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Multi-Method Analysis of Locally Built Artificial Intelligence Models Designed for Journalists in an African Country

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Abstract

Artificial intelligence (AI) models for journalism have been built within the Global North context, hence deepening the concerns of the "AI divide" between the North and South. This has compelled organizations in various areas of the Global South to develop journalism-focused AI models to address the specific challenges peculiar to journalism practice within the region. Nigeria stands out within the Global South context because organizations are developing local AI models to empower local journalists. However, the extent to which these AI products can address real-life journalistic challenges is unknown; hence, this study assesses how well locally developed AI models are positioned to support journalists in Nigeria, using a purposive sample of four homegrown tools: ChatJourno, Dubawa Chatbot, ChatVE, and MyAIFactChecker. Employing a mixed-methods design, we conducted walkthrough usability tests by engaging 15 trained journalists who provided rigorous assessments of the functionalities of each tool. We then conducted semi-structured interviews with the developers of each of the tools to assess each platform's vision and directly cross-check those claims against the test-users' evidence. Findings show the tools generally aim to complement Nigerian newsroom needs, such as improving news drafting and accelerating verification, but their realized value is uneven. While some of the platforms offer usable interfaces and services, some common limitations include gaps in up-to-date data and unusable features. We conclude that the tools must reliably achieve their promised functions because usability strongly drives user acceptance, and mass newsroom adoption will follow only when tools demonstrably enhance content standards in news practice.

Keywords

AI models; journalism; Nigeria; usability

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1. Introduction

An artificial intelligence (AI) revolution in journalism is transforming many aspects of the practice (Radcliffe, 2025). Notably, the dynamics of journalism processes are broadening as long-established news gathering, verification, writing, editing, and distribution practices are evolving from a unidirectional process into an integrated and dynamic one (Shi & Sun, 2024). Very much like the initial entry of many new technologies into the practice, a lot of enthusiasts believe that while AI may currently serve as a supplementary aid and not a replacement, it is not certain that it will remain the same in the near future, considering that AI is becoming potent and dependable enough to replace mundane journalism tasks (Simon, 2024).

In spite of AI's promises, its entry raises critical concerns in many areas, including erosion of editorial independence, algorithmic bias, and misinformation (Kevin-Alerechi et al., 2025). One crucial concern that hasn't been adequately addressed in journalism scholarship is the equity gap created by the dominance of Global North-developed AI tools for journalism (Mohammed et al., 2024), a development believed to limit the representation of low resourced voices and journalistic perspectives from climes such as Africa, Latin American, and other Global South regions, hence deepening the "AI divide" between the North and South.

This gap has compelled cutting-edge organizations and individuals in various areas of the South to develop journalism-focused AI models to address the specific challenges peculiar to the practice within their region. For example, in Colombia, Cuestión Pública developed Odin, a locally developed AI tool designed to curate news content within the confines of investigative journalism (Linares, 2024). Likewise, *India Today* developed Sana, a generative AI news anchor designed to deliver news in multiple languages and integrate with humans seamlessly (Verma, 2024).

Within the broader Global South context, Nigeria stands out as one of the active countries where a lot of organizations and individuals are developing AI models specifically to empower journalists and newsrooms. As a matter of fact, out of the five AI for journalism organizations featured in the notable Global Investigative Journalism Network article on platforms adopting AI for enhancing fact-checking and investigative reports on the African continent, four of them were Nigerian organizations and tools, namely FactCheck Africa's fact-checking AI, MyAIFactChecker; Centre for Journalism Innovation and Development's (CJID) fact-checking platforms Dubawa Chatbot and DubawaAudio; and Dataphyte's Nubia AI, a story creation AI model (Sofiullahi, 2024).

Given this background, there's no doubt that there's an active scene for locally developed AI models in Nigeria; however, the motivations for developing these platforms, as well as the extent to which these intentions align with the intended users' usability of the AI models, remain a mystery. It is crucial to provide meaningful insights into these issues, especially with the increasing failure of journalism tech startups, which in many cases is believed to be largely because of the "disconnect between these new entrants and legacy newsrooms" (Chew & Tandoc, 2024, p. 191).

Given this lacuna, this study finds it crucial to ask:

> RQ1: How functional and usable are locally-developed AI tools intended to empower journalists in Nigeria?

RQ2: What are the goals of locally-developed AI tools intended to empower journalists in Nigeria?

RQ3: How do the goals of the locally-developed AI tools align with the functionalities of the tools?

To answer these research questions, first, the study employs a walkthrough method to understand how functional and usable the selected locally developed AI tools are. Secondly, the study conducted semi-structured in-depth interviews with the developers and managers of the AI models to obtain the goals of locally developed AI tools intended to empower journalists in Nigeria. Finally, findings from both methods of inquiry were cross-examined to understand how the goals of the locally developed AI tools align with the functionalities of the tools.

The remainder of this study is structured as follows. First, the literature review explores the efforts made to decolonize AI for journalism in the Global South, technology transfer in newsrooms of developing countries, and the assessment of AI tools in low-resource contexts. Secondly, we detail the methodological approach. Third, we analyze the findings. Fourth, we discuss and draw relevant conclusions.

