



AI IN BROADCASTING: A STUDY OF IMPLICATIONS ON INFORMATION DISSEMINATION WITHIN BROADCASTING CORPORATION OF ABIA STATE, NIGERIA

Chika Ruth Okorie¹, Ifeyinwa Nsude²,

Gloria Eberechukwu Nwodu³, and Wealth Akudoh Udoh⁴

¹Assistant Manager News and Current Affairs, Nigerian Television Authority, Umuahia, Abia State.

Email: ruchy220@gmail.com

²Department of Mass Communication, Ebonyi State University, Abakaliki.

Email: ifeyinwansude@gmail.com

³Department of Mass Communication, Chukwuemeka Odumegwu Ojukwu University Igbariam Campus, Anambra State.

Email: ge.nwodu@coou.edu.ng

⁴Alex Ekwueme Federal University Teaching Hospital, Abakaliki.

Email: sendwealth7@gmail.com

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ABSTRACT: *This study investigated the implications of Artificial Intelligence (AI) on information dissemination within the Broadcasting Corporation of Abia State, Nigeria. The thrusts of the study were to assess how AI technologies enhanced content creation, explored the implications of AI on Information Dissemination and audience engagement, as well as identified the benefits and challenges posed by AI integration. The scope focused on the Broadcasting Corporation of Abia State which has both radio and television sections. The researchers interacted with broadcasting professionals within BCA and got data using focused group arrangement. Using the convenience sampling technique, 9 discussants were selected considering the objectives of the work. Diffusion of innovations and media ecology theories were the theoretical framework used. The research recommended that BCA should work assiduously hard to improve the state of its infrastructure, replace outdated equipment and train its staff on AI technology for better service delivery.*

KEYWORDS: Artificial Intelligence, Broadcasting, Information Dissemination, Abia State, Nigeria, Media Ecology and Innovation.



INTRODUCTION

The emergence of artificial intelligence (AI) is reshaping industries across the globe by altering processes, enhancing productivity, and transforming the way organizations do things. In the broadcasting sector for instance, AI is particularly influential, promising to revolutionize content creation, audience engagement, and information dissemination. As technologies evolve, the way information is created, disseminated, and consumed is also changing dramatically the communication landscape (Shadrach & Adikuru, 2023). Communication networks have also experienced tremendous change with the aid of AI (Ezeali, Nwodu & Udoh, 2023). In Nigeria, the Broadcasting Corporation of Abia State (BCA) plays a pivotal role in the dissemination of information to its audiences. Information is crucial in every aspect of life (Ezeaka, 2019). Artificial intelligence refers to the simulation of human intelligence in machines programmed to think and learn like humans. This encompasses various technologies, including machine learning, natural language processing, computer vision, and robotics (Russell & Norvig, 2016). In broadcasting, AI can be utilized to automate processes, analyze audience data, and enhance content creation and delivery. The integration of artificial intelligence (AI) into various sectors has prompted transformative changes in how information is disseminated, analyzed, and utilized (Ezeaka & Umennebuaku, 2024). The implementation of AI technology has drawn the attention of researchers in various fields. One of them refers to advertising, which represents a sector of special importance for the entire society (Nwodu, Obiora & Agbachukwu, 2025). AI no doubt has made a great paradigm shift in how global news flows globally on social media (Udeze, Nwodu & Nwodu, 2015). Its impact on aiding development has no bound (Ezeaka & Nwodu, 2022); it is imperative to note that AI presence is being felt in health communication (Ezeoke, Ezeaka, & Nwodu, 2020) and it is not left out in research (Nwodu, & Nwodu, 2010, 2018). Methods of teaching and learning are not being left out; AI tools are increasingly being used to develop innovative tools and technologies that have the potential to transform the traditional method of learning (Nwodu, 2025). The importance of AI technologies in broadcasting is multifaceted as it fits in every aspect of content generation and production. Firstly, AI can dramatically increase operational efficiency and effectiveness when fully mobilised. In support of this Katz et al. (2020) remarks that the use of AI to carry out routine tasks, such as content curation and basic reporting, allows journalists to focus on more complex storytelling that requires human insight. Take for instance when a journalist is working on a local story in a remote area, the application of AI in carrying out such a task will be highly limited especially if such an event has not been uploaded on the web. It is widely believed that the future lies in the information age, where a nation's success hinges on its ability to handle information effectively (Enemuo, Ezeanyi & Ezeaka, 2019).

According to García (2021), AI technologies can improve audience engagement by personalizing content delivery based on viewer preferences. Algorithms can analyze user behavior to create tailored viewing experiences, increasing retention and satisfaction. The automation of production processes in the broadcast industry which BCA falls in will boast the quality of content, be it the television or radio output. It will enhance the quality of video clips by making it more catchy and attractive for viewers.

Moreover, AI can assist in the delivery of news. Hargittai and Waldfogel (2020) observed that using AI to fact-check content and reduce the spread of misinformation, broadcasters can enhance their credibility and trustworthiness in a media landscape which is often marred by fake news and sensationalism. Fact-checking is the process of verifying the factual accuracy of questioned reporting and statements. AI-powered instruments can improve communication



campaigns' efficacy (Ezeaka & Ochuba, 2024). With the use of AI, a news reporter or editor can easily deploy internal fact-checking measures to prevent inaccurate content from being published and save the image of the media house and also increase its credibility in the eyes of her viewership. This journalistic practice is carried out to correct perceptions among citizens, spelling as well as discouraging the spread of false or misleading claims. It is through communication that the society is properly educated, informed and entertained (Ezeaka & Nwodu, 2022).

