The Adoption of Artificial Intelligence Into Journalism Practice:
Perspectives From the Ghanaian Media Industry

Samuel Adefioye, University of Education, Winneba, Ghana

Abstract
The adoption of Artificial Intelligence (AI) technology in journalism globally is characterized by a significant disparity, with Western countries exhibiting more widespread and advanced usage compared to non-Western countries. As a result, research on AI's application in journalism has predominantly focused on developed economies, creating a substantial knowledge gap and scarcity of studies exploring AI's use in journalism in developing countries. This study addresses this gap by examining the current state of AI deployment in Ghana's media industry, its potential benefits and risks, and the challenges hindering its adoption. The study was anchored on Rogers' adoption-diffusion theory and van Dijk's digital dichotomy theory. Based on eighteen in-depth interviews with journalists selected through purposive and snowball sampling, this study reveals that AI is being leveraged to improve newsroom efficiency, but a significant digital divide persists. While some newsrooms actively adopt AI, others lag behind. The adoption of AI is expected to yield both positive outcomes, such as enhanced efficiency and innovative broadcasting, and negative outcomes, including diminished human creativity and potential disinformation. The high cost of deployment, inadequate data, and poor internet connectivity are barriers to AI adoption in Ghana's media industry.

Keywords: Artificial Intelligence, Newsroom, Journalism Practice, Perspective

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Introduction

Artificial Intelligence (AI) is defined by the European Commission's High-Level Expert Group on Artificial Intelligence as "Systems that display intelligent behavior by analyzing their environment and taking actions— with some degree of autonomy – to achieve specific goals." (HLEGAI, 2018: p1). According to de Zuniga et al. (2023), AI refers to the observable, practical ability of machines or computer programmes to think, learn, and act like humans. This implies that AI technology perceives and interprets its surroundings, operates independently, and initiates activities to achieve specific objectives.

AI is redefining the landscape of work in many ways across various sectors. In journalism, AI is revolutionizing the entire production chain, transforming the way news is gathered, processed, and disseminated (Amponsah & Atianashie, 2024; Stanescu, 2023; de-Lima-Santos & Ceron, 2022; Noain-Sanchez, 2022; Diakopoulos, 2019). As observed by the London School of Economics and Political Science, AI technology has already been embraced by the journalism industry, with news organisations and journalists utilizing it in a wide range of innovative ways to improve their news gathering, production, and dissemination processes (LSE, 2024). AI is alleviating the workload of overwhelmed resources, influencing newsroom decisions, facilitating innovative forms of audience engagement, and unlocking new revenue streams through cutting-edge products that can boost news media consumption and reach (Jamil, 2020, Diakopoulos, 2020). Thus, AI has rapidly evolved to become a crucial element in contemporary journalism.

While AI technology is being employed in journalism practice worldwide, its usage is more widespread and advanced in Western countries compared to non-Western countries, where its implementation is still in its early stages. Consequently, research on AI's application in the news media industry and journalism has primarily focused on developed economies like the US, EU, Scandinavia, and China (Makwambeni et al., 2024; Jamil, 2020). As a result, there is a significant knowledge gap and scarcity of studies exploring the use of AI in journalism in developing countries and continents, such as Africa.

Also, despite the several advantages offered by AI, some experts warn that it poses risks, including privacy violations, job losses, perpetuating biases, and spreading fake news among others (Amponsah & Atianashie, 2024; Noain-Sanchez, 2022). If left unchecked, these consequences could disrupt the journalism industry, undermining the relevance of traditional news sources and compromising the fundamental principles of journalism (Newman, 2022; Nwanyanwu & Nwanyanwu, 2021; Hansen et al., 2017). Again, the adoption of AI technologies in journalism faces several obstacles, including concerns about AI being exploited for harmful purposes, inertia in the face of change, complex institutional structures, inadequate funding, audience preferences, and a shortage of necessary expertise (Simon, 2024; de-Lima-Santos & Mesquita 2021).