2. Literature Review

2.1. Toward Decolonizing Journalism AI in the Global South

In the 21st-century newsroom, Africa and other Global South regions confront the paradox of tools that promise to streamline journalistic processes, while often carrying foreign news values and assumptions (Kothari & Cruikshank, 2022; Ndlovu, 2024). A recent Reuters Foundation survey of 70 Global South countries found that nearly half (49%) of the journalists feared AI would amplify misinformation because most AI models are trained on Western-centric datasets (Radcliffe, 2025). In other words, machines built from Meta, Google, and OpenAI corpora simply don't know much about, say, rural Ghanaian politics, Nigerian folklore, or Ugandan music. In one such example, a South African editor noted that the American-made AI tool, Coral, despite its successes, still needs human intervention to be effective in Africa because "it is an American tool not built [with] the South African audience in mind" (Beckett & Yaseen, 2023, p. 67).

Likewise, reporters note that AI transcription tools often mishear non-Western accents (Ejifoma, 2024). In practice, this means even mundane AI-assisted tasks such as voice-to-text transcriptions and text translation become challenging. Without local tuning, an African journalist risks receiving insights filtered through a Western worldview and missing subtleties of context, dialect, and culture (Ndlovu, 2024).

It is precisely this gap between Global North AI innovations and Global South realities that the push for decolonization aims to close. Some commentators have argued that it is not simply about more data, but about whose data and whose priorities shape the tools. For instance, digital rights activists fault the standard fix of "getting better data" as missing the point because any large dataset is a digital representation of society as it is through the lenses of the powerful (Miller, 2022). Therefore, more data from the same sources will merely reinforce existing blind spots. When the skill of building AI is concentrated among Western engineers and Western venture capitalists, they decide which problems AI will solve and which it will ignore. This replicates economic colonialism in a new guise (Miller, 2022), as it forces all societies to conform to problems and solutions defined abroad.

In journalism, for instance, it is assumed that foreign AI tools capable of editorial functions will automatically work everywhere, even though, in reality, they often misrepresent facts, as seen with ChatGPT, whose limitations have been documented vividly in studies such as Hicks et al. (2024). Decolonization in this instance would demand that the entire process, from data curation to tool design and deployment, be done in collaboration with Global South experts. As Miller (2022) put it, the very decisions of what data to collect, how to collect them, and what to use them for need new oversight. Put differently, in addition to fixing biases at the output, it is necessary to rethink who writes the code and asks the questions.

Thus far, conversations about newsroom AI are indeed globalizing, and Global South voices are not silent. In South Africa, one qualitative study of journalists found that because generative tools mine data that already exist, they inevitably exclude marginalized communities and voices (Munoriyarwa et al., 2023). This resonates with other findings, such as those of Mohammed et al. (2024), which conclude that if journalism AI is to work in Africa, newsrooms must develop AI technologies aligned with African journalistic principles.

Some on-the-ground experiments in AI-driven journalism give credence to these ethical clamors. Take the example of Alice AI, a news anchor created in Bulawayo, Zimbabwe. Alice AI "reads" weekly news bulletins generated by journalists. Although the innovation sought to democratize access for audiences, including disabled listeners via captioned video, the project also hit the classic decolonial snag when the team struggled with accurate replication of local accents and dialects (Cook, 2024). The Zimbabwean team had to manually edit spellings and even engage in voice cloning to make Alice's speech feel authentic. This example shows that simply building a locally developed AI application on Western-trained speech synthesis and language technologies is insufficient; true decolonization would require grounding the system in Zimbabwean language data. Only by building large language models (LLMs) explicitly on low-resource tongues can these communities avoid being left behind (Smart et al., 2024). Decolonizing AI in newsrooms, therefore, often begins with linguistic justice. That is, making sure that the very words and idioms of indigenous societies are included in the software's vocabulary. To decolonize journalism AI in Africa and the wider Global South is to ensure these new tools serve local needs and values, rather than overwrite them. It means recognizing that data and algorithms carry culture and power (Adams, 2021), and only by reclaiming who controls the algorithms can formerly silenced voices become part of the story.

2.2. Tech Transfer in the Global South: Localization, Capacity Building, and Knowledge Sharing

As scholars of development and communication have observed, the popular image of technology simply flowing smoothly from North to South is hopelessly naive (Salami, 2024) because of the inherent power imbalances that often accompany the diffusion. Lu and Qiu (2023) argue that technology flows are becoming increasingly diverse and call for a new lens of translation and transfer. They caution that conventional technology transfer is haunted by technocratic dreams and an insensitivity to technological materiality that often ignores local contexts. In their view, we must treat tech not as a neutral gadget to be plugged in, but as an artifact "socially shaped with distributed agency" (Lu & Qiu, 2023, p. 272). In practice, this means that debates about tech transfer in journalism must grapple with a raft of social questions: Who shapes the code? Whose language does it use? Who benefits from the data it gathers and stores?

Language barriers, cultural values, and even accents can confound a one-size-fits-all approach to technology transfer. This is why studies view the pendulum as swinging toward localization and capacity-building as

solutions to these divides (Wiaterek et al., 2025). Localization, in the media-tech context, means shifting power, resources, and decision-making from global entities to local actors, primarily to craft solutions by those who know local needs best. A bottom-up, locally-led approach would have journalists or publishers themselves be the inspirers, originators, or designers of the technology and its use rather than being passive end-users. We see glimmers of this in tech hubs and innovation labs across Africa. For instance, CJID in Nigeria has built new tools for local reporters that will cater to fact-checking, news refinement, news accessibility, audio transcription, and translation services (Eromonsele, 2024). These are examples of translating technology to suit local needs.