Furthermore, Adegoke (2020) is of the view that Broadcasting Corporation of Abia State (BCA) is a critical player in Nigeria's media landscape; hence, it is established to serve the information needs of the local population. It plays a significant role in providing news and entertainment to residents of Abia State and beyond. As a public broadcaster, its mandate includes promoting national unity, informing the public, educating citizens on important issues and currently providing a landscape of holding government accountable to the masses and by the masses (Obiakor, Adikuru & Agbakaj, 2022). As the conscience of the society, the media outfit also samples public opinion on government policies and programmes with a view to relating the same to the appropriate authorities for either a change or sustenance in the interest of the masses.

However, the role of BCA in information dissemination goes beyond serving as a platform for community engagement and dialogue; it also helps to foster a sense of community and participation among its audience. It assists in addressing specific concerns and interests that might be overlooked by national media outlets. As a traditional media, BCA faces increasing competition from social media platforms but it has to uphold journalistic integrity and ensure the accuracy of the information it disseminates. It is a trusted and reliable source of information for its audience which includes mainly the locals. Information is no doubt a very crucial resource to everyone (Ezeaka, Ezeoke, Nwodu & Umennebuaku, 2023).

STATEMENT OF THE PROBLEM

The integration of Artificial Intelligence (AI) into broadcasting offers significant potential for transforming information dissemination. However, within the context of the Broadcasting Corporation of Abia State, Nigeria, this integration raises critical challenges that warrant thorough investigation. One primary concern is the reliability and authenticity of AI-generated content. As broadcasting increasingly relies on algorithms for content creation and distribution, the risk of perpetuating biases embedded in these systems grows (O'Reilly, 2021). This is particularly concerning in a diverse society like Nigeria, where the accurate representation of various cultures and perspectives is vital for social cohesion.

Additionally, the introduction of AI tools may disrupt traditional broadcasting roles, leading to job displacement and a loss of editorial oversight. This could undermine the creative and critical capacities of human journalists, resulting in a homogenization of content (Adetunji & Ogunsola, 2020). The socio-cultural dynamics in Abia State complicate this further as local contexts require tailored approaches to ensure AI technologies resonate with the audience (Nwankwo, 2022).

Ethical issues surrounding data privacy and surveillance also emerge as significant concerns. AI systems often depend on large datasets, raising questions about consent and the potential for misuse of personal information (Himmelboim, 2020). This study aims to address these



multifaceted challenges by exploring the implications of AI on content accuracy, workforce changes, and audience engagement within the broadcasting sector of Abia State. Understanding these dynamics is essential for developing strategies that harness AI's benefits while safeguarding against its risks.

Objectives of the Study

To assess how AI technologies enhance content creation,

To explore the implications of AI on Information Dissemination and audience engagement,

To identify the benefits and challenges posed by AI integration.

LITERATURE REVIEW

Definition and Importance of AI Technologies in Broadcasting

Artificial intelligence (AI) refers to the simulation of human intelligence in machines programmed to think and learn like humans. This encompasses various technologies, including machine learning, natural language processing, computer vision, and robotics (Russell & Norvig, 2016). AI has rapidly transformed various sectors, including broadcasting. In broadcasting, AI can be utilized to automate processes, analyze audience data, and enhance content creation and delivery. AI is changing industries by improving how we get information and services (Ezeaka, 2024).

The importance of AI technologies in broadcasting is multifaceted and has come to stay. First, AI can dramatically increase operational efficiency. Automation of routine tasks, such as content curation and basic reporting; this allows journalists to focus on more complex storytelling that requires human insight (Katz et al., 2020). AI technologies can improve audience engagement by personalizing content delivery based on viewer preferences. Algorithms can analyze user behavior to create tailored viewing experiences, increasing retention and satisfaction (García, 2021).

Moreover, AI can assist in the ethical delivery of news. By using AI to fact-check content and reduce the spread of misinformation, broadcasters can enhance their credibility and trustworthiness in a media landscape often marred by fake news and sensationalism (Hargittai & Waldfogel, 2020).

Furthermore, current trends in broadcasting reflect the growing integration of AI technologies. Major media companies are increasingly employing AI for various functions, such as automating news production, analyzing viewer data, and enhancing user experiences, especially with the presence of online broadcasting platforms (Obiora & Uche, 2022). For instance, AI is now utilized for automated news writing, where algorithms can generate basic news stories based on data input (Lau & Tham, 2020). In sports broadcasting, AI-driven systems can analyze game statistics in real-time to provide insightful commentary.

Another significant trend is the rise of personalized content recommendations driven by machine learning algorithms in the film industry. Services like Netflix and YouTube use sophisticated AI systems to analyze user data, delivering tailored content suggestions that keep



audiences engaged and make decisions about what they decide to watch (Obiora & Adikuru, 2024a; Smith, 2021). This trend highlights a shift towards an audience-centric approach in film and broadcasting industries, emphasizing the importance of understanding viewer preferences and behaviors.

Additionally, AI is becoming instrumental in enhancing accessibility as the amalgamation of broadcasting and social media, where programmes on television or radio are also posted on social media platforms enhancing engagements and immediate feedback from the audience. This collaboration can enhance the use of social media memes and emojis to promote interventions for citizens' wellness (Obiora & Adikuru, 2024b) and development; AI technologies can generate real-time captions for broadcasts, making content more accessible to individuals with hearing impairments (Baker & O'Connor, 2020). This focus on inclusivity reflects a broader trend in media towards ensuring that diverse audiences have access to information.

This literature review explores the implications of AI on information dissemination within the Broadcasting Corporation of Abia State, Nigeria.

Development of Media in Nigeria

The evolution of media in Nigeria has been shaped by various socio-political and cultural dynamics. The early forms of media in Nigeria date back to the pre-colonial era, where oral traditions were the primary means of communication (Adegoke, 2020). However, the introduction of print media by European missionaries and colonial administrators in the 19th century marked a significant turning point (Uche & Obiora, 2022). Newspapers like "The Iwe Irohin" were among the first to provide written news, promoting literacy and awareness among the populace (Omu, 1978).