Notwithstanding, although newsrooms in non-Western societies including various African nations are integrating AI into their operations (Kothari & Cruikshank, 2022; Mutsvairo & Bebawi, 2022), very little is known about the possible impact. To fill this gap, there is a need to examine the level of AI deployment, its potential effects, and the challenges of AI adoption in the media industry in countries in the Global South. The current study therefore explores the views of journalists on the deployment of AI in Ghana's news media industry. This research focuses on the current state of AI integration in the Ghanaian media industry,

analyzing the ways AI is being deployed, the potential benefits and challenges associated with AI integration, and the key factors that obstruct its adoption.

Research Questions

The following research questions guided the study:
1. In what ways is AI being deployed into journalism practice in Ghana?
2. What outcomes are expected by adopting AI in journalism practice in Ghana?
3. What are the factors that hinder the deployment of AI in journalism practice in Ghana?

Literature Review

Adoption-Diffusion Theory

Everett Rogers' Adoption-Diffusion Theory (ADT) emerged from research on innovation adoption in the 1950s and 1960s. ADT explores how new technologies spread within social systems over time, focusing on the presence or absence of an innovation. The theory categorizes adopters into five groups: innovators, early adopters, early majority, late majority, and laggards (Rogers, 2003). Innovators are the gatekeepers who introduce an innovation into a system. Early adopters are role models or opinion leaders who shape opinions about an innovation and decrease uncertainty about the innovation through their experiences. Early majority adopters are deliberate in adopting an innovation, and they want to see evidence of success before making a decision to adopt. Late majority adopters are skeptical about an innovation and its outcomes. They therefore wait until most of their peers adopt the innovation. Laggards are the last to adopt an innovation. Rogers (2003) further classified these five categories of innovation adopters into two main groups: earlier adopters (innovators, early adopters, and early majority) and later adopters (late majority and laggards). This theory is applied to the study to examine how AI is being deployed in the Ghanaian media industry and determine its adopter category.

Digital Dichotomy Theory

The concept of digital dichotomy refers to the disparities in access, adoption, and utilization of digital technologies. The concept of digital dichotomy originated from van Diyk's theory of digital divide. The digital dichotomy theory proposes that entities with differing predisposing factors will exhibit variations in adoption time and experiences with current digital technologies (Nyam, 2021). According to the Association of Communication Scholars and Professionals of Nigeria, the theory assesses the uneven imperatives of AI-based media communication between societies that drive AI innovation and those that adopt imports (ACSPN, 2021). The digital dichotomy theory is applied to the study to examine the factors that influence the deployment of AI in Ghana's media industry, aiming to conclude whether the digital divide is being bridged or widened.

Uses of AI in Journalism

The integration of AI in journalism has triggered a profound transformation of the industry, leading to improvements in efficiency and productivity. Some of the benefits of this integration are discussed below.

Task Automation.

Automated journalism refers to the process of using algorithms to generate and distribute large volumes of news content for audience consumption. This involves converting data into news stories that are easy to read and understand (Biswal & Gouda, 2020). In recent years, newsrooms have increasingly leveraged AI to automate news production, including transcribing interviews and distributing news (Stanescu, 2023; de-Lima-Santos et al., 2022). According to AI World School, AI can automate up to 9% of an editor's tasks and 15% of a reporter's tasks (AIWS, 2024). However, Simon (2024) questions whether AI automation will lead to improved quality or merely increased quantity, and argues that some aspects of journalism will always require human expertise. The present study would shine light on this debate.

Monitoring.

AI-powered tools possess the ability to scrutinize trends, detect patterns, and keep track of other publications, enabling reporters and web editors to stay informed and up-to-date. Moreover, these tools can be utilized to monitor airplay and data, as highlighted by Makwambeni (2024) and Nurelmadina et al. (2024). By automating the task of monitoring other publications, AI resources can streamline the workload of reporters and web editors, freeing up valuable time for more in-depth reporting and analysis (Stanescu, 2023).

Content Personalization.