Researchers increasingly talk about the need for "digital sovereignty" (Mohammed et al., 2024; Sampath & Tregenna, 2022), as well as the need to cultivate indigenous tech capacity (Salami, 2024). These clamors have brought about some level of resources and attention to the subject. Open-source platforms such as Zindi, Kaggle, and openAFRICA offer African journalists, researchers, and practitioners avenues to curate and share locally relevant datasets, which are crucial for addressing the region's well-documented dataset scarcity (Okolo et al., 2023). Grassroots initiatives have also emerged as contributors to African AI development, often through collaborations that leverage regional expertise to create culturally and linguistically diverse datasets. For instance, the AI for Development (AI4D) Africa Language Challenge, which is a collaboration between Zindi and AI4D, saw over 400 data scientists working to develop datasets for African languages such as Wolof, Hausa, Chichewa, Igbo, Ewe, Kabiye, and Kiswahili, which indicates that local initiatives can work to fill gaps left by global technology providers (Zindi, 2020).

2.3. Evaluating AI Tools in Low-Resource Settings

One of the underexplored determinants of AI adoption in local newsrooms in the Global South is usability. As studies in human–computer interaction have demonstrated, trust, interface clarity, and task relevance are strong predictors of whether new technologies diffuse beyond pilot stages (Dang & Li, 2026; Ntoa, 2025). In African news organizations where the workload is heavy, and many journalists have limited access to premium technical support, they are more likely to adopt AI systems that demonstrably help them save time, improve accuracy, and deliver on tasks without committing professional blunders (Umejei et al., 2025). There is an emerging body of scholarship employing mixed-method approaches to the study of AI in journalism (e.g., usability tests combined with interviews or ethnography) in Europe. Still, far fewer studies are found in the Global South. Studies on journalism AI and media assistance suggest that newsroom technologies are most likely to scale when built through participatory, iterative co-design with journalists. In contrast, short-cycle donor projectization—characterized by the absence of plans for maintenance and institutional integration—correlates with abandonment after pilots (Clarke, 2021). The current article addresses that need by empirically evaluating four Nigerian journalism AI tools—ChatJourno, Dubawa Chatbot, ChatVE, and MyAIFactChecker—using walkthrough usability tests and semi-structured interviews with journalists and developers.

3. Methodology

To understand how locally developed AI models support the work of journalists in Nigeria, this study adopts a multi-method approach. First, we purposively selected four AI models—ChatVE, ChatJourno, Dubawa Chatbot, and MyAIFactChecker—based on local ownership and development, local uptake, and accessibility

of AI models by journalists and news professionals. The selection was guided by function and visibility rather than statistical representativeness. In other words, the four tools were chosen because they are among the few publicly visible, journalism-facing AI products in Nigeria that already speak to concrete newsroom needs. Nigeria's AI-journalism ecosystem is still emerging, and because these four platforms only recently became publicly available, they are best understood as early illustrative cases from a nascent field rather than as normal cases of a mature and established market. ChatVE, for instance, is a fact-checking generative AI model developed by a Nigerian data analyst, accessible to news makers in the country. ChatJourno, on the other hand, is a tool that enhances efficiency in newsroom operations in the areas of brainstorming and crafting engaging headlines and stories. Dubawa Chatbot, meanwhile, is a fact-checking AI model that verifies a claim, provides freshly verified information, and allows journalists and citizens to report claims. Finally, MyAIFactChecker is a news and fact verification AI platform that assesses the credibility of news stories and provides acclaimed fact-checking entries and sentiment assessment of news queries.

In terms of ownership, funding structures, and institutional backing, Dubawa Chatbot is an AI tool developed by Dubawa, the independent verification and fact-checking initiative of the CJID, one of Nigeria's leading media development NGOs. It builds on Dubawa's eight years of fact-checking work across eight countries, so its verification logic draws on an institutional knowledge base rather than generic web data. Its funding is embedded in CJID's wider organizational model, which gives it a stronger financial base than many local journalism AI tools. ChatJourno, on the other hand, began as a multi-stakeholder, Luminate-funded initiative that brought journalists and technology experts together to co-develop AI tools for African newsrooms, and it now operates as an independent product. MyAIFactChecker is an organizational initiative developed by FactCheck Africa under the Brain Builders Youth Development Initiative, a Nigerian civic-tech non-profit. The platform received funding support from BECERA (Building an Environment for Civic Responses and Engagement in Africa) and the U.S. State Department; it launched in April 2024. ChatVE, developed by data scientist Israel Olatunji Tijani, is an AI tool designed to combat misinformation, online toxicity, and radicalization.

Following this selection, we conducted a walkthrough assessment of the AI models to understand the usability and functionality of the platforms for routine journalists' tasks. Secondly, we conducted in-depth interviews with developers of these AI models to understand their vision for the platforms, which aided our cross-examination of how these visions align with the functionalities of the tools.

