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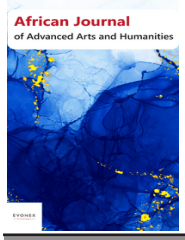

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RESEARCH ARTICLE **Section:** *Media, Communication & Cultural Studies*

Comparative Study of the Coverage of Indigenous Knowledge Systems (IKS) and Science and Technology in Nigeria: A Case of Punch, Sun and Vanguard Newspapers

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Abstract

This study undertook a comparative analysis of the coverage of Indigenous Knowledge Systems (IKS) and Science and Technology (focusing on Information and Communication Technology- ICT, Artificial Intelligence, Big Data, and related domains) in three major Nigerian newspapers: *Punch*, *Sun*, and *Vanguard*. The study was guided by three objectives: to ascertain the volume of coverage devoted to IKS compared to Science and Technology between January and April 2025; to identify the placement of stories relating to both domains (front page, inside pages, and back page); and to determine how the stories are framed within the selected newspapers. Anchored on the Agenda-Setting Theory, the study adopted the quantitative Content Analysis method to systematically examine newspapers` content within the specified period. The findings were that Science and Technology (S&T) dominated the volume of coverage while Indigenous Knowledge Systems (IKS) were marginalized; most IKS and S&T stories were placed on inside pages with low front-page visibility, and both domains were mostly framed positively; however, IKS had a higher proportion of negative frames. The study concluded that the imbalance in reporting IKS and S&T stories risks excluding valuable indigenous practices from policy discussions, thereby undermining efforts to achieve sustainable development. It recommended, amongst others, that Nigerian newspapers should deliberately increase the visibility of Indigenous Knowledge Systems (IKS) alongside Science and Technology (S&T) to ensure that both are represented equitably. Also, that IKS stories should continue to be framed positively, through storytelling, documentaries, and interactive content, to support Nigeria's drive toward digital transformation.

Keywords: Artificial intelligence, Indigenous Knowledge Systems and Science & Technology, Newspaper Coverage.

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Introduction

Newspapers in Nigeria play a significant role in setting the agenda, affecting how cultural and developmental concerns are framed and how important they are. Previous research indicates that, despite their generally positive framing, the Sustainable Development Goals (SDGs) are often reported in major publications like *Punch* and *The Nation* but are frequently confined to inner pages, restricting their visibility (Talabi, Adaja & Sanusi, 2024).

Similar to this research on Science, Technology, and Innovation (STI) reporting reveals serious structural flaws: only the Nigerian Television Authority (NTA) has a science correspondent with a background in science, and while broadcast outlets like AIT and FRCN cover STI topics, many do not have dedicated science desks (Obot, Batta, Nda & Ekeanyanwa, 2022).

These empirical insights foreground the critical issue at stake: the extent to which media institutions are empowering or sidelining both scientific innovation and cultural heritage. In light of this, the current study examines how *Punch, The Sun*, and *Vanguard* newspapers handle the interaction between contemporary science and technology (ICT, AI, Big Data, etc.) and Indigenous Knowledge Systems (IKS) in their reporting.

Three primary dimensions are the focus of the analysis: story framing, positional placement, and coverage volume. Do indigenous stories and inventions receive the same level of attention as state-of-the-art technology? Are front-page headlines biased in favor of tradition or modernity? Which narrative frames—such as technological optimism, cultural preservation, progress, or crisis—do journalists employ in each field? Despite its cultural significance and developmental potential, traditional knowledge continues to be marginalized in national discourse, according to recent research on IKS reporting (Babagana & Kemboi, 2024).

These findings make it all the more pressing to understand how mainstream Nigerian newspapers mediate the representation of both indigenous and technological knowledge. This study closes a significant gap in media scholarship by using a structured content analysis methodology to provide empirical insights into the representative balance—or imbalance—between tradition and innovation in Nigerian print media. By contrasting these interactions across cultural and technical registers, it also builds on previous research, adding to scholarly conversations about media framing, knowledge systems, and cultural inclusion in development communication.

Statement of the Problem

The coverage of science and technology in major dailies *like Punch, The Guardian*, and *Vanguard* is notably limited, according to previous research. Guanah, Ejezie, and Egbra (2023) conducted a content analysis of these newspapers (December 2021–May 2022) and found a consistently low level of reportage on S&T subjects, often dominated by private companies and foreign media as sources rather than local experts or governmental bodies. This is evident despite Nigeria's rich cultural heritage and rapidly evolving technological landscape.

At the same time, Indigenous culture and expertise are often overlooked by the media. According to Simon and Ndoma (2016), Nigerian media have mainly given up on their vital role in fostering and reshaping indigenous cultural identities, frequently sacrificing traditional knowledge systems in favor of westernized narratives. Despite IKS's ability to promote social cohesiveness, policy innovation, and sustainable development, this suggests that it is systemically marginalized in the national media landscape.