AI enables the customization of journalistic content to suit the unique tastes and interests of each individual audience member. Amponsah and Atianashie (2024) highlight the relevance of AI in tailoring news feeds and suggesting articles that align with individual interests and preferences, leveraging insights from their behavioural patterns, likes, and previous interactions. In their view, the tailored approach strengthens the bond between news platforms and their audience, driving engagement and loyalty (Amponsah & Atianashie, 2024). Additionally, through content personalization, AI-powered news platforms can provide content in multiple languages, expanding their reach and engaging a vast, globally dispersed audience (Biswal & Gouda, 2020).

Fact-Checking and Verification.

Journalists are currently grappling with the challenges of fake news and misinformation. While there is a risk that unsupervised AI-generated content may perpetuate falsehoods (Amponsah & Atianashie, 2024), AI can actually support journalists in improving news quality and accuracy by detecting and debunking fake news, as well as upholding ethical journalism standards through fact-checking and disinformation dismantling (Biswal & Gouda, 2020).

Content and Image Creation.

AI-powered tools can simulate human-like creativity, suggesting ideas, generating comprehensive storylines, and even creating images based on accompanying text (Hudikova & Nagyova, 2024; Noain-Sanchez, 2022). Moreover, AI is capable of producing basic content, such as concise news updates, sports recaps, financial summaries and visual elements. According to Stanescu (2023), AI can be leveraged to create immersive and

interactive journalistic content, utilizing virtual and augmented reality technologies to explain complex topics. The AI-generated images, derived from text inputs, not only captivate audiences but also provide a realistic and experiential experience, blurring the lines between human and artificial creativity.

Virtual Reporting.

AI avatars, as described by Liu and Siau (2023), are virtual representations of AI systems that mimic human-like characteristics. These AI avatars have the ability to facilitate human-like interaction and engagement, making them ideal for roles such as virtual presenters or reporters. By leveraging their human-like interface, AI avatars can also enhance credibility and trustworthiness (Liu & Siau, 2023; Stanescu, 2023).

The literature on AI adoption in journalism presents varied views on the capabilities of AI and its potential to enhance news quality and accuracy (Biswal & Gouda, 2024; Simon, 2024). Therefore, it is essential to define the specific role AI can play in journalism, particularly in developing countries [like Ghana], where AI technology implementation is still in its infancy (Makwambeni et al., 2024; Jamil, 2020).

Bottlenecks for the Deployment of AI in Journalism

Newsroom Brain Drain.

The deployment of AI in news media faces an obstacle in the form of talent competition. Newsrooms struggle to attract and retain skilled professionals, who are lured away by higher salaries in the tech industry, leading to a brain drain that hinders AI adoption (de-Lima-Santos & Ceron, 2022).

High Cost.

Implementing AI projects in newsrooms can be costly (de-Lima-Santos & Ceron, 2022) because AI models are often tailored to specific stories, requiring redevelopment and retraining for new projects. This means that initial investments may not be recouped across multiple applications (Stray, 2019). Moreover, investigative journalism projects that utilize AI technologies such as computer vision require substantial investments in infrastructure and expert personnel to develop the necessary code (de-Lima-Santos & Salaverría, 2021).

Perceived Risks Associated With AI.

AI's ability to generate convincing deepfakes, potentially leading to the dissemination of misinformation, poses a risk to the reliability of news and information (Amponsah & Atianashie, 2024). Besides, as AI systems become more adept at performing complex tasks, concerns arise that they may replace human journalists, resulting in job losses. Additionally, AI algorithms are designed to engage users by presenting content that aligns with their existing beliefs, potentially limiting exposure to diverse perspectives and viewpoints. This can impede the development of a well-informed public by restricting the flow of varied opinions and analyses.