To commence the first phase of the data collection, we designed a walkthrough coding sheet following Light et al.'s (2018) protocol guide. In our case, the walkthrough coding sheet was designed to assess the AI models' usability, functionality, and alignment with the vision of the platform. Further, the protocol was designed for test users to carry out a forensic review of the tool's sign-up process, daily use, design, ease of navigation, crawlability, and response. It also serves as a means for user-centric assessment of the AI model's intended purpose and use. To obtain test users for the walkthrough, we reached out via email to a pool of journalists drawn from participants who attended the Media and Development Conference, which included an AI and Journalism Workshop, held from November 25 to 29, 2024, in Abuja, Nigeria. A total of 18 journalists showed interest; however, three journalists withdrew to avoid bias due to potential conflicts of interest. All participants were trained to understand the study protocol and the walkthrough process in a 30-minute session-based orientation via Google Meet, after which they commenced their assessments. All assessments were successfully conducted between June 30 and July 11. The walkthrough assessment

was largely supplemented by elements of ethnographic inquiry, such as observations and field notes (Elega et al., 2025; Light et al., 2018). All test users were instructed to peruse the environment of use of the select platforms and provide ample evidence to back up their observations and claims, including screen recordings of motion evidence as well as screenshots of pictorial ones.

To commence the second phase of the research, white papers, technical reports, webpages, magazine essays, promotional articles, and news articles about the various AI models were reviewed. These reviews served as the basis for the interview guide. After the protocol was designed, an email invitation was sent to developers and managers of the AI models. A total of six developers were reached, but only five participated in the semi-structured in-depth interview. All interviews were conducted in English between June and July 2025 via Microsoft Teams, primarily because of the software's ability to transcribe in real time. On average, the interview lasted for 60 minutes. Direct textual reproduction of interviews was done immediately after the oral inquiry, and all interviews were analyzed thematically, where themes and categories were identified. This method is lauded for its strength in analyzing, organizing, describing, and reporting themes that emerge from a qualitative data set (Braun & Clarke, 2006).

4. Findings and Discussion

Our findings are drawn from the walkthrough with 15 test users (practicing Nigerian journalists) to understand the functionality and usability of locally-developed AI tools in Nigeria, as well as the interviews we conducted with developers of ChatVE, ChatJourno, Dubawa Chatbot, and MyAIFactChecker to assess the goals of locally-developed AI tools intended to empower journalists in Nigeria.

4.1. Walkthrough Analysis

Following the test users' assessment of the platforms, out of the four AI models, we found that one is fully functional, two are near-fully functional, and one is not functional at all. The fully functional tool, Dubawa Chatbot, by design is expected to help journalists and everyday people fact-check, verify mis/mal/disinformation, and corroborate viral claims through WhatsApp. Although the app could exist on traditional marketplaces for apps such as Apple App Store or Google Play Store, the developers built the bot into WhatsApp with the cultural assumption that, first, WhatsApp is one of the most popular synchronous messaging apps on the continent, particularly in Nigeria, and second, it is a leading local platform for the dissemination of misinformation in Nigeria. Additionally, Global South journalism-focused studies acknowledge the increasing influence of the platform on news gathering, distribution, and dissemination (Dodds, 2019; McIntyre & Sobel, 2019). According to the test users' assessment of the fact-checking platform, it was responsive; the majority of the prompts yielded accurate results, but some did not. This is understandable because even the frontline generative AI models, such as ChatGPT, also provide wrong results and sometimes hallucinate, hence why the journalism world has frowned against it (Liu, 2025) and advised responsible adoption. The only major concern here is that these platforms are designed for journalists and news producers who operate under higher accuracy and verification demands than typical users of general-purpose generative AI platforms, given the professional and ethical consequences of errors in news production. Additionally, Dubawa Chatbot functioned well under stress. Test users entered multiple queries, and it was able to handle them each time, but it may provide generic responses if the claim is new or phrased differently than it used to be.

ChatJourno is nearly fully functional but falls short on one key promise. By design, it should function as a newsroom assistant that allows journalists and news professionals to draft stories, brainstorm, and generate backstories. From the test users' assessment, the brainstorming element is functional to an extent, but it is largely limited in terms of recency. Test users found that it only includes stories up to June 2024, which means one cannot engage with recent or ongoing issues. The primary concern is that the backstory generation feature is not functional. It is a primary feature that a lot of journalists look forward to because the opportunity to electronically retrieve past stories would not only help journalists save time, but it would also help them ensure accuracy, strengthen reportage, and enhance story credence. This would be useful in a world where journalism is increasingly becoming contextual, prioritizing background and backstory rather than isolated stories (Svith, 2025).

MyAIFactChecker is also partially functional (see Figure 1). By design, MyAIFactChecker is expected to verify news, state their authenticity, and provide a sentiment analysis on the news being inquired about. Test users were largely able to verify their claims, but, in some instances, particularly when inquiring into older or very recent information, an error message stating that "the claim is unverified due to the inability to access the internet" was provided by the platform. One test user wanted to verify a story about the death of filmmaker Kayode Peters, who had been confirmed dead in Canada, as at the time of the inquiry, a majority of the reputable news organisations had posted the news on their website (see Figure 1). As a matter of fact, the test user entered the prompt exactly the way *Punch Newspaper*, a major national daily, reported it, but MyAIFactChecker failed at verifying the claim. Not working is bad enough; however, in the event that it works, this brings into question whether AI actually enhances journalism or simply recasts existing information in a new format (Spyridou & Ioannou, 2025). Further, test users were also not able to benefit