Therefore, the particular gap is the relative dearth of empirical research on how *Punch, Sun*, and *Vanguard* newspapers explicitly balance—or fail to balance—the numbers, positioning, and framing of IKS against S&T stories during a specified period of time, from January to April 2025. It is currently unclear whether IKS narratives are given equal weight in headlines or front-page placements, or whether S&T content—which includes ICT, AI, Big Data, and related fields—is routinely omitted or given preference in terms of both thematic framing and spatial placement.

Objectives of the Study

They are to:

i. Ascertain the volume of coverage devoted to IKS compared to Science and Technology between January and April 2025;
ii. Identify the placement of stories relating to both domains (front page, inside pages, and back page); and
iii. Determine how the stories are framed within the selected newspapers.

Literature Review

Theoretical Framework

The Agenda-Setting Theory constituted the foundation of our investigation. According to the hypothesis, the media influence public opinion by indicating what people should think about rather than by instructing them what to think. After conducting an empirical research during the 1968 U.S. presidential election in Chapel Hill, North Carolina, Maxwell McCombs and Donald Lewis Shaw formally formulated the idea in their seminal 1972 paper, "The Agenda-Setting Function of Mass Media." According to their results, there is a significant relationship between the topics that are highlighted in the media and the ones that the public believes are most important (McCombs & Shaw, 1972).

Agenda-Setting Theory fundamentally functions on two levels. The first level focuses on the importance of issues; media placement, prominence, and frequency all affect which subjects become more prominent in the public mind (McCombs & Shaw, 1972). The second level, also known as attribute-level agenda-setting or framing, deals with how issues are presented, influencing the audience's perception by emphasising or under-emphasizing particular traits. Newspapers continue to be a major medium investigated in agenda-setting research throughout the continent, including Nigeria, according to a noteworthy meta-analysis of research with an African focus (2000–2020) (Mohammed, Mojaye, & Adelakun, 2022). Additionally, the rise of reverse agenda-setting, which allows people to shape traditional media material, especially through social media, highlights how agenda control is changing in the digital era (Sanusi, Adeleke-Sola, Owojuyigbe, & Adaralegbe, 2025).

The theory offers a convincing analytical framework, which makes it pertinent to this investigation. First, the amount of coverage influences the subjects the media prioritizes (first-level). Second, another measure of issue salience is positional prominence, such as front-page vs inside-page placement. Third, evaluation of the construction of IKS and S&T narratives is made possible by framing analysis. Do they emphasize innovation, cultural legacy, opportunity, or other thematic frames? When taken as a whole, these characteristics enable a comprehensive investigation of the ways in which mainstream media prioritize and depict traditional and technical knowledge.

Media Preference for S&T Topics over IKS

While mainly ignoring new STI and IKS-related content, mainstream Nigerian publications show a clear predilection for covering specific science and technology subjects, such as health sciences, agriculture, and ICT. Emerging science, technology, engineering, and mathematics (STEM) issues received almost no coverage between December 2020 and May 2021, according to a content analysis of four national dailies (Punch, Daily Trust, Leadership, and Guardian). The majority of coverage was focused on medical/health sciences (48%), agricultural science (24%), and ICT/engineering (19%) (Batta, Ekeanyanwu, Obot & Nda, 2022).

This bias points to a media strategy that marginalizes both new scientific fields and established knowledge systems in favor of traditional or instantly significant subjects. The dearth of science desks and correspondents in Nigerian newsrooms furthers the preference for scientific subjects over native ones. The ability of broadcast media to effectively cover complex S&T or IKS stories is undermined by the fact that only the Nigerian Television Authority (NTA) has a science correspondent with a scientific background, while other major networks like AIT and FRCN do not have such infrastructure (Obot et al., 2022).

Deeper coverage of intricate or culturally situated knowledge systems, such as IKS, is unlikely in the absence of specialized reporters or beats, which would further the media's inclination toward mainstream or commodified S&T subjects. This trend is consistent with more general results about Nigerian reportage on agricultural biotechnology.

According to an analysis of the *Daily Trust* and *The Nation* newspapers from 2018 to 2019, stories about biotechnology were sporadic and poorly explained; most of them took place inside pages and frequently lacked in-depth analysis or a fair assessment of the advantages and disadvantages (Bello, 2021). When combined, these studies show how underreporting or cursory treatment plagues both indigenous knowledge and emergent S&T themes, underscoring the media's institutional predilection for more traditional storylines.