A review of the existing studies reveals a significant knowledge gap in the adoption of artificial intelligence (AI) in journalism practice in developing countries. Numerous studies

on AI's application in journalism have been conducted in developed economies (Simon, 2024; Stanescu, 2023; Liu & Siau, 2023; Noain-Sanchez, 2022; de-Lima-Santos & Ceron, 2022; Nurelmadina et al., 2021). However, AI's role in journalism within countries in the Global South remains largely understudied. In Africa, research on this topic has concentrated on South Africa, Kenya, and Nigeria (Makwambeni, 2024; Kioko et al., 2022). Ghana-specific research on AI's application in journalism is scarce. This highlights a research gap in understanding AI adoption in journalism practice in developing countries, including Ghana.

Methodology

This study adopted the interpretivist paradigm to explore the understanding of AI adoption in journalism practice in Ghana, from socially constructed multiple realities. Interpretivists believe that reality is subjective and must be interpreted to understand its underlying meaning. As a result, interpretivist research aims to produce thick, contextualized descriptions and interpretations of social realities (Saunders, Lewis & Thornhill, 2019). Qualitative research techniques are often employed by interpretivists (Creswell & Creswell, 2018) to uncover new perspectives and meanings that reveal the intricacies and complexities of human experience. Thus, the study utilized a qualitative research approach to gain a comprehensive understanding of AI adoption in journalism practice in Ghana, leveraging participants' lived experiences and perceptions (Miles, Huberman, & Saldana, 2014). The study employed a multiple case study research design, focusing on four media organisations: two broadcast media firms and two print media firms. Multiple case studies yield more robust outcomes as they examine several cases to reveal insights that a single case cannot (Baraska, 2014). This design enabled in-depth exploration of AI adoption from multiple perspectives, which would have been lost with other designs. The target population comprised journalists from four leading media organisations in Ghana: Graphic Communications Group Limited, New Times Corporation, Multimedia Group Limited, and Media General. Graphic Communications Group Limited and the New Times Corporation are prominent players in Ghana's print media landscape (Appiah-Adjei, 2020). Multimedia Group Limited and Media General are Ghana's premier broadcast media entities, boasting an extensive media presence with online news portals, TV, and radio stations that reach a nationwide audience. Given their diverse digital platforms and multiple channels, these organisations are likely to leverage AI technologies in their operations. These organisations were chosen to gather a diverse and rich dataset, allowing for a comprehensive understanding of the phenomenon (Simon, 2024). Purposive and snowball sampling techniques were employed to select eligible participants for the study. In qualitative research, purposeful sampling is employed to deliberately select information-rich individuals or sites that can provide the most insightful information about the research problem under investigation (Creswell & Poth, 2018). In snowball sampling, the researcher taps into the social networks of existing participants who have provided rich data, asking them to recommend others who have relevant experiences, characteristics, or viewpoints (Patton, 2015). To be included in the study, participants had to meet two criteria: they had to have worked as journalists for at least one year in any of the selected media organisations, and they had to have used AI tools for at least three months. Eligible participants for the study were identified and asked to recommend colleagues with similar experiences, who in turn referred others. The process continued until the desired sample size was reached, yielding a total of eighteen (18) participants from the four media organisations.

Table 1: List of Media Organisations With Participants for the Study

Name of Media organisation	Organisation type	Number of participants
Multimedia Group Limited	Broadcaster	7
Media General	Broadcaster	5
Graphic Communications Group Limited	Newspaper	4
New Times Corporation	Newspaper	2
Total		**18**

Data for this research was collected through semi-structured in-depth interviews. This method allows for an in-depth understanding of the phenomenon, offers flexibility and enables probing and clarification of participants' perspectives (Creswell & Poth, 2018). Interviews continued until saturation was reached. All the interview sessions were tape-recorded and anonymized. Data analysis involved thematic analysis (Creswell, 2013), where the recorded interviews were transcribed from an audio to a text format and read through thoroughly to identify relevant codes and themes which were then interpreted and the findings compared with existing literature.

Findings and Discussion

This research explored the views of journalists on the integration of artificial intelligence (AI) in Ghana's media industry. To achieve the objectives of the study, semi-structured interviews were conducted with eighteen journalists from four media organisations in Ghana. The participants' responses are presented anonymously, labeled as AI-1 to AI-18, to maintain confidentiality and ensure frank responses. The following section presents the findings and discussion of the data collected from the interviews.