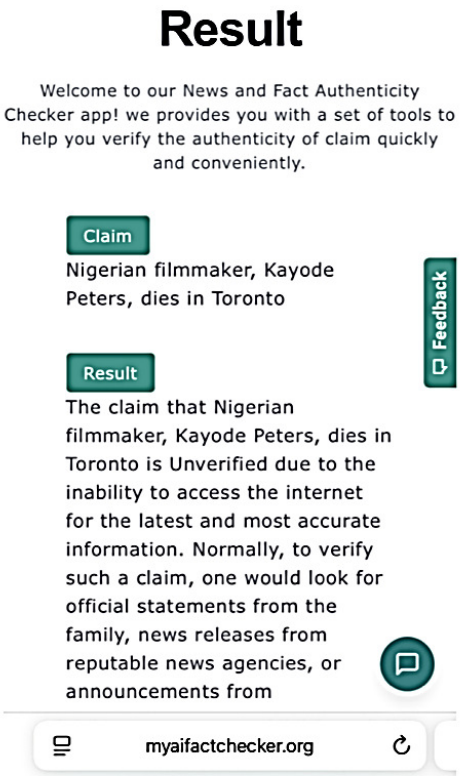


Figure 1. Response to claim by MyAIFactChecker.

from the sentiment analysis of claims; the error message that occurred for that was "An error occurred while fetching the response from the external API."

Although ChatVE is intended to fact-check information, identify online toxicity, and conduct sentiment analysis, our findings show that journalists are unable to access the platform as they are expected to request a demo; however, after entering their required details, the demo isn't provided. Although the platform has been primarily described and presented as a fact-checking tool, the technical walkthrough demonstrates that the platform also doubles as a B2B platform that helps businesses create chatbots to address hotel and flight booking challenges. This, according to Driver (2026), is a "recurring structural misalignment in how authority, learning, legitimacy, governance cadence, and ownership are designed and sequenced" (p. 1)

Our usability assessment shows that three of the AI tools achieved an acceptable threshold for the usability standard of AI models. Dubawa Chatbot, ChatJourno, and MyAIFactChecker exhibit ease of use, smooth navigation, intuitive interaction, and appealing design, while ChatVE is largely unusable (see Figure 2).

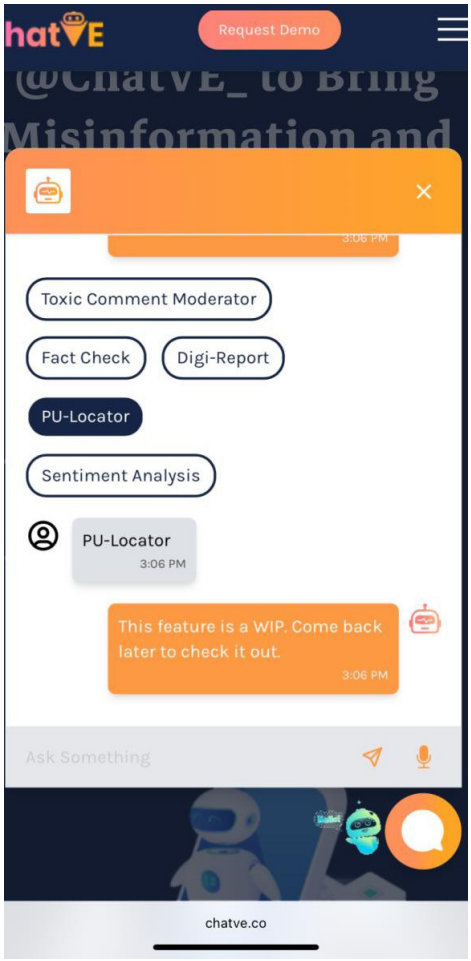


Figure 2. ChatVE's polling unit (PU) locator feature.

Among other things, Dubawa Chatbot is usable because it is embedded into WhatsApp; hence, it leverages the app's interface. Test users find the landing page user-friendly, visually engaging, and easy to use. Just like on the traditional hosting platform, Dubawa Chatbot allows for customization; hence, users can change chat

appearance, background, and wallpaper. One user likened it to chatting with a friend; obviously, this time, the "friend" replies mostly always instantly; as a result, it is easy to swiftly verify claims and find evidence without difficulty. The majority of test users revealed that it doesn't require technical knowledge to use. As a matter of fact, every day, WhatsApp users anywhere in the world could easily use the chatbot (see Figure 3).

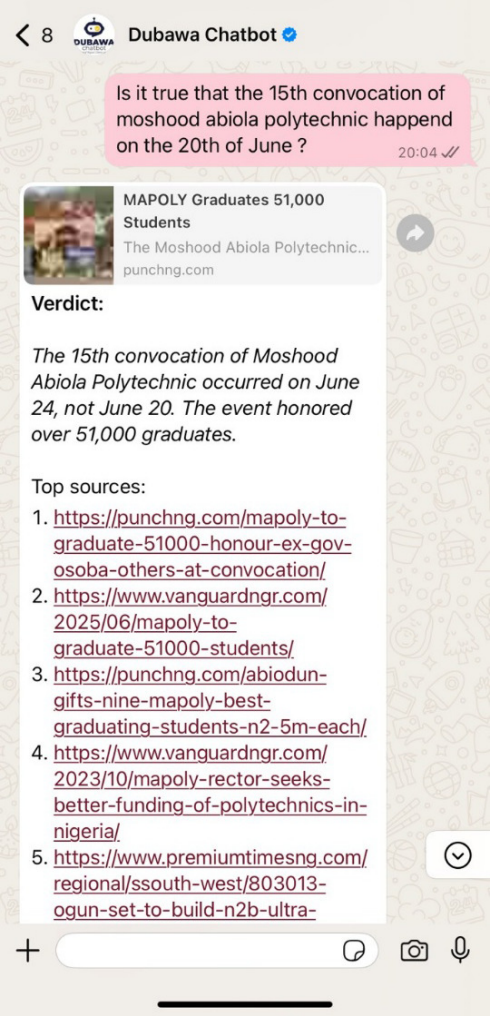


Figure 3. Response to a fact-check by Dubawa Chatbot.