Media Representation and Knowledge Validation

Certain bodies of information are validated—and devalued—in large part by the way Nigerian media frame knowledge systems. One notable example is the negative tone of media coverage of genetically modified (GM)

crops, which placed more focus on risks, regulations, and controversy than on potential benefits. This, along with the journalists' poor science communication skills, prevented the coverage from adequately contextualizing and validating agricultural biotechnology (Omeje, 2019).

In public opinion, such framing successfully delegitimizes the subject, especially when the media does not engage with balanced narratives or expert viewpoints. This trend is supported by an analysis of biotechnology reporting in various contexts. IKS and other esoteric or culturally based knowledge are similarly marginalized. The media might promote skepticism or ignorance if it does not employ framing tactics that highlight the relevance, legitimacy, and usefulness of indigenous systems. Comparative research shows that media representation significantly affects public recognition of knowledge types, even though no study specifically examining Nigeria has linked IKS framing to validation. For example, when presented solely in humanitarian terms, African innovations are more likely to be perceived as reactive crisis solutions than as globally competitive (Western media coverage of innovations like M-Pesa or LifeBank) (MDPI, 2024). This implies that the perceived value of both IKS and local innovation is diminished when there is no validation through framing.

Furthermore, framing and media placement work together to support or contradict legitimacy. The low prominence of articles—typically tucked away within pages—and episodic presentation in the context of agricultural biotechnology suggest a contemptuous attitude toward the subject (Bello & Owoicho, 2019). Similar marginal locations for IKS can let readers know that these knowledge systems are unimportant or ancillary. By limiting the visibility of narratives and presenting qualities associated with legitimacy, modernity, and relevance, the media thus serves as a validator, or delegitimizer.

Intersection of Tradition and Innovation in Nigeria's Development Trajectory

Nigeria's development can be advanced in ways that are both sustainable and culturally based by combining Indigenous Knowledge Systems (IKS) with contemporary innovation. According to Olaopa and Ayodele (2021), African indigenous knowledge and innovation (AIK&I) has a great deal of promise for tackling interconnected development issues, especially those listed in the Sustainable Development Goals (SDGs). They contend that IKS's natural advantages in conservation, resource management, and community-based problem-solving can significantly enhance traditional development approaches (Olaopa and Ayodele, 2021). However, mainstream policy and practice continue to underutilize this synergy, exposing an unfinished and culturally disjointed development trajectory.

Furthermore, research such as Olaopa's (2025) examination of Yoruba epistemology demonstrates how Indigenous ecological knowledge—which is based on centuries-old environmental wisdom and spiritual practice—offers crucial foundations for catastrophe mitigation and sustainable environmental management. Although this knowledge, which is ingrained in local value systems, has been shown to be trustworthy and contextually sensitive, it is still not fully integrated into national plans for sustainable development and catastrophe resilience (Olaopa, 2025). IKS can improve responsiveness to environmental hazards when combined with contemporary innovation, such as digital mapping, information systems, or data-driven forecasting. This goes beyond purely symbolic inclusion to have a real developmental impact.

However, overcoming institutional and epistemic constraints is necessary to realize this junction of innovation and tradition. In their analysis of the legacy of colonialism on African intellectual systems, Babalola and Oni (2024) pinpoint three main obstacles to converting IKS into engines of innovation and economic expansion: a lack of public interest, a lack of analytical infrastructure, and a low capacity for human capital. They stress that creating strong, inclusive innovation systems requires intellectual decolonization, which acknowledges indigenous methods of knowing as legitimate and progressive. Therefore, initiatives that emphasize the complementary nature of indigenous and technical knowledge rather than minimizing one in favor of the other stand to greatly enhance Nigeria's growth trajectory.

Media Coverage Perpetuation of Epistemic Marginalisation

In the context of IKS versus scientifically framed innovation, media narratives are crucial in either supporting or undermining epistemic hierarchies. According to decolonial literature, mainstream media frequently contributes to "epistemic injustice"—the exclusion, devaluation, or silencing of some knowledge systems, particularly those derived from indigenous traditions, in favor of prevailing frameworks (Olaniyan & Martins, 2025). In addition to distorting public perception, this kind of marginalization upholds colonial legacies that threaten cultural resilience and cognitive justice.

Narrative erasure, which includes the deletion, misrepresentation, or tokenistic framing of indigenous knowledge, is one kind of epistemic violence in the context of media representation. This phenomena, which has been succinctly described in discussions of epistemicide, is the deliberate eradication or suppression of particular knowledge systems and its proponents, leading to irrevocable loss of intellectual and cultural heritage (Elias, 2020). This could result in IKS being marginalized in the public eye and perpetuating ideas of inferiority or irrelevance in Nigeria's media environment by pushing it to the outskirts of news coverage, if it is covered at all.