Ways AI Is Being Deployed in Journalism in Ghana

The data suggest that currently newsrooms in Ghana deploy AI applications to analyse data, transcribe audio recording, translate language, check grammar and spelling, and research and write stories.

Data Analysis.

The interviews revealed that Ghanaian newsrooms leverage AI-powered tools to streamline data processing and analysis. Journalists utilize these tools to uncover trends, relationships, and relevant insights hidden within large datasets. As one journalist noted, "The data analyzing tool makes it easy to process data, breaking down large data into meaningful insights." (AI-1) This finding aligns with previous research by Makwambeni (2024) and Biswal and Gouda (2020), which highlight AI's ability to rapidly analyze vast amounts of data, thereby enhancing newsroom efficiency.

Audio Transcription.

The journalists interviewed disclosed that they utilized AI-powered transcription tools to streamline their workflow, reducing the time spent on transcribing audio recordings. The journalists noted that previously, they had to manually transcribe interviews and other audio files, but with the advent of AI, they could now quickly and accurately transcribe recordings, which helped to file their stories on time. According to the journalists, some AI-powered transcription tools offered advanced features that enabled them to edit both audio and video files, further enhancing their productivity and efficiency. Consistent with this finding, studies by Stanescu (2023) and de-Lima-Santos et al. (2022) have shown that in recent years, newsrooms have been increasingly adopting AI technology to automate various aspects of news production, such as transcription of interviews.

Language Translation.

The study's findings show that newsrooms in Ghana utilize AI's Natural Language Processing (NLP) tools to translate text from one language to another. This helps the journalists to communicate with sources and audiences in different languages. As intimated by a journalist, "We make use of the natural language processing tool which translates text from one language to another. This helps to foster communication with our diverse audience and sources." (AI-9). The finding corroborates the assertion by Biswal and Gouda (2020) that AI-powered news platforms can offer multilingual content, expanding their reach and engaging a diverse audience.

Grammar and Spell Checking.

It also emerged from the interviews with the journalists that newsrooms in Ghana are harnessing AI technology to improve the accuracy and precision of their writing. By utilizing AI-powered grammar and spell checking tools, journalists are able to refine their writing and ensure error-free content. The journalists emphasized that these tools have become essential to their workflow, as they enhance the overall quality and standards of their writing. A journalist stated as follows:

> *We observed that the team responsible for adding text overlays on television programmes initially had a high rate of spelling and grammatical errors. So, we decided to go in for ChatGPT to help them in correcting grammar and spellings. Everyone in the newsroom now makes use of ChatGPT and it is really helpful. (AI-8)*

Researching and Story Writing.

The study found that Ghanaian newsrooms utilize AI technology to identify and access relevant sources, articles, and documents which contain additional information that complement field research. As a journalist put it, "You need AI to guide you when you are crafting a story and need to ensure the facts are accurate. So, AI helps me to get precise information in order to enhance the credibility of my story." (AI-3). This finding supports the ideas of Hudikova and Nagyova (2024), Noain-Sanchez (2022), and Biswal and Gouda (2020) who suggested that AI-powered tools can suggest ideas, generate comprehensive storylines, and support journalists in improving news quality and accuracy, and upholding ethical journalism standards.

The study uncovers a digital divide, not only between developed and developing countries, but also within the media industry. The disparities in AI technology adoption and utilization among media organisations in Ghana are notable. This supports van Dijk's digital dichotomy theory, which suggests that entities with differing predisposing factors will exhibit varying adoption rates and experiences with digital technologies (Nyam, 2021). While some newsrooms in Ghana are making progress in AI adoption, bridging the digital divide, many other newsrooms lag behind, confirming Rogers' adoption-diffusion theory.