The establishment of broadcasting in Nigeria began in 1932 with the formation of the first radio station, the Lagos-based Nigerian Broadcasting Service (NBS). This development was aimed at enhancing communication and information dissemination among the populace. After Nigeria gained independence in 1960, the media landscape evolved rapidly. The government took a more active role in broadcasting, leading to the creation of various state-owned radio and television stations across the country, including the Nigerian Television Authority (NTA) in 1977 (Okwu, 2010).

Throughout the years, Nigeria's media has faced numerous challenges, including government censorship, regulatory hurdles, and financial instability. The return to civilian rule in 1999 ushered in a new era of media freedom and pluralism, allowing for the proliferation of private broadcasting stations and an explosion of media content. Today, Nigeria boasts a vibrant media landscape, with a mix of public and private broadcasters, newspapers, and digital media platforms.

As media technologies continue to evolve, the advent of digital broadcasting has transformed the landscape (Obiora & Uche, 2022), enabling faster information dissemination and broader reach. However, the challenges of misinformation, audience fragmentation, and the need for culturally relevant content remain pressing issues that broadcasters must address (Adegoke, 2020).



History and Role of Broadcasting Corporation of Abia State (BCA) in Information Dissemination

The BCA was established in 1992, during a period marked by the need for enhanced communication within the rapidly changing Nigerian political landscape and Abia State in particular. The corporation was tasked with bridging the information gap between the government and the populace, thus promoting transparency and accountability. BCA as a state-run media organization plays a crucial and multifaceted role in the dissemination of information within its territory. It was established to provide a platform for news, education, entertainment, and promoting the cultural heritage of the Abia people. BCA operates within a unique socio-political and economic context.

BCA operates various media channels, including radio, television, and online platforms. These channels serve distinct purposes and reach different segments of the population.

BCA's radio services are pivotal in reaching rural areas where access to television, electricity and the internet may be limited. The radio programming includes news, talk shows, and educational content, ensuring that even the most marginalized communities have access to vital information (Iroegbu, 2020).

Another is the television station which broadcasts a range of programs, including news bulletins, documentaries, entertainment, and sports. This medium allows for more in-depth storytelling and visual representation of local issues, which can engage audiences on a deeper level (Eze, 2019). It also relates foreign contents to its viewers.

With the rise of the internet, BCA has expanded its horizon through online platforms. The corporation's website and social media channels provide real-time news updates and engage younger audiences, thereby broadening its influence beyond traditional media consumers (Okoro, 2021).

Impact of BCA on Local Communities

BCA's role in local communities is significant. By providing timely and relevant information, the corporation enhances community awareness and participation in governance. For example, programs that highlight government policies and initiatives allow citizens to engage with their leaders and understand their rights and responsibilities. This fosters a culture of accountability, as citizens are more informed and can hold their leaders accountable for their actions.

Furthermore, BCA promotes local languages and cultures through its programming. By broadcasting in Igbo and other local dialects, BCA helps preserve cultural heritage while ensuring that information is accessible to all demographic groups, regardless of their educational background (Nwachukwu, 2018).

Promoting Governance and Accountability

In a democratic society, the media serves as a watchdog, and BCA is no exception. The corporation plays a critical role in promoting transparency and accountability in governance. Through investigative journalism and critical reporting, BCA highlights issues such as corruption, mismanagement, and community grievances. This watchdog function is essential in empowering citizens and fostering a more participatory governance structure.



BCA also facilitates public discussions on governance through call-in programs and community forums, allowing citizens to voice their concerns and interact directly with public officials. This engagement is vital in bridging the gap between the government and the governed, promoting a sense of community ownership in governance (Ogbulu, 2022).

Cultural Promotion and Education

Beyond news and governance, BCA is instrumental in promoting local culture and education. The corporation broadcasts educational programs that cater to various age groups, addressing issues such as health, agriculture, and technology. This educational focus is vital in a state where literacy rates are still improving.

Culturally, BCA showcases local music, art, and traditions, providing a platform for local artists and cultural groups. By doing so, it reinforces cultural identity and pride among the Abia people, contributing to social cohesion (Obasi, 2020).

Despite its significant contributions, BCA faces numerous challenges. Funding constraints often limit its ability to produce high-quality content and maintain modern broadcasting technology. Additionally, political interference can affect the corporation's independence, hindering its role as a neutral information provider (Uche, 2021).

The rise of digital media also presents a challenge. While BCA has made strides in establishing an online presence, it must compete with a plethora of information sources that may not adhere to the same journalistic standards, potentially leading to misinformation and confusion among the public (Nwankwo, 2023).

The Role of AI in Media

The integration of artificial intelligence into the media landscape is reshaping how content is created, distributed, and consumed. AI technologies are increasingly being leveraged to enhance operational efficiency, improve audience engagement, and automate various aspects of news production. It also encompasses machine learning, natural language processing, and data analytics, which facilitate the automation of tasks traditionally performed by humans (Borkowski, 2020). In broadcasting, AI can enhance content creation, curation, and distribution processes. For instance, AI-driven algorithms can analyze audience preferences to tailor content (Liu & Zhang, 2021). Furthermore, automated journalism has emerged, where AI systems generate news articles based on data inputs, streamlining news production (Wang et al., 2020).

Globally, broadcasters have successfully integrated AI to improve operational efficiency. The BBC, for example, utilizes AI to enhance its news production process by using natural language processing to summarize large volumes of information quickly (Davies, 2021). Similarly, CNN employs AI for real-time analytics, helping to tailor content based on viewer preferences and behaviors (Martinez, 2022). These advancements highlight the potential of AI to transform broadcasting practices.