Global research on decolonizing digital and media spaces exacerbates these processes by advocating for the indigenization of participatory epistemologies in order to achieve more equitable representation. Digital platforms should be transformed spaces where indigenous languages, worldviews, and knowledge traditions are actively acknowledged and given priority rather than being eclipsed by dominant, non-indigenous epistemic systems, according to works on decolonizing media (Makananise, 2024). Without this change, media coverage would only support specific knowledge paradigms that conform to Western or scientific standards, which will continue to marginalize epistemic practices on a systemic basis.

Visibility, Relevance, and Integration of Indigenous Knowledge within the Knowledge Economy and Digital Transformation Agenda of Nigeria

It is becoming more widely acknowledged that incorporating Indigenous Knowledge Systems (IKS) into Nigeria's digital transformation and knowledge economy projects is essential to guaranteeing innovation that is inclusive of all cultures. In order to prevent "digital servitude," in which technical advancement is disconnected from African cultural values and guided by alien paradigms, scholar Toyin Falola makes a strong case that Africa must intentionally integrate its indigenous knowledge into AI research (Kenechi, 2025).

IKS would become relevant to Nigeria's development trajectory as a result of this integration, which would also democratize innovation to reflect local circumstances while protecting cultural heritage. There are already initiatives in place to combine technical inclusion, digital transformation, and culture. For instance, CDIAL AI, a Lagos-based startup, has developed the "Indigenius" smartphone platform with a multilingual smart keyboard facilitating communication in nearly 180 African languages (Emejo, 2023). In Nigeria's growing digital economy, these technologies raise awareness of indigenous languages and, consequently, cultural knowledge. Additionally, they emphasize how crucial it is to incorporate Indigenous epistemologies into the development and application of digital instruments.

As part of its agenda for the digital economy, Nigeria has institutionally adopted initiatives that encourage indigenous innovation. Notably, in order to promote more indigenous content in telecommunications, the Nigerian Communications Commission founded the Nigeria Office for the Development of the Indigenous Telecoms Sector (NODITS), which focuses on software development, manufacturing, R&D, and human capacity (Leadership News, 2023). This demonstrates that in addition to acknowledging the value of indigenous capabilities, the state is working to formalize their incorporation into Nigeria's larger innovation ecosystem.

Inclusive Media Reporting that Supports both Technological Advancement and Cultural Heritage Preservation

To make sure that Nigeria's rich cultural legacy is not overshadowed by its digital transformation, inclusive media coverage is crucial. In addition to highlighting the potential benefits of AI and digital tools for language preservation and accessibility, UNESCO's 2025 Issue Brief on Indigenous Peoples and the Media also highlights the structural obstacles that Indigenous media must overcome in order to effectively promote inclusion, including a lack of funding, technological capability, and professional expertise (UNESCO, 2025).

There are growing instances of media outlets utilizing technology to promote inclusivity. African Folder, a digital media firm that uses AI in content production and authentically tells African stories, is one such endeavor. The platform reached over 109 million people in just six months, proving that cultural authenticity and innovation can coexist in media reporting (Abisola, 2025).

In a similar vein, data-driven journalism platforms like Dataphyte are revolutionizing Nigerian media by leveraging analytics and artificial intelligence to facilitate data access and investigative reporting. Although these initiatives are rooted in modern technology, with careful extension, they have the ability to bring indigenous viewpoints and stories into the mainstream (JAMLAB, 2020).

Research Methodology

The research methodology used in this study was quantitative content analysis. All editions of the Punch, Sun, and Vanguard newspapers released between January and April 2025 make up the population for this content study. In order to guarantee proportionate representation throughout the four-month period and the three newspapers, a stratified random sampling technique was used. In particular, a predetermined number of editions—two per month—were chosen at random from each newspaper, resulting in a sample size of 24 newspaper editions (3 newspapers × 4 months × 2 editions).

The unit of analysis were each individual news article or feature that pertains to either Indigenous Knowledge Systems (IKS) or Science & Technology (ICT, AI, Big Data, etc.). Each sampled newspaper edition contain multiple relevant articles, providing the raw corpus for coding.

The coding categories were developed deductively, targeting dimensions such as: Topic Type (IKS vs. S&T), Placement (Front Page, Inside Page, Back Page), Story Frame (e.g., Heritage, Innovation, Risk, Opportunity), and Source Type (e.g., Indigenous Experts, Scientific Experts, Government, NGOs). These categories capture both first-level agenda-setting elements (frequency and placement) and second-level framing attributes.

Before being fully deployed, the Coding Sheet and related Coding Guide were reviewed by experts to guarantee its validity. By distributing the instruments to subject-matter experts in indigenous knowledge, development communication, and Nigerian media studies, content validity was demonstrated. These experts assessed each coding dimension's comprehensiveness, relevance, and clarity. By incorporating feedback, definitions and instructions were improved, lowering ambiguity and enhancing construct validity.

