Sometimes there's no light for the whole day... We're still sharing one or two functional computers among several staff members. With all that, how can you expect any real technology like AI to be used?"* The differential infrastructure experiences across organisations with private broadcasters such as Prestige FM comparatively better positioned than state-funded organisations reveal that the infrastructure barrier is mediated by ownership structure and funding model.

Theme 4: Institutional Abdication of Training. All participants reported no formal AI training from their organisations. An ICT Officer at Ultimate FM stated: *"Nobody has taught us how to use any AI tools. Everything I know, I learned from YouTube or blogs."* This has created a generational fracture: younger journalists self-educate informally while senior editorial staff disengage entirely, widening the internal competence gap precisely along the authority axis that determines institutional adoption decisions.

Theme 5: Unrealised Potential. A staff member at Niger State Television articulated the condition of informed deprivation: *"When it comes to analytics or targeting our audience, we're still behind. We don't have the tools or the knowledge to use AI in that area."*Organisationsrecognise the gap between current and possible practice but lack the structural capacity to close it — indicating that awareness campaigns are insufficient and that concrete structural support is required.

Theme 6: Unprotected Transition. A journalist at Prestige FM expressed displacement anxiety: *"We fear that one day, the organisation may not need some of us anymore."* A journalist at Badeggi FM offered a counter-position: *"AI lacks the creativity, ethical judgment, and contextual understanding that human journalists bring."* Critically, none of the nine organisations had developed internal AI governance policies leaving journalists to navigate professional and ethical uncertainties without institutional guidance.

Discussion of Findings

The 60-percentage-point gap between AI awareness (82.9%) and organisational adoption (22.1%) directly validates DOI's foundational argument that awareness and adoption are distinct stages separated by complex evaluative and structural conditions (Rogers, 2003). The dominance of speech-to-text tools (49.7%) over advanced applications such as automated news writing (11.0%) confirms Dörr's (2016) observation that AI's initial foothold in journalism typically begins with repetitive, low-level tasks, and mirrors patterns from developing contexts where adoption proceeds incrementally due to resource constraints (Mutsvairo&Ragnedda, 2019).

The identification of faster news production (60.8%) and reduced workload (38.7%) as primary benefits aligns with global research confirming AI's capacity to enable journalists to work faster in time-sensitive environments (Marconi & Siegman, 2017). The finding that 49.7% found AI made their work easier despite limited institutional support demonstrates the technology's practical utility even in resource-constrained settings. However, the moderate recognition of content innovation (35.9%) suggests that AI's transformative potential beyond efficiency gains remains unrealised, consistent with Simon's (2024) question of whether AI automation generates improved quality or merely increased quantity.

The dominance of infrastructural challenges (66.3%) and skills deficits (55.2%) corroborates Mutsvairo and Ragnedda's (2019) argument that infrastructural underdevelopment is the core barrier to emerging technology adoption in African newsrooms. The finding that 71.8% lack adequate training, combined with equivalent rates of low self-reported proficiency, confirms Pavlik's (2019) argument that AI adoption requires not only technological investment but workforce re-skilling. The informal learning pathways documented YouTube tutorials and personal blogs are structurally insufficient to produce the consistent, professionally grounded AI competencies that journalistic practice requires.

The finding that 38.7% believe AI could replace human journalists reflects broader global anxieties about automation's employment consequences (Frey & Osborne, 2017). The absence of ethical guidelines across all nine organisations raises serious concerns about transparency and accountability, echoing Diakopoulos' (2019) warning that without oversight, AI risks undermining editorial integrity. The complete policy vacuum documented in this study means that all informal AI use occurring across the nine organisations is proceeding without governance, accountability frameworks, or professional protection for the journalists navigating it.

Theoretical Implications

The findings confirm and extend all three theoretical frameworks. For DOI, the data demonstrate that in structurally constrained environments, Rogers' five innovation characteristics are not merely perceptual variables shaped by individual cognition, they are materially determined by environmental conditions that individual motivation cannot overcome. The informal early adoption documented qualitatively remains organisationally invisible, breaking the diffusion chain at its second link and preventing awareness from progressing to systemic adoption regardless of individual experimentation. For TAM, the study extends Davis's (1989) model by demonstrating that perceived ease of use is institutionally determined rather than individually constructed organisations that provide no formal AI training structurally suppress perceived ease of use across their workforces, generating an institutional barrier that operates through the individual cognitive mechanism TAM describes. For Technological Determinism, the finding that 55.2% reported AI had already influenced content dissemination despite only 22.1% formal adoption confirms McLuhan's (1964) argument that technology reshapes its environment through structural logic rather than deliberate deployment. However, the Minna context introduces an important boundary condition: in environments of severe infrastructure deficit, Technological Determinism operates along a continuum rather than as an absolute force, with transformative effects constrained by material preconditions.

Conclusion and Recommendations

This study examined AI deployment across nine media organisations in Minna, Niger State, revealing a landscape characterised by high individual awareness (82.9%) but severely limited organisational adoption (22.1%), with utilisation confined largely to basic speech-to-text transcription. The findings establish that the awareness-adoption gap is not primarily attitudinal but structural — driven by poor infrastructure, the complete absence of formal AI training, high tool costs, and the total absence of institutional AI governance policies across all nine organisations. The study contributes original empirical evidence on AI adoption in Northern Nigerian journalism and demonstrates that DOI, TAM, and Technological Determinism require contextual qualification when applied in structurally constrained media environments where material conditions, rather than individual perceptions, are the primary determinants of adoption outcomes.