In content creation and audience engagement for example, AI plays a significant contribution to modern broadcasting. Algorithms can analyze vast amounts of data to identify trends, preferences, and viewer behaviors, enabling broadcasters to tailor their content to meet audience needs (Obiora & Uche, 2022; García, 2021). For instance, AI-driven content



recommendation systems, similar to those used by platforms like Netflix and YouTube, allow broadcasters to personalize viewer experiences, thereby increasing engagement and retention.

Additionally, AI tools can assist journalists in producing content more efficiently. Natural language processing (NLP) technologies enable automated writing, allowing news organizations to generate reports quickly based on data inputs. For example, sports results and financial updates can be automatically written and published, freeing journalists to focus on in-depth reporting and storytelling (Lau & Tham, 2020). This not only enhances productivity but also allows for the timely dissemination of news, crucial in today's fast-paced information environment.

AI also facilitates audience interaction by enabling chatbots and virtual assistants. These tools can engage viewers in real-time, answering questions and providing personalized content suggestions based on user preferences (Smith, 2021). By enhancing interactivity, broadcasters can foster a more engaged and loyal audience base.

Automated reporting represents another significant advancement made possible by AI technologies. News organizations are increasingly adopting AI-driven systems to generate news content without human intervention. For example, Associated Press and Reuters utilize AI to produce reports on sports events, financial earnings, and other data-heavy stories. These systems can process structured data and convert it into readable narratives in a fraction of the time it would take a human journalist (García, 2021).

This shift towards automation raises questions about the future role of journalists. While AI can enhance efficiency and reduce costs, it also poses risks related to job displacement. Journalists may find themselves competing with machines that can generate basic reports more quickly and cost-effectively. This trend necessitates a reevaluation of the skills required in journalism, with an increased emphasis on investigative reporting, analysis, and narrative construction—areas where human insight remains indispensable (Brynjolfsson & McAfee, 2014).

AI Implications for Information Dissemination

AI technologies can significantly enhance the efficiency of information dissemination in broadcasting. By automating content creation and distribution, broadcasters can deliver news faster and reach broader audiences. For instance, the introduction of AI-driven chatbots allows for real-time engagement with viewers, answering queries and providing information instantaneously (Smith & Jones, 2020). This immediacy is crucial in a fast-paced media landscape where timeliness is essential.

Also, the application of AI in data verification also contributes to improved accuracy in broadcasting. AI algorithms can cross-reference information from multiple sources, flagging inconsistencies and potential misinformation (Johnson & Lee, 2021). This capability is vital in an era where misinformation can spread rapidly through digital platforms, thereby threatening the credibility of broadcasting institutions.

It can personalize content, enhancing audience engagement. By analyzing viewer data, broadcasters can tailor news stories to fit audience preferences, increasing viewer retention (Khan et al., 2023). This level of customization fosters a more interactive experience, enabling broadcasters to build stronger relationships with their audiences.



To ensure that journalists within the Broadcasting Corporation of Abia State benefit from the technology by leveraging on the multiple benefits, there should be investment in the institution's infrastructure as well as training and building their capacity. Also, the integration of AI technologies in broadcasting carries significant cultural implications. It has the potential to shape the representation of local narratives and influence how diverse cultures are portrayed in the media.

Representation of Local Narratives

In a culturally rich country like Nigeria, the representation of local narratives in the media is crucial and must be tailored appropriately. AI can enhance the representation of diverse voices and stories, provided it is utilized thoughtfully. Okoro (2022) remarks that by leveraging AI to analyze audience preferences and feedback, broadcasters can gain insights into the types of content that resonate with various demographic groups.

However, there is also a risk that AI may inadvertently homogenize content, leading to a loss of cultural specificity. Algorithms trained on global data may prioritize mainstream narratives over localized stories, marginalizing minority voices and cultural expressions. This is particularly concerning in the context of Nigeria, where a myriad of ethnic groups and languages coexist. Media organizations must ensure that AI-driven content reflects the rich tapestry of local cultures and experiences rather than reinforcing dominant narratives (Okoro, 2022).

To mitigate this risk, broadcasters should engage with local communities and stakeholders when developing AI-driven content strategies. Incorporating feedback from diverse cultural groups can help ensure that content is not only representative but also authentic and respectful of local traditions and values.

Furthermore, AI technologies can significantly enhance language inclusivity in broadcasting. With Nigeria's linguistic diversity, the ability to generate content in multiple languages is invaluable. Okoro (2022) noted that AI-driven translation tools can facilitate the production of content in local dialects and make information more accessible to a broader audience especially during awareness campaigns for health mobilization like we experienced during and post COVID-19 era (Obiora & Kenekchukwu, 2023).

However, the challenge lies in ensuring that these AI systems accurately reflect the nuances of local languages and cultures. Misinterpretations or inaccuracies in translation can lead to miscommunication and reinforce stereotypes. For Smith (2021), it is essential for broadcasters to collaborate with linguists and cultural experts to develop AI systems that respect and accurately represent local languages to increase acceptability among the audience.

Moreover, fostering inclusivity in content requires a commitment to ethical practices. Media organizations must ensure that their AI systems do not marginalize or exclude specific groups. This involves not only language considerations but also the representation of various cultural identities in media content (Okoro, 2022).



Challenges in Adopting AI in Journalism in Nigeria

In Nigeria, the adoption of AI in broadcasting faces significant challenges, primarily due to inadequate infrastructure. Many broadcasting corporations, including the Broadcasting Corporation of Abia State, struggle with unreliable internet connectivity and limited access to advanced technology (Ogunyemi, 2022). These infrastructural limitations hinder the effective implementation of AI tools that require robust digital ecosystems.

To buttress the issue, Ibrahim and Adeola (2021) said that there is a notable skill gap within the broadcasting sector in Nigeria as many professionals lack the necessary training to utilize AI technologies effectively. The successful integration of AI demands not only technological investments but also a workforce skilled in data analysis and AI management.