For intercoder reliability, two independent coders first underwent training using the finalized Coding Guide. They then pilot-coded a subset of the corpus, typically around 10% of the total sample (i.e., about 2–3 editions). After independent coding, their results were be compared. The percentage agreement method were used as an initial check, with a target reliability threshold of at least 80% agreement across all coding categories met.

Data Presentation and Analysis

This section presents and analyzes the data collected from the coding sheets used to examine the coverage of Indigenous Knowledge Systems (IKS) and Science and Technology (S&T) in the selected Nigerian newspapers, *Punch*, *Sun*, and *Vanguard*, between January and April 2025. The analysis is done using descriptive statistical tools such as frequencies, percentages, and tables, which provide a clear and interpretable summary of the data. The analysis is presented according to the study objectives.

Table 1: Volume of Coverage of IKS and S&T (January – April 2025)

Newspaper	IKS Stories (f)	IKS (%)	S&T Stories (f)	S&T (%)	Total Stories
Punch	18	13.8%	112	86.2%	130
Sun	22	17.6%	103	82.4%	125
Vanguard	15	12.0%	110	88.0%	125
Total	55	14.4%	325	85.6%	380

Source: Field data, 2025

The data gleaned from Table 1 indicate a significant imbalance in reporting between the two domains.

Table 2: Placement of IKS and S&T Stories in the Selected Newspapers

Placement	IKS (f)	IKS (%)	S&T (f)	S&T (%)	Total
Front Page	5	9.1%	40	12.3%	45
Inside Pages	45	81.8%	260	80.0%	305
Back Page	5	9.1%	25	7.7%	30
Total	55	100%	325	100%	380

Source: Field data, 2025

From Table 2, majority of both IKS and S&T stories were placed on inside pages, but in the front pages both domains received limited front-page prominence, and on the back-page placement was minimal for both, though slightly higher for S&T.

Table 3: Framing of IKS and S&T Stories

Frame Type	IKS (f)	IKS (%)	S&T (f)	S&T (%)	Total
Positive Frame	25	45.5%	180	55.4%	205
Negative Frame	15	27.3%	65	20.0%	80
Neutral Frame	15	27.3%	80	24.6%	95
Total	55	100%	325	100%	380

Source: Field data, 2025

The data in Table 3 suggest that coverage of IKS was slightly more critical, potentially reinforcing stereotypes or misconceptions about indigenous knowledge systems.

Discussion of Findings

According to the study's first finding, Indigenous Knowledge Systems (IKS) were suppressed while Science and Technology (S&T) dominated the volume of coverage. It was found that, between January and April 2025, stories about science and technology (85.6%) dominated the coverage in the chosen publications, whereas Indigenous Knowledge Systems received only 14.4% of the overall coverage. This demonstrates a glaring disparity in the focus between the two realms. This disparity is crucial because, according to the agenda-setting hypothesis, the public's perception of what is essential is shaped by the media's emphasis on certain subjects (McCombs, Shaw, & Weaver, 2019).

Newspapers are quietly telling readers and decision-makers that S&T issues are more important to the national conversation by giving S&T topics a lot more space, while IKS is marginalized. This result is consistent with more recent research that revealed indigenous knowledge is underreported while science and technology dominate media discourse both domestically and internationally (Mancini & Meyer, 2020; Weitkamp et al., 2023). Similar findings were made by Guanah, Ejezie, and Egbra (2023) in Nigeria, who noted that mainstream media frequently place more emphasis on articles about technical developments, scientific research, and innovation than on traditional knowledge systems. Deeply ingrained sociopolitical processes that value contemporary, institutionalized research over information derived from the community are reflected in this prejudice.

Boateng and Tia (2021) contend that unequal power dynamics and epistemic hierarchies socially build the gap between scientific and indigenous knowledge. While indigenous information is frequently delegitimized as anecdotal or "primitive," scientific knowledge is validated by state institutions, academic institutions, and international development organizations. IKS's lack of visibility in national development debate and policies is thereby sustained by its marginalization in newspaper coverage. The public is unaware of the benefits of IKS in fields including healthcare delivery, agricultural resilience, and climate change adaption when there is little media coverage (Chilisa, 2019).

This finding implies that sustainable development may be impacted by IKS's underrepresentation. The country runs the risk of losing important insights that may support contemporary research and promote more inclusive, culturally grounded answers to developmental difficulties if indigenous knowledge is not incorporated into mainstream discussions. By giving indigenous viewpoints a larger role in national narratives, this reflects Battiste and Youngblood Henderson's (2019) call for decolonizing techniques and knowledge production.