MyAIFactChecker offers seamless navigation, a user-friendly design, and overall ease for both everyday users and journalists. The landing page immediately introduces the user to the fact-checker tool, then highlights the step-by-step guide on how to use it. Although the guide is redundant because similar content is available in the "how to use" navigation item, for the most part, it doesn't alter the fact-checking process in any way. In fact, one could make the argument that it was purpose-built to ensure that wherever the user is on the site, they're able to access key information. The AI tool doesn't require users to create an account, which makes it highly usable and also lowers the barrier of entry.

ChatJourno is user-friendly, offers smooth navigation, and has the simplest design of the bunch. The tool opens with a concise call to action to journalists to attempt the two key features in a simple, clean, and spacing-balanced font. The navigation buttons were easy to use; however, while the "chat with AI" feature

was highly functional (see Figure 4), a step-by-step guide on how to benefit from the backstory generation feature would have been really helpful. ChatJourno doesn't require users to sign up to use it, and also does not require optimum digital or technical knowledge and experience. As Blanco et al. (2026) argue, it is important to address issues of user experience, particularly in the context of novel journalistic technology.

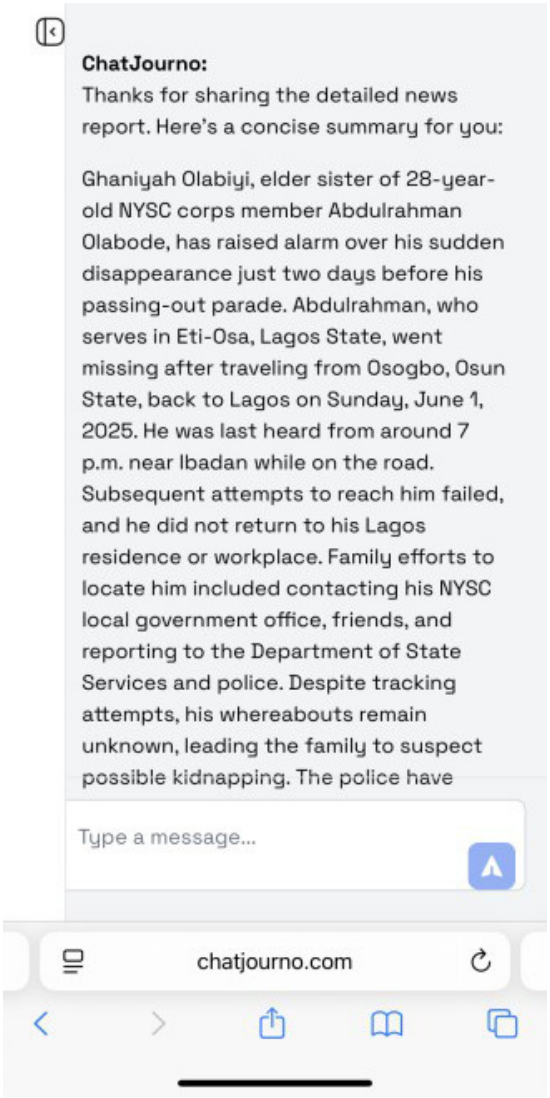


Figure 4. ChatJourno summarization feature.

ChatVE prevents journalists from completing intended tasks; as a result, it is unusable. Although the layout is clean, there's evident clutter in labels and the menu. The incorporation of booking an appointment in this supposed AI for journalism tool is confusing. Primary features are not attainable within a few clicks. Additionally, navigation and ease of use are largely problematic. There's also no explainer or step-by-step guide for the comment moderation feature, which seems to be the only working tool. The majority of the test users were discouraged, evidenced by their reduction to monosyllabic comments such as "no" and "Did not work" in the walkthrough response forms. This behavioral pattern was only noticeable with ChatVE. Respondents who were expressive about the platform resolved to the conclusion that the tool is either inactive or under development.

Although these AI models have mostly benefited from publicly available open-source democratized digital assets made available by innovators from the North, the uneven performance of these locally developed AI models for journalism speaks directly to the existing digital divide, which impacts the development of AI talent, AI competencies, research, and financial support (Kitsara, 2022). So, what does this mean for the newsrooms and journalists these are intended for? The mixed outcomes negatively impact the operations and internal dynamics of the newsrooms, particularly in the Global South, where technology dependence is still hindered by persistent obstacles such as a lack of technological infrastructure, or in some cases, government policies (Abtidon, 2026). So, in our attempt to "innovate against all odds" as de-Lima-Santos (2026) puts it, or solve the problem of intense "reliance on Western technologies that are linguistically and culturally ill-fitted to local realities" (Hasan, 2026, p. 40), ensuring that the transformation of the newsroom from an environment of editorial production into a site of socio-techno struggle should not be a by-product.

4.2. Interview Analysis

To complement the walkthrough findings presented in the previous section, semi-structured interviews were conducted with founders/managers of Dubawa Chatbot, ChatJourno, MyAIFactChecker, and ChatVE (see Table 1). The analysis yielded six themes covering project background and intent; design and functionality; usability and engagement; technical and operational challenges; vision, impact, and improvement; and policy support for the studied AI tools. Together, these themes show how design choices, data and language constraints, platform dependencies, and funding realities all act together to shape how these tools serve the purposes they set out to serve or not.