As AI becomes increasingly integrated into the media landscape, ethical considerations arise regarding bias, misinformation, and accountability. These concerns are crucial in ensuring that AI technologies are used responsibly and do not compromise journalistic integrity. According to Anagba, Udjo-Onovughakpo and Nwodu (2025), it is imperative to address and combat fake news in order to preserve the integrity of information flows, as informed citizens are the cornerstone of a functioning democracy, and the unchecked propagation of false information can undermine the very principles that uphold societal harmony.

Ethical considerations is another challenge in the media space of Nigeria. The use of AI in broadcasting raises ethical concerns, particularly regarding bias and accountability. AI systems are only as unbiased as the data they are trained on, leading to potential misrepresentation of certain groups (Kumari & Singh, 2022). In a diverse society like Nigeria, it is essential for broadcasters to ensure that AI-driven content does not perpetuate stereotypes or marginalized specific communities.

The rise of AI in journalism also raises concerns about job displacement. As automation takes over routine reporting tasks, there is a genuine fear that journalists may lose their jobs or face reduced opportunities in the industry (Brynjolfsson & McAfee, 2014). AI can handle enormous volumes of data faster than humans can (Anagba, Udjo-Onovughakpo & Nwodu, 2025). This displacement is particularly concerning for entry-level positions, which often serve as crucial training grounds for aspiring journalists.

Moreover, the question of accountability becomes paramount. When AI systems generate news content, determining responsibility for errors or ethical breaches becomes complex. If an AI-produced report contains inaccuracies or biases, who is held accountable—the media organization, the algorithm's developers, or the data sources? Establishing clear lines of accountability is essential to maintain trust in media institutions and ensure ethical standards are upheld (Hargittai & Waldfogel, 2020).



THEORETICAL FRAMEWORK

This theoretical framework combines the Diffusion of Innovations (DOI) theory and Media Ecology theory to analyze the implications of AI adoption in broadcasting.

Diffusion of Innovations Theory

The DOI theory, articulated by Rogers (2003), examines how, why, and at what rate new technologies are adopted. Key attributes of AI that influence its adoption at BCA include:

Relative Advantage which says that AI can enhance operational efficiency by automating tasks like content generation and audience engagement, thereby providing BCA with faster and more tailored news delivery (Wang & Weng, 2020).

Another is compatibility, emphasizing that a successful AI integration depends on its alignment with existing broadcasting practices. If AI tools fit well with BCA's current systems, their adoption is more likely (Gao et al., 2021).

Complexity here refers to the perceived difficulty of using AI to hinder activities. Therefore, adequate training and user-friendly interfaces are crucial for easing this transition (Bohorquez & Estevez, 2022).

Trial ability gives room for allowing for small-scale trials of AI technologies in order to facilitate broader acceptance among BCA staff, demonstrating their benefits in a controlled environment (Agarwal & Prasad, 1998).

Observability touches on the visible benefits from AI implementation, such as improved audience engagement metrics, and encourages further adoption within the organization (Rogers, 2003).

Media Ecology Theory

This was proposed by McLuhan (1964); it emphasizes how media and technology reshape societal interactions. The introduction of AI in broadcasting alters how content is created and consumed, reshaping audience expectations and engagement. BCA must adapt its strategies to meet these new demands (Postman, 1992).

This theory also highlights the interconnectedness of the media. As BCA adopts AI, it affects not only its own content delivery but also how information flows across various platforms, including social media (Nielsen, 2019). Understanding these dynamics is essential for optimizing AI's role in broadcasting.

In summary, the integration of AI at BCA can be understood through the lens of DOI and Media Ecology theories. By focusing on attributes that facilitate AI adoption and recognizing the transformative effects of technology on media environments, BCA can strategically enhance its information dissemination practices.



METHODOLOGY

Research Design

This study employed a qualitative research design and used focus groups while exploring the implications of Artificial Intelligence (AI) on information dissemination within the Broadcasting Corporation of Abia State (BCA). Focus groups were particularly suited for this research as they allowed for in-depth discussions and insights from participants which facilitated a comprehensive understanding of their experiences, perceptions, and attitudes towards AI integration in broadcasting.

Participants were selected through purposive sampling that ensured that those involved had relevant experience and insights in the broadcasting sector. The focus groups consisted of 9 participants each, including BCA staff members from various departments, such as the news division, technical department and management staff. The selection criteria were based on experience, role diversity, willingness to participate.

The focus groups were conducted in a semi-structured format which allowed for guided discussions and permitted flexibility for participants to explore topics of interest. Each session lasted for about 20 to 30 minutes under the supervision of a trained moderator with experience in qualitative research.

DATA PRESENTATION

Data gathered from the focused group, who were professionals from the broadcasting corporation of Abia State (BCA), were marked A to I. The pieces of information guided the researchers in the presentation of following the research objectives.

Notwithstanding that the first objective of the work was to assess how AI technologies enhanced content creation at the Broadcasting Corporation of Abia State (BCA), it was discovered that most of the selected participants knew nothing or little about Artificial Intelligence. Out of the marked A to I, totaling 9 discussants 4 (A, D, F and I) said they had no knowledge of AI let alone its application in the line of their duties.

Two (B and G) gave a peripheral knowledge of AI but asserted that they had never deployed it to improve what they do. They went further and defined AI as many things, majorly work enhancement or research tools, stressing that it refers to the simulation of human intelligence in machines. B and G said the media organization has not taught staff that AI could be used to execute their jobs easier, attributing it to the fact that their contents are locally sourced while the output is considerably among the best when compared to other state owned broadcasting outfits. They could lay claim if AI was used by the institution, not whether some staff are using the trend to enhance their job.

Another 2 (E and H) noted that they had an in-depth view of AI and also leveraged on its benefits to improve output. They described AI as simply a machine's ability to carry out the cognitive functions associated with human minds, like perceiving, reasoning, learning, and interaction within the environment, adding that it is an advanced Google search where one can find information. It is a modernized way of sourcing information and it has come to stay. In



their testimonials, BCA has queued into the latest technology which has taken cyberspace by storm. They used it to generate and verify contents with global value.