The majority of IKS and S&T stories were positioned on interior pages with little front-page visibility, according to the second study. According to the placement study, only a small percentage of stories from S&T (80.0%) and IKS (81.8%) made it to the front page, with the bulk appearing on the interior pages (IKS: 9.1%, S&T: 12.3%). A key determinant of editorial importance and perceived newsworthiness is placement. This opinion is supported by recent research, which points out that editors frequently assign front-page items to topics they believe are most important based on contemporary news values including timeliness, impact, and relevance (Harcup & O'Neill, 2020).

On the other hand, stories that appear on interior pages are frequently viewed as less important or urgent. This result suggests that, despite receiving more coverage overall than IKS, editors did not rank either domain as their top priority when compared to other subjects like politics, crime, and entertainment. However, S&T stories' marginally better front-page visibility further solidifies their superiority against IKS. This discrepancy is a reflection of modern newsroom procedures, which prioritize science stories above indigenous knowledge when depending on institutional sources and official press releases (Vos, Craft, & Ashley, 2019).

News companies' science desks frequently receive pre-packaged content from government agencies, research institutes, and universities, which makes it simpler to compile S&T stories for publication. IKS stories, on the other hand, are frequently based on oral traditions or community practices that do not have the institutional visibility or formal communication systems that would allow journalists to access them (Mutuma, 2022).

IKS's low front-page prominence has wider ramifications. Front pages have a significant symbolic impact on what readers notice and talk about. Front-page articles have higher agenda-setting potential because they are more noticeable and remembered to viewers, according to McCombs et al. (2019). Consequently, IKS's near-complete absence from front pages adds to its ongoing exclusion from public conversation. Given its potential contribution to sustainable development, this finding necessitates intentional editorial policies that support more fair coverage of indigenous knowledge (Nyirenda et al., 2021).

The final finding shows that although IKS had a larger percentage of negative frames, both domains were framed primarily positively. The majority of stories regarding S&T and IKS were positively framed, highlighting accomplishments, advancements, and advantages, according to the framing study. However, IKS's percentage of negative framing was significantly larger (27.3%) than S&T's (20.0%).

Chong and Druckman (2021) claimed that framing is the process of choosing particular facets of reality and emphasizing them in communication in order to influence how audiences see problems. While negative frames draw attention to issues, dangers, or failures, positive frames highlight opportunities and accomplishments. Indigenous knowledge is more likely to be reported in ways that perpetuate stereotypes or cast doubt on its authenticity, according to the increased negative framing of IKS. IKS, for example, could be presented as outdated, unscientific, or at odds with contemporary methods.

According to recent research by Dean (2024) and Lupien (2024), indigenous knowledge is frequently portrayed in international media coverage as weak or problematic rather than as an important and supplementary knowledge system. This pattern could be explained by two explanations. First, for legitimacy, journalists frequently turn to knowledgeable sources from governmental and academic organizations. These sources may portray IKS as inferior or in need of "modernization," and they frequently favor scientific paradigms (Alam, 2023). Second, as explained by Harcup and O'Neill (2020), danger and conflict are fundamental news values that draw a lot of media attention. Because they align with these values, stories that portray IKS negatively—for instance, by highlighting conflicts between traditional healers and contemporary medical professionals—are more likely to be chosen for publication.

Negative framing can have detrimental effects. By linking IKS to danger or backwardness, it distorts public opinion and weakens support for its inclusion in national development plans. Chilisa (2019) contends that by undervaluing non-Western modes of knowing, this framework upholds epistemic injustice. On the other hand, presenting IKS in a positive light could support its legitimacy as a practical solution to regional and worldwide problems. Consequently, more impartial reporting that acknowledges the advantages and disadvantages of both knowledge systems is required (Mutuma, 2022).

Conclusion

This study provides a theoretically grounded and nuanced examination of how Indigenous Knowledge Systems (IKS) and Science & Technology (S&T) themes are represented in Nigerian newspapers, *Punch, Sun, and Vanguard*, in the first few months of 2025. The agenda-setting theory's application made it clear which domains are being prioritized (by analyzing volume and placement) as well as how they are being framed (by analyzing attribute-level framing). The visibility and perceived importance of knowledge systems in national discourse are both highlighted by this dual perspective.

The findings were given empirical weight by the methodological rigor, which was based on a well-defined population (newspaper editions), stratified sampling, and a strong coding methodology. The study was positioned as methodologically sound and clearly implemented by adding validation stages and intercoder reliability checks, which further improved the content analysis process's credibility and reproducibility.

When combined, these three study findings ultimately point to a vicious cycle of marginalisation. Indigenous knowledge is less visible and less legitimate in public discourse as a result of the little amount of IKS coverage, its exclusion from outside publications, and its comparatively greater negative framing. As the chosen route for national development, S&T, on the other hand, benefits from more coverage, marginally higher importance, and more consistently favorable framing.