Table 1. Interview respondents.

S/N	Organization	Role
R1	ChatJourno	Co-founder
R2	Dubawa Chatbot	Product lead
R3	MyAIFactChecker	Lead project manager
R4	ChatVE	Founder
R5	Dubawa Chatbot	Software engineer

4.2.1. Project Background and Intent

Across the responses, we observe that the developers' motivations for building the tools were drawn from: domain knowledge and newsroom experience (R1); technical skill in product development and management (R4); a tactical decision to situate the technology so it meets people in a platform (WhatsApp) where they already are (R2); and the rather personal, lived problem of a manager whose grandparents habitually forwarded dubious, often harmful social-media messages to him (R3), prompting him to do something about it.

Put precisely, our respondents were candid about the specific journalistic gaps they intend to address, and their proposed mechanisms for closing them are tellingly varied. Across the interviews we can isolate at least four distinct task-level problems the tools aim to address: (a) improve news draft quality and reduce editing workload through writing, rewriting, summarizing, and transcribing (R1); (b) ensure rapid verification of viral claims in all formats and detect news trends through backend monitoring (R2); (c) ensure democratized, grassroots fact-checking and capacity building through fellowships and API openness to enable other

newsroom to integrate the tool's functionality (R3); and (d) detect questionable claims, gather supporting evidence, and return a clear, justified verdict with source links and a truth label to users (R4).

4.2.2. Design and Functionality

Design choices, as narrated by respondents, are rarely purely technical; they are also deliberate translations of newsroom tasks into code. ChatJourno's founding team, "two technical guys, two journalists," made a deliberate social-technical decision so that the model would "tell you where the data is coming from" (R1); Dubawa's team insisted on a menu-based WhatsApp flow and backend trend-monitoring so that "our fact checkers know the trends and can carry out further investigations" (R2); MyAIFactChecker prioritized language coverage and an offline mode precisely because "cost of data is high in Nigeria and the grassroots must be able to use the tool" (R3).

We find that most teams rely on external LLM APIs (OpenAI GPT-3.5/4; R2, R3, R4, R5), while ChatJourno (R1) reported using natural language processing (NLP), transformer-based audio processing systems, and locally developed model components; however, the respondent declined to disclose the specific underlying LLM used. The pattern is consonant with what scholars describe as a "managed-services" path to productization in low-resourced and constrained settings (van Dijck et al., 2018). As for Dubawa Chatbot, its reliance on WhatsApp, while innovative, creates a dependency on a private platform's infrastructure and business rules. ChatVE's unfortunate tale tells us that such dependency can be risky. ChatVE started conceptually strong as an in-thread verification tool on X that served a stateful purpose of fact-checking and evidence retrieval, but was abruptly humbled by platform economics when X/Twitter's API pricing changed, forcing the team to, in their words, "roll things back on our web application" (R4). This experience is an empirical demonstration of the platform-dependency problems scholars theorize, in which platforms are infrastructural actors whose policies and pricing inscribe values and create lock-in, and those choices can quickly reconfigure who can sustain particular public interest services (Gillespie, 2018; van Dijck et al., 2018). In sum, we note that the design choices for these tools were largely informed by (a) careful participatory needs assessment (MyAIFactChecker's fellowships, Dubawa's consultations), (b) pragmatic, context-sensitive engineering (WhatsApp deployment, language support), (c) human oversight and governance features (editorial supervision and trend monitoring), and (d) a sustainability plan that acknowledges platform power and recurring costs.

4.2.3. Usability and Engagement

Usability is the point of contact where a developer's theory of change meets the impatient body of a working reporter; and in the developers' accounts, we hear repeatedly and insistently that the tool's vision is to save time, reduce cognitive friction, and slot into the journalist's day without asking them to reinvent the way they work:

> What is most important to me personally…is for it to save you time and effort, right….Normally, you will write your story in 30 minutes, one hour; with ChatJourno, you can do it in 5 minutes to 10 minutes, so you can then use the remaining minutes…for investigation, going on the field…calling police…calling government officials to verify news directly. (R1)

Thus, journalists are more comfortable with behind-the-scenes uses of AI (to assist and optimize efficiency) than with tools that substitute for news judgment. MyAIFactChecker's lead voices a similar opinion: "We do not want you to…contract your reasoning to MyAIFactChecker….It is complementary to your work….The team keeps a visible feedback button…it makes us train the chatbot better" (R3). This also resonates with Diakopoulos's argument that automation must augment human judgment in high-stakes domains like news, not eclipse it (Diakopoulos, 2019).

Despite local engagements with the tools, competition from the big players persists. The ChatJourno lead admitted, however spitefully, that many Nigerian journalists already experiment with ChatGPT, so the struggle has been to offer differentiated, task-specific affordances that general LLMs do not: "The more they use ChatGPT…the more they are exposed to fake news and misinformation…because Sam Altman does not care about journalists, Sam Altman cares about Big Tech" (R1), implying that when journalists turn to generalist systems like ChatGPT, they risk importing questionable data and unverifiable claims into their workflow. This is echoed in broader scholarly debates on "platform capture," where Big Tech's priorities in scaling AI often marginalize domain-specific needs, and in the case of journalism, needs such as transparency, source verification, or editorial ethics (Moran, 2023).