Outcomes Expected by Adopting AI in Journalism in Ghana

The study also sought to determine the expected outcomes of adopting AI in journalism practice in Ghana. The two broad themes that emerged from the data are positive and negative outcomes. The positive outcomes include; improved work efficiency and innovative broadcasting. The negative outcomes include; decline in human creativity and abilities, potential for disinformation and deepfakes, employee downsizing and layoffs.

Positive Outcomes

Improved Work Efficiency.

The journalists interviewed envisaged that a full integration of AI into journalism practice would boost productivity. They suggested that AI could optimize tasks to enable them complete their assignments in a timely manner. The interviewees explained that by eliminating tedious tasks, AI can help journalists manage their time more effectively, leading to increased productivity and improved work efficiency. One of the journalists stated that; "AI adoption will save me a significant amount of time, meaning I will be able to complete tasks in a much shorter time frame." (AI-5). The finding aligns with the views of AIWS (2024) and Stanescu (2023) who suggested that AI resources can alleviate the workload of journalists.

Innovative Broadcasting.

In enumerating some of the benefits to be expected on the integration of AI in journalism practice in Ghana, the journalists noted that AI technologies could offer innovative ways of presenting news. They suggested that AI could be used to reduce the need for physical movement and travel, and solve the challenge of news anchors having to wake up early or stay late to read the news. The journalists also noted that a full adoption of AI could help with automated news anchoring, allowing for uninterrupted news coverage without the need for human anchors.

Again, the journalists expressed the expectation that AI could be relied upon to automate tasks such as scheduling and playing adverts. As AI-8 put it; "In the master control room, we schedule specific times for adverts and other contents to be played. AI could be used to programme these tasks, enabling automated playback at the designated times." The findings support the claim made by Liu and Siau (2023) that AI applications can mimic human-like qualities including facilitating human-like interaction and engagement, making them ideal for roles such as presenters or reporters.

The fact that journalists in developed countries are already exploiting these expected affordances of AI, underscores the disparities in access, adoption, and utilization of AI

technologies. The findings thus support the digital divide theory, which highlights the unequal dynamics of AI-driven media communication between societies that pioneer AI innovation and those that rely on imported technologies (ACSPN, 2021).

Negative Outcomes

Decline in Human Creativity and Abilities.

Participants of the study thought that a fully AI-integrated journalism industry could make people lazy and less creative, as they would rely too heavily on AI's capabilities and struggle to think independently without it. The journalists were of the view that an over-reliance on AI technologies would result in the loss of critical thinking and problem-solving skills. AI-11 commented that; "We will become redundant and struggle to think beyond what we are supposed to do when AI is taken away."

The journalists felt that over-reliance on AI could lead to a sense of disconnection and unfamiliarity with our own systems, making us seem like strangers to ourselves. This finding highlights the need for a balanced approach that combines the benefits of AI with the development of human skills and abilities.

Potential for Disinformation and Deepfakes.

The journalists were concerned about the potential for AI-generated deepfakes to be used to spread disinformation and manipulate public opinion, particularly during elections. They worry that people may accept fake news and manipulated media (such as videos or audio recordings) as genuine, without verifying the source or fact-checking, which could lead to confusion, misinformation, and potentially harmful consequences. A journalist (AI-15) stated that; "During elections, someone could use deepfake technology to make it appear as though the EC chairperson is declaring election results when, in fact, they have not. This can cause chaos."

The finding lends credence to the research of Amponsah and Atianashie (2024), in which the researchers found that AI's ability to generate deepfakes could lead to the dissemination of misinformation, posing a threat to the trustworthiness of news and information. This finding emphasizes the need for implementing proper safeguards, rigorous fact-checking, and thorough verification of sources.

Employee Downsizing and Layoffs.

Participants of the study believed that AI's integration into journalism would inevitably lead to job losses, decimating the very fabric of the industry. They observed that AI's ability to automate such routine tasks as data analysis, report generation, and content editing threatens journalism jobs as it could render human journalists redundant. A journalist (AI-11) stated that; "We've heard that AI is replacing human jobs in Europe, America, and elsewhere. So, if we fully integrate AI, it will mean we have to downsize our newsrooms, leading to unemployment."

In the view of the participants, as AI takes over these routine tasks, the need for human journalists will diminish and many news organisations will see this as an opportunity to lay off journalists and cut costs. This finding contradicts earlier observation by de-Lima-Santos

and Ceron (2022) who posited that the integration of AI in news media could result in a brain drain where media organisations struggle to attract and retain skilled professionals (de-Lima-Santos & Ceron, 2022).

Factors that Hinder the Deployment of AI in Journalism in Ghana

This segment of the research sought to identify and examine the factors that hindered the adoption, implementation, and full integration of AI into journalism practice in Ghana. Themes that emerged from the data are high cost of deployment, inadequate and unreliable data, and unreliable internet.

High Cost of Deployment.

The journalists observed that purchasing or subscribing to AI infrastructure and integrating AI into existing newsroom systems and processes can be costly. They explained that the deployment would require major capital expenditure on consulting, purchasing, and maintenance. This, in their view, is beyond the financial capabilities of the media owners. As noted by AI-4, "We don't have the money and media owners themselves are not ready to put more money into the business." This finding is consistent with those of de-Lima-Santos and Ceron (2022); Kioko et al. (2022); de-Lima-Santos and Salaverría (2021); and Stray (2019), in which it was found that the deployment of AI in newsrooms requires substantial investments, further adding to the financial burden.

Limited Local and Unreliable Data.

The journalists are worried that the scarce availability of local data is hindering the adoption of AI technology in Ghana's media industry. They pointed out that the limited contribution of Ghanaian data makes it challenging for AI systems to learn and provide responses that are culturally relevant and accurate. Thus, AI-generated contents are out of touch with local contexts and risk being inaccurate. In line with the five key attributes of Rogers' (2003) adoption-diffusion theory, the findings suggest that the limited availability of local data in Ghana reduces the relative advantage of AI technology, making it less appealing for adoption in the Ghanaian media industry. Since AI relies heavily on relevant data to function effectively, the lack and incompatibility of local data with AI systems hinders the adoption process, adds complexity, and makes it more challenging for media organisations to test the technology and witness its advantages.

Poor Internet Connectivity.

The journalists interviewed also cited poor internet connectivity as a factor that could hinder the adoption of AI technology in Ghana's media industry. The journalists observed that AI systems required stable internet connectivity to update and function effectively. However, Ghana's internet infrastructure is unreliable. This, the journalists emphasized, could limit the ability of newsrooms to utilize AI technology. The comments by the journalists highlight the slow adoption of AI in Ghana's media industry; and further reinforce the adoption-diffusion theory which categorizes innovation adopters as earlier adopters and later adopters (Rogers, 2003). The findings suggest that Ghana's media industry typifies later adopters, with a majority of newsrooms falling into the late majority and laggard categories.

Conclusion

The study examines the current deployment of AI in Ghana's media industry, the potential benefits and risks of AI adoption, and the challenges that hinder its adoption. The findings reveal that while AI is being leveraged in various ways, a significant digital divide exists within the industry. Some newsrooms actively adopt AI technology, while others lag behind. The adoption of AI is expected to bring about both positive outcomes, such as improved work efficiency, innovative broadcasting, and automated tasks, and negative outcomes, including a decline in human creativity and abilities, potential disinformation and deepfakes, and employee downsizing and layoffs. The high cost of deployment, inadequate and unreliable data, and poor internet connectivity are major factors hindering AI adoption in Ghana's media industry. The study supports Rogers' adoption-diffusion theory and van Dijk's digital dichotomy theory. Addressing financial, data, and infrastructure challenges is crucial to promote AI adoption and effective utilization in Ghana's media industry. Encouraging widespread AI adoption with human skill development and proper safeguards is essential to bridge the digital divide, enhance journalism quality, and competitiveness.

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Contact email: sadefioye@uew.edu.gh