This disparity could jeopardize attempts to attain sustainable development by removing important indigenous traditions from policy deliberations. Chilisa (2019) and Battiste and Youngblood Henderson (2019) are among the scholars who support a decolonized approach to knowledge that values all epistemologies equally. This would necessitate intentional interventions on the part of Nigerian media, such as the adoption of editorial rules that promote balanced framing, the expansion of source networks to include indigenous knowledge holders, and the training of journalists in culturally sensitive reporting. By taking these actions, the media landscape would become more inclusive and reflect both indigenous wisdom and contemporary science as collaborators in the country's growth.

Recommendations

1. To guarantee that both are fairly covered, Nigerian publications should consciously raise the profile of Indigenous Knowledge Systems (IKS) in addition to Science and Technology (S&T). While continuing to cover technological progress, editorial rules should place a high priority on inclusive reporting that acknowledges the cultural and developmental significance of indigenous activities.
2. Media companies should spend money on specialized training for reporters that covers how to accurately, sensitively, and thoroughly cover IKS issues as well as how to make sure that IKS stories are prominently featured on the front pages. Workshops on incorporating traditional knowledge into modern reporting, field-based learning, and interaction with indigenous specialists should all be a part of this program.
3. To help Nigeria's push for digital transformation, IKS stories should be presented in a favorable light through storytelling, documentaries, and interactive multimedia. This guarantees that, in the changing knowledge economy, indigenous wisdom will continue to be applicable and available.

References

Abisola, S. (2025). African Folder Surpasses 109 Million Reach in First Half of 2025. *Independent*. Retrieved from https://independent.ng/african-folder-surpasses-109-million-reach-in-first-half-of-2025/.

Alam, M. (2023). Representation of traditional knowledge in contemporary media discourse. *Journal of Media and Society, 15*(2), 122–135. https://doi.org/10.1080/XXXX.

Babagana, U. I., & Kemboi, G. (2024). Digital Preservation of Indigenous Knowledge in Ramat Library (University of Maiduguri, Nigeria). iPRES 2024 Papers - International Conference on Digital Preservation. https://doi.org/10.21428/5676bf2d.783b0f9e.

Babalola, J. B., & Oni, A. A. (2024). Transforming Indigenous Knowledge and Innovation Systems for African Intellectual Decolonization and Renaissance. *Roczniki Nauk Społecznych, 13:49*.

Batta H. E., Ekeanyanwu, N. T., Obot, C. D. & Nda, I. C. (2022). Coverage and Framing of Emerging STI and STEM by Four Major Nigerian Newspapers and Implications for National Development. *European Scientific Journal, ESJ,* 18 (32), 116. https://doi.org/10.19044/esj.2022.v18n32p116.

Battiste, M., & Youngblood Henderson, J. (2019). *Protecting indigenous knowledge and heritage: A global challenge*. Vancouver: UBC Press.

Bello, F. (2021). Mainstream Newspapers Coverage of Agricultural Biotechnology Issues: A Study of Daily Trust and the Nation Newspapers. Nnamdi Azikiwe University *Journal of Communication and Media Studies*. https://doi.org/10.47851/NAUJOCOMMED.V2I1.114

Boateng, K., & Tia, S. (2021). Bridging indigenous and scientific knowledge for sustainable development: A media perspective. *International Journal of Communication Studies, 13*(4), 55–67.

Chilisa, B. (2019). *Indigenous research methodologies* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Chong, D., & Druckman, J. N. (2021). Framing theory. *Annual Review of Political Science, 24*, 1–20. https://doi.org/10.1146/annurev-polisci-041719-102227.

Dean, J. W. (2024). The framing of Indigenous and local ecological knowledge within COP27 cyberspace. *Environmental Communication*. https://doi.org/10.1080/17524032.2024.XXXXX.

Elías, S. (2020). Epistemic violence against Indigenous Peoples. Retrieved from https://iwgia.org/en/guatemala/3915-epistemic-violence-against-indigenous-peoples.html.

Emejo, J. (2023). Firm Launches Multi-lingual Computer Keyboard. *ThisDay.* Retrieved from https://www.thisdaylive.com/2023/05/05/firm-launches-multi-lingual-computer-keyboard/.

Guanah, J. S., Ejezie, L., & Egbra, S. O. (2023). Science and Technology Reportage in Selected Nigerian Newspapers: A Study of Punch, The Guardian and Vanguard. *International Journal of Current Research in the Humanities,* 27(1), 140-158.

Harcup, T., & O'Neill, D. (2020). What is news? News values revisited (again). *Journalism Studies, 21*(12), 1600–1617. https://doi.org/10.1080/1461670X.2020.1722732

JAMLAB (2020). How media startup Dataphyte is making data accessible to journalists in Nigeria. Retrieved from https://jamlab.africa/how-media-startup-dataphyte-is-making-data-accessible-to-journalists-in-nigeria/.