From the engagement, C appeared to have deep knowledge of AI by defining it as an application software technology designed to perform human activities. It is a robot that can behave like a human being, hence a machine that possesses some human-like qualities such as a sense of reasoning, decision making and so on. C also asserted that AI has the capacity to perform tasks with multiple options at a very high speed. When asked whether the tool is being used to generate or create content at BCA, the research moderator could get either yes or no answer.

From the deductions at the time of conducting this research, it was difficult to truly ascertain whether BCA as a media outlet uses AI to beef up its output positively, considering the fact that the majority of the participants had zero knowledge of AI, more or less its application, while two, who claimed to be knowledgeable, answered in the opposite direction when confronted with the question whether they use it or not. E and H, who also laid claim that they are gurus in the field, gave their hats in support of its usage at BCA. The interviewer who guided the participants during the interview engagement observed that B and G were assertive that the state-owned media house has embraced the latest technology. Participant C whose contributions during the interview had a superior view declined volunteering any answer to whether BCA has adopted the technology as a media outlet or not.

On the second objective, which was on the implications of AI on information dissemination and audience engagement, Participants A, B, C, D, E, F, G, H and I gave different opinions. A, D, F and I, who had zero knowledge of AI, could not make any contribution because they were already defeated from the standpoint of absolute illiteracy on the burning issue.

When approached to make input on the second aim of conducting the research, Participants B and G said that due to the fact that BCA has not adopted and adapted to the use of AI in fast tracking its services, there was still a gap between the station's output when compared to some national broadcasting media houses like the Channels TV. They could not hesitate to add that the emergence of some private broadcasting outlets with better outputs are gradually winning the hearts of the audience, stressing that it is affecting income generation also. For Participants E and H, the application of AI in carrying out tasks in the broadcasting space has helped in no little way by improving efficiency and effectiveness of the staff's operations, leading to an enhanced media content on a daily basis. They cited speed and quality of production as the areas the use of AI will remain inevitable in the organization. For these participants, the dwindling revenue, cited by B and G, was due to the economic crisis rocking the nation in recent times, while other participants were contributing to the second objective; C maintained a nonverbal cue, basically smiling and laughing, and refused to orally support or oppose any of the groups.



DISCUSSION OF FINDINGS

The research work explored Artificial Intelligence (AI) in Broadcasting: A Study of Implications on Information Dissemination within the Broadcasting Corporation of Abia State (BCA), Nigeria. Discoveries with regard to the first objective of the research work matter.

In the course of the investigation, it was discovered that among the nine participants, four (A, D, F and I) were ignorant of the latest trend called AI and, based on that grounds, they could not volunteer any answer to objective number one which sought to find out whether AI technologies help to enhance content creation at BCA. Participants B and G, who said that they have little knowledge of AI, gave a superficial definition, stressing that they have not been educated on its application in the industry. The deductions from their answer in reference to objective number one point to the fact that whether AI is used at the broadcasting outlet or not to bolster better service remains unknown to them. Still relating to unearth whether AI technologies help to enhance content creation at BCA, Participants E and H, who appeared to have better exposure on the subject matter considering their contributions during the interview session, answered in affirmation while C decided to remain on the fence despite the fact that it was obvious that C is a guru in the area.

Concerning the second objective which hinged on exploring the implications of AI on information dissemination and audience engagement, participants also made input based stipulated templates. The participants namely A, D, F and I could not volunteer much valid answers here because they were totally unschooled on AI and its application. For participants B and G, who could not authoritatively said the media outfit has adopted the technology due to the fact that contents are locally sourced it has affected information dissemination and audience engagement with emerging and more digitalized media houses like Channels TV and Flow FM. Participants E and H, who were indifferent to the standpoint of B and G, rather asserted that AI has helped to improve the services BCA as a radio and television house provides for the masses, giving credence that the station is self-sustaining financially. They noted that the media station has a towering influence among its audience because of excellent service delivery. C, who decided to always take a different stand, did not either agree with B and G nor E and H differed by remaining neutral on AI implications on information dissemination and audience engagement at BCA by maintaining sealed lips.

With respect to the last and third objective of this research work, although Participants A, D, F and I were aloof due to illiteracy on the subject matter, they agreed with the position of the remaining Participants B, G, E, H and C that AI is revolutionizing various industries, and broadcasting is no exception. They opined that the integration of AI tools at BCA presents significant opportunities for enhancing content creation, audience engagement, and operational efficiency at a substantial speed as well as personalize viewer experiences.

While the integration of AI in broadcasting offers numerous advantages, they also agreed that there are several challenges impeding the effective implementation of AI technologies within BCA Corporation, such as infrastructure limitations, skill gaps, financial constraints, and cultural resistance, integration with existing and outdated systems, and data privacy and ethical concerns among others.



CONCLUSION

The research work critically assessed the title, "AI in Broadcasting: A Study of Implications on Information Dissemination within Broadcasting Corporation of Abia State, Nigeria" by underpinning that the latest technology is being deployed in every sector, broadcasting not exempted. It was discovered that AI helps to bolster performance, effectiveness and efficiency of human activities on a daily basis.

Insofar as one cannot authoritatively say that the Broadcasting Corporation of Abia State has adopted the use of AI technology to improve its service of information dissemination via radio, television and online, there is evidence that some of the staffers have varying degrees of knowledge on what AI stands for. It was also established that if the media organization welcomes the idea, there would be a positive spike in its activities, but this could only be achieved if perceived drawbacks as identified by participants would be addressed decisively.