The following targeted recommendations are proposed:

1. Niger State Government and Broadcasting Corporation of Niger State should designate digital infrastructure, reliable electricity, high-speed connectivity, and hardware renewal as a dedicated budget line in annual media sector allocations, beginning with a baseline infrastructure audit across all nine organisations to prioritise investment sequentially by severity of deficit.
2. The NUJ Minna chapter, in partnership with the Broadcasting Organisation of Nigeria, should design and deliver a tiered AI literacy training programme differentiated by job role — basic digital tools literacy for reporters, AI-assisted content production for editors, and AI governance for station managers — using tools already in informal use as accessible entry points.
3. The Nigerian Press Council and National Broadcasting Commission should jointly convene a technical working group to develop a national ethical framework for AI use in Nigerian journalism within twelve months, specifically addressing transparency requirements for AI-generated content, accountability protocols for AI-assisted editorial decisions, and professional protection guidelines.
4. Prestige FM and Newsline Newspaper, identified as the organisations with the most advanced informal AI experimentation, should lead a structured cross-organisational pilot adoption programme formally documenting AI tool use, measuring outcomes, and sharing findings through an NUJ-convened cross-organisational learning forum to address DOI's observability constraint by making AI's benefits visible and credible to organisations that have not yet experimented.

References

Adefioye, A. (2024). The adoption of artificial intelligence into journalism practice: Perspectives from the media industry. *African Journalism Studies, 45*(2), 134–152.

Amponsah, P. N., &Atianashie, A. M. (2024). Navigating the new frontier: A comprehensive review of AI in journalism. *Advances in Journalism and Communication, 12*, 1–17. https://doi.org/10.4236/ajc.2024.121001

Beckett, C. (2019). *New powers, new responsibilities: A global survey of journalism and artificial intelligence*. London School of Economics and Political Science.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.

Diakopoulos, N. (2019). *Automating the news: How algorithms are rewriting the media*. Harvard University Press.

Dörr, K. N. (2016). Mapping the field of algorithmic journalism. *Digital Journalism, 4*(6), 700–722.

Etumnu, E. W., & Azubuike, C. (2024). Artificial intelligence and broadcasting in information driven society: Imo State, Nigeria in perspective. *International Journal of Sub-Saharan African Research, 2*(4), 272–280.

Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting and Social Change, 114*, 254–280.

Jamil, S. (2020). Artificial intelligence and journalistic practice: The crossroads of obstacles and opportunities for Pakistani journalists. *Journalism Practice, 15*(10), 1400–1422.

Kioko, P. M., Booker, N., Chege, N., &Kimweli, P. (2022). The adoption of artificial intelligence in newsrooms in Kenya: A multi-case study. *European Scientific Journal, 18*(22), 278–296.

LSE (London School of Economics and Political Science). (2024). *Journalism AI report: How newsrooms are using AI*. Retrieved from https://www.lse.ac.uk/

Marconi, F., & Siegman, A. (2017). *The future of augmented journalism: A guide for newsrooms in the age of smart machines*. Associated Press.

McLuhan, M. (1964). *Understanding media: The extensions of man*. McGraw-Hill.

Mutsvairo, B., &Ragnedda, M. (Eds.). (2019). *Mapping the digital divide in Africa: A media perspective*. Amsterdam University Press.

Newman, N. (2022). *Journalism, media, and technology trends and predictions 2022*. Reuters Institute for the Study of Journalism.

Noain-Sanchez, A. (2022). Addressing the impact of artificial intelligence on journalism: The perception of experts, journalists and academics. *Comunicacion y Sociedad, 35*(3), 105–121.

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.

Nwanyanwu, N. C., &Nwanyanwu, M. (2021). Utilisation of artificial intelligence in journalism in Nigeria. *KIU Journal of Social Sciences, 7*(2), 205–212.

Olawuyi, E. A., &Enuwah, J. (2024). Framing the future: Media narratives on artificial intelligence and its societal impact. *International Journal of Current Research in the Humanities, 28*, 24–29.

Pavlik, J. V. (2019). *Journalism in the age of virtual reality*. Columbia University Press.

Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? Critique and recommendations. *Research in Nursing and Health, 29*(5), 489–497.

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

Simon, F. M. (2024). *Artificial intelligence in the news: How AI retools, rationalises, and reshapes journalism and the public arena*. University of Oxford.

Westlund, O., & Ekström, M. (2019). News and participation through and beyond proprietary platforms in an age of social media. *Media and Communication, 7*(1), 105–109.

Westlund, O., &Krumsvik, A. H. (2014). Perceptions and practices of algorithmic news production. *Journalism Practice, 8*(5), 658–678.

Winner, L. (1980). Do artefacts have politics? *Daedalus, 109*(1), 121–136.

Zakariyyah, Z. O., Mohammed, J. D., & Shadrach, I. (2024). Adoption of artificial intelligence and ethical challenges in newsroom operations within media organisations in Kogi State, Nigeria. *TSU Journal of Communication and Media Studies, 4*(2), 46–60.