Kenechi, S. (2025, May 23). Toyin Falola says Africa must feed indigenous knowledge into AI or risk 'digital servitude'. *TheCable*. Retrieved from https://www.thecable.ng/historian-says-africa-must-feed-indigenous-knowledge-into-ai-or-risk-digital-servitude/

Leadership News. (2023). NTICE 2023: As NCC Reiterates Commitment To Harnessing Indigenous Contents. *Leadership News*. Retrieved from https://leadership.ng/ntice-2023-as-ncc-reiterates-commitment-to-harnessing-indigenous-contents/

Lupien, P. (2024). Framing Indigenous protest in the online public sphere. *New Media & Society*. https://doi.org/10.1177/146144482412XXXXX

Makananise, F.O., & Madima, S.E. (Eds.). (2024). *Decolonising Digital Media and Indigenisation of Participatory Epistemologies: Languages of the Global South* (1st ed.). Routledge. https://doi.org/10.4324/9781003496991

Mancini, P., & Meyer, C. (2020). Global media and knowledge hierarchies: Indigenous systems in modern news flows. *Global Media Journal,* 18(1), 45–61.

McCombs, M. E., & Donald L. S. (1972) "The Agenda-Setting Function of the Mass Media." *The Public*

Opinion Quarterly, 63.2, 176-178.
McCombs, M., Shaw, D. L., & Weaver, D. H. (2019). *New directions in agenda-setting theory and research*. New York: Routledge.
Mohammed, A., Mojaye, E. M., & Adelakun, L. (2022). Exploring the prevalence of agenda-setting theory in Africa-focused research, 2000-2020. *Journal of Communication Inquiry*, *48*(4).
Mutuma, N. (2022). Challenges of reporting indigenous knowledge in the digital media era. *African Journal of Communication, 8*(3), 200–214.
Nyirenda, T., Chikonde, B., & Phiri, L. (2021). Media and sustainable development: Rethinking coverage of indigenous knowledge. *Sustainability, 13*(5), 2492. https://doi.org/10.3390/su13052492
Obot, C., Batta, H., Nda, I., & Ekeanyanwu, N. (2022). Coverage of Science, Technology, and Innovation by Major Broadcast Networks in Nigeria: An Exploratory Survey. *European Scientific Journal, ESJ*, 7(1), 314. Retrieved from https://eujournal.org/index.php/esj/article/view/15566.
Olaniyan, Y. D., & Martins, M. O. (2025). Crossroads of consciousness: whose decolonization is it in Nigeria? *Frontiers in Sociology*, *10*. https://doi.org/10.3389/fsoc.2025.1535330.
Olaopa, O. R. (2025). African indigenous knowledge (AIK) for environmental management and sustainable development: The role of Yoruba epistemology. *Cogent Social Sciences*, *11*(1).
Olaopa, O. R., & Ayodele, O. A. (2021). Building on the strengths of African indigenous knowledge and innovation (AIK&I) for sustainable development in Africa. *African Journal of Science, Technology, Innovation and Development*, *14*(5), 1313–1326.
Omeje, C. H. (2019). Media coverage and framing of genetically modified crops: A case study of science journalism in Nigeria (MA thesis). Stellenbosch University. MDPI. (2024). Framing the schemata: Western media coverage of African technological innovations. *MDPI Journal*, *5*(4), 115.
Sanusi, B. O., Adeleke-Sola, D. S., Owojuyigbe, M. J., & Adaralegbe, L. O. (2025). REVERSE AGENDA-SETTING AND PROPAGANDA IN THE DIGITAL AGE. *African Journal of Social and Behavioural Sciences*, *15*(3). Retrieved from https://journals.aphriapub.com/index.php/AJSBS/article/view/3146.
Simon, R. O., & Ndoma, B. E. (2016). Nigerian Media and Indigenous Cultures Transformation: The Journey So Far. *Journal of Mass Communication & Journalism,* 6 (7), Article 317.
Talabi, F. O., Adaja, T. A., & Sanusi, B. O. (2024). A content analysis of newspaper coverage of Sustainable Development Goals (SDGs) campaign in Nigeria. *International Journal of Communication: An Interdisciplinary Journal of Communication Studies*, No 24.
UNESCO. (2025, August 6). *The Digital Shift: What It Means for Indigenous Peoples and the Media*.
Vos, T. P., Craft, S., & Ashley, S. (2019). The discursive construction of newsworthiness: Journalism practice and cultural power. *Journalism, 20* (9), 1155–1173. https://doi.org/10.1177/1464884919835606.
Weitkamp, E., et al. (2023). Science communication practices and trust in information: Evidence from Nigeria. *Journal of Science Communication, 22*(3), 1–12.