RECOMMENDATIONS

The study recommends the following:

1. The challenges relating to knowledge gap should be addressed by the management of BCA organizing a training workshop where the staff would be educated on the latest technology known as AI.
2. Since BCA is autonomous, the management should invest in the infrastructure and equipment by phasing out obsolete ones and replacing them with modern facilities that could fit in with AI technology.
3. BCA as a broadcast media should source for financial support even outside what it generates so that money would not be a big issue in adopting the AI technology.
4. Staff of BCA should go the extra mile to acquire the knowledge of AI to beef up their worth in the media house.

REFERENCES

- Adegoke, A. (2020). The role of broadcasting in a democratic society: A study of Nigeria's media landscape. *Journal of Media Studies*, 15(1), 22-37.
- Adetunji, A., & Ogunsola, L. (2020). The role of AI in Nigerian broadcasting: Opportunities and challenges. *Journal of Media Studies*, 35*(2), 45-58.
- Agarwal, R., & Prasad, J. (1998). A conceptual and operational definition of personal innovativeness in the domain of information technology. *Information Systems Research*, 9(2), 204-215.
- Anagba, E. U., Udjo-Onovughakpo, O. J., Nwodu, G. E. (2025), AI-Powered verification: fighting misinformation in Nigeria. *British Journal of Mass Communication and Media Research* 5(1), 27-37. DOI: 10.52589/BJMCMRVVVP8XA1
- Baker, S., & O'Connor, P. (2020). AI for accessibility: Enhancing media for the hearing impaired. *Media, Culture & Society*, 42(4), 593-605.



- Borkowski, D. (2020). The impact of AI on the future of journalism. *Media Innovations Journal*, 8(1), 10-25.
- Bohorquez, V., & Estevez, J. (2022). Understanding the adoption of artificial intelligence in broadcasting: A qualitative study. *Journal of Broadcasting & Electronic Media*, 66(1), 45-65.
- Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W.W. Norton & Company.
- Davies, R. (2021). AI and the BBC: Enhancing news production through technology. *Journal of Broadcasting and Electronic Media*, 65(3), 456-470.
- Enemuo, C.J., Ezeanyi, B.C & Ezeaka, N.B. (2019). Extent of Information Technology (ICT) Integration among Students in Tertiary Institutions in Anambra State. *International Journal of Education and Research*. 7(7).
- Eze, M. (2019). The Role of Broadcast Media in the Dissemination of Information in Nigeria. *Journal of Media Studies*, 15(2), 45-56.
- Ezeaka, N.B. (2019). Information Diffusion and Utilization of Undergraduates 'Drug Free Clubs' against drug trafficking in Anambra State. *Higher Education of Social Science* 17(1) 26-30
- Ezeaka, N.B., Ezeoke, C.B., Nwodu, G.E. & Umennebuaku, V.A. (2023). *The use of ICTs to communicate about waste disposal management by residents of Onitsha, Nigeria*. In N.T. Ekeanyanwu; A.S. Bashir & E.S. Asemah (eds) *African Council for Communication Education* 85-97
- Ezeaka, N.B & Nwodu, E.G (2022). *Communication for Partnership in Development*. In A.N Nwammuo; G.U Nwafor & B.N Ogbonna (eds) *Twenty-One Scholars' Viewpoints on Development Communication*. Enugu: Rhyce Kerex Publishers
- Ezeaka, N. B. & Umennebuaku, V. A. (2024). Development Communication in the Artificial Intelligence (AI) Era: Navigating Cultural Complexity and Technological advancements. *African Journal of Culture, History, Religion and Traditions*. 7(3), 98-107. DOI: 10.52589/AJCHRTHQCS2XJ7
- Ezeaka, N.B. (2024). Artificial Intelligence (AI) and Health Communication Policy in Nigeria: Challenges and Prospects. *Journal of Advanced Research and Multidisciplinary Studies* 6(1) 141-149.
- Ezeaka, N.B., & Ochuba, C.C. (2024). Harnessing AI in Development Communication for Drug Abuse Prevention: A Nigerian Perspective. *Mass Media Review* Vol 6 (1)
- Ezeaka, N. B. & Nwodu, G. E. (2022). Communication for partnership in development. In A. N. Nwammuo, G. U. Nwafor & B. N. Ogbonna (ed.s) *Twenty-one scholars' viewpoints on development communication*; Enugu: Rhyce Kerex Publishers;
- Ezeali, C. T., Nwodu, G. E. & Udoh, W. A. (2023). Effectiveness of mobile telecommunication networks (MTN), corporate social responsibility in the development of education in Enugu state, Nigeria. *imsujcs.com/Journals*
- Ezeoke, B. C., Ezeaka, N. B. & Nwodu, G. E. (2020) Understanding Health Communication. In C. S. Okunna (ed) *Communication and Media Studies Multiple Perspectives*; Enugu: New Generation Educare LTD
- Gao, Y., Zhang, R., & Liu, T. (2021). Factors influencing the adoption of AI in media organizations. *International Journal of Media Management*, 23(2), 85-100.
- García, S. (2021). AI in media: New opportunities for personalized content. *Journal of Broadcasting & Electronic Media*, 65(3), 450-470.
- Hargittai, E., & Waldfogel, J. (2020). The impact of automation on journalism: A dual perspective. *Digital Journalism*, 8(5), 610-629.
- Himelboim, I. (2020). AI and ethics in media: Balancing innovation and responsibility. *Communication Research*, 47(4), 552-570.
- Ibrahim, Y., & Adeola, O. (2021). Bridging the skill gap in Nigerian broadcasting: The role of education. *Nigerian Journal of Communication*, 18(1), 85-100.



- Iroegbu, P. (2020). Radio Broadcasting and Community Engagement in Nigeria: A Case Study of Abia State. *African Communication Research*, 7(1), 23-40.
- Johnson, T., & Lee, S. (2021). AI and the fight against misinformation: Opportunities and challenges. *International Journal of Media Management*, 23(2), 142-158.
- Katz, E., Blumler, J.G., & Gurevitch, M. (2020). Uses and gratifications research. In J. Bryant & M. Oliver (Eds.), *Media Effects: Advances in Theory and Research* (pp. 19-34).
- Khan, R., Smith, J., & Jones, L. (2023). Personalization in broadcasting: The role of AI. *Journal of Media Technologies*, 12(4), 200-215.
- Kumari, S., & Singh, R. (2022). Ethical implications of AI in media: Bias and representation. *Ethics in Journalism Review*, 5(2), 78-92.
- Lau, R., & Tham, J. (2020). The automation of news: How AI is transforming journalism. *Journalism Studies*, 21(2), 218-235.
- Liu, H., & Zhang, Y. (2021). AI-driven content curation in broadcasting: A case study. *Global Media Journal*, 19(2), 100-115.
- Martinez, A. (2022). CNN and the use of AI in news production. *Media and Communication Studies*, 14(3), 330-345.
- McLuhan, M. (1964). *Understanding Media: The Extensions of Man*. McGraw-Hill.
- Nielsen, R. K. (2019). *The Future of News: AI, Journalism, and the New Media Landscape*. Oxford University Press.
- Nwachukwu, F. (2018). Language and Culture in Nigerian Broadcasting: A Focus on Local Languages. *Nigerian Journal of Communication*, 10(3), 89-102.
- Nwankwo, A. (2022). Digital divide and the future of broadcasting in Nigeria. *African Journal of Communication*, 15(1), 23-37.
- Nwankwo, E. (2023). The Challenges of Traditional Media in the Age of Digital Disruption. *Media and Communication Studies*, 12(4), 67-81.
- Nwodu, G. E., Obiora, A. V. & Agbachukwu, P. I. (2025). Communication students' perception of AI in planning, creating and disseminating advertisement. *African Journal of Social Sciences and Humanities Research (AJSSHR)* 8(1), pp
- Nwodu, G. E (2025). Awareness and perception of the use of artificial Intelligence for learning among select communication undergraduates in Nigeria. *African Journal of Social Sciences and Humanities Research*, 8(1), pp
- Nwodu, L. C. & Nwodu, G. E. (2018). Evolving research agenda for international communication in the era of social media” in L. C. NWODU & I. S. ONUNKWOR (ed.s) *Evolving Thoughts on International Communication, Diplomacy and the Social Media; Enugu: Rhyce Kerex Publishers* 276-283
- Nwodu, L. C. & Nwodu, G. E. (2011). Exploring the basics of communication research” in I. S. Ndolo (ed.) *Contemporary issues in communication and society*; Enugu: Rhyce Kerex Publishers. Pp 90-107
- Obasi, J. (2020). Cultural Identity and Broadcasting: *The Role of BCA in Abia State*. *Journal of Cultural Studies*, 8(2), 114-130.
- Obiakor, C. U., Adikuru, C. C. & Agbakaj, B. C. (2022). Digital Broadcasting Network and the Emerging Democratic Culture in Nigeria: The 2021 anambra Guber Debate Experience. *International Journal of International Relations, Media and Mass Communication Studies*, Vol. 8, No.3, pp.1-21
- Obiora, A.V., & Adikuru, C.C. (2024a). Emerging artificial intelligence techniques in the production of “Jagun Jagun” movie. *Social Science Research*, 10(3), 13–30. <https://journals.aphriapub.com/index.php/SSR/article/view/2754/2538>
- Obiora, A.V., & Adikuru, C.C. (2024b). Intervention communication strategy: Boosting fight against drug abuse among Nigerian youth through artificial intelligence generated memes on social media. *Advance Journal of Arts, Humanities and Social Sciences*, Volume: 7(4), 57–72. <https://aspjournals.org/ajahss/index.php/ajahss/article/view/112>



- Obiora, A.V., & Kenechukwu, S.A. (2023). Radio programming and audience mobilization on covid-19 vaccination. *Advance Journal of Linguistics and Mass Communication*. 7(2), 1-13. <https://aspjournals.org/Journals/index.php/Ajlmc/article/view/297/295>
- Obiora, A.V., & Uche, A. O. (2022). Impact of online radio programme preferences on academic pursuit of undergraduates in South-east Nigeria. *Mass Media Review*, 4(1). <https://www.massmediareview.net/paper/impact-of-online-radio-programme-preferences-on-academic-pursuit-of-undergraduates-in-south-east-nigeria>
- Ogbulu, M. (2022). Public Participation in Governance: The Role of Broadcasting in Nigeria. *Journal of Political Communication*, 6(1), 33-48.
- Ogunyemi, A. (2022). Technological challenges in Nigerian broadcasting: A critical analysis. *African Journal of Media Studies*, 11(2), 90-105.
- Okoro, A. (2022). The role of AI in enhancing broadcasting in Nigeria: Challenges and prospects. *Nigerian Journal of Media Studies*, 14(2), 115-130.
- Okwu, A. (2010). The historical evolution of broadcasting in Nigeria: Challenges and prospects. *International Journal of Media and Communication Research*, 3(1), 55-67.
- Omu, F. (1978). *Press and Politics in Nigeria 1880-1937*. Longman.
- O'Reilly, T. (2021). Understanding AI bias: Implications for journalism and broadcasting. *Journalism Ethics*, 16(3), 287-299.
- Postman, N. (1992). *Technopoly: The Surrender of Culture to Technology*. Knopf.
- Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.). Free Press.
- Russell, S., & Norvig, P. (2016). *Artificial Intelligence: A Modern Approach* (3rd ed.). Pearson.
- Smith, A. (2021). The influence of AI on audience engagement in streaming media. *Television & New Media*, 22(6), 555-572.
- Shadrach, Idi & Adikuru C. C. (2023). Assessment of Adoption and Practice of Citizen Journalism Among Women in North-East Nigeria