4.2.4. Challenges and Adaptation

The developers' answers about their biggest technical and operational challenges made it clear that some were less concerned with "will this model run?" and more concerned with "how would mistakes and hallucinations from the model affect the Nigerian news ecology?", which suggests that they grasp the field's delicacy and the real consequences of a faulty or unreliable AI:

> We cannot leave ChatJourno to hallucinate, because if it hallucinates…your mistakes can go a long way. If a journalist published a story on *The Cable*, within the space of 10 minutes…20 to 30 newsrooms would have copied it….We do not have the grace to make such mistakes. (R1)

Research on generative AI and the ethics of automation has warned that LLMs can confidently fabricate facts, like stochastic parrots, producing fluent but ungrounded assertions that can be socially toxic when passed off as authority (Bender et al., 2021). The ChatJourno lead further notes that building a high-functioning model trained on local data is costly:

> If you wanted to subscribe to an API right now per month, you must have about $490, and that's close to a million Naira each month….We would not be sustainable….We needed to train our model deeply on local news….We were faced with the problem of…should we scrape the news from the newsroom or…talk to them when they are ready to give us their news. (R1)

That dilemma—scrape and risk legal/ethical transgressions, or solicit formal partnerships and face slow uptake and limited datasets—is a recurring constraint for journalistic AI innovations. As Brittain (2025) notes, these litigations and public conflicts between publishers and AI firms are recurring because content licensing has become a live political cost for any team that contemplates using large amounts of news data for training. ChatVE's narrative is even more pronounced as their X-integrated tool was rendered untenable when API pricing changed (R4). That very policy shock has been described by commentators as an infrastructural decision that reshuffles the calculus of viability for dozens of downstream civic services (Mehta, 2023).

In terms of adaptation barriers, developers mentioned fear and low digital literacy among older journalists as adoption barriers: "The older generation…feels AI will take their job…they discourage younger journalists to use it" (R3); ChatVE's founder likewise laments the "lack of will to actually adopt the use of AI" in some newsrooms (R4). Studies similarly find that journalists, in particular, are pragmatic adopters who demand transparency, verifiability, and clear editorial governance before settling to use AI for news work (Mohammed et al., 2024).

5. Discussion and Conclusion

Placing the findings regarding functionality and usability of journalism-focused AI models in the larger context of AI tools, we found that it is not completely contrary to the overwhelming data showing that many AI models often do not work. This is not surprising because, as a discourse, the functionality of AI models is unfortunately disregarded and typically drowned out by the hype, excitement, and promises of AI, automation, and machine learning. In recent years, we've seen an overwhelming amount of functional failure with real-world impact typically emanating from engineering, overpromising of AI capabilities, system malfunction, and communication—all concerns that should be explicitly mentioned in AI ethics guidelines and principle statements, but they aren't (Raji et al., 2022).

In the specific case of the journalism-focused tools examined here, our walkthroughs show clear differences in performance. Dubawa Chatbot was the strongest performer because it was fully functional, and its WhatsApp integration made it relatively easy to use. The tool handled heavy query loads well, and most prompts returned accurate verification, although it could still give generic answers to very new or unusually phrased claims. ChatJourno was near-fully functional, as its drafting, rephrasing, and brainstorming features worked well, and the interface was simple, but the backstory retrieval feature was not functional and was not up-to-date, which limited its usefulness for recent events. MyAIFactChecker was also near-fully functional. Its navigation and design were usable, and many checks succeeded, but it sometimes failed to fetch or verify very recent or very old claims, and its sentiment feature was unreliable in testing. ChatVE, however, was not functional for journalists at the time of the walkthrough exercise because access was blocked behind a demo request that never materialized. Its core verification features were unreachable, and the interface mixed unrelated B2B booking features, which made the tool drift away from its intended journalistic purpose.

Further, due to the fact that mainstream AI tools indeed occupy an overwhelming market share of the generative AI environment, which leaves little to no room for niche AI tools such as ChatVE, ChatJourno, Dubawa Chatbot, and MyAIFactChecker to compete, locally developed AI models must be set to compete in environments where they seem to thrive, such as WhatsApp, as we've seen with Dubawa Chatbot. However, lately Big Tech is also venturing into such terrain. In mid-2025, the global tool, Perplexity AI, launched a fact-checking chatbot on WhatsApp. To many, this is just a normal revelation; however, "to those working in the information ecosystem, particularly in the Global South, it felt like something more: a sign of just how quickly Big Tech is expanding into domain-specific spaces once led by local innovation" (Babatunde, 2025, para. 1).

The question is, what does this mean for locally developed AI models? It's simple. Niche tools must achieve promised goals with efficiency and effectiveness because "user acceptance of a system is significantly impacted by its usability, which is a vital facet of non-functional software qualities" (Namoun et al., 2024,

p. 672). This probably explains why we have not seen a rapid adoption of these locally developed journalism-focused AI models in Nigeria, because beyond launch, when they work, the joys of adoption must also reflect in the necessity of adopting AI to enhance content standards rather than sabotage or stifle them (Palla & Kostarella, 2025), because what is the use of a fact-checking platform that cannot fact-check in real time in 2025?

Overall, we maintain that there's an urgent need for journalism organizations, particularly in the Global South, to continue creating locally developed AI platforms; however, for platforms' goals to align with their functionalities, there has to be a full understanding of the delusion of AI functionality.

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Conflict of Interests

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Data Availability

Data used for this study are available upon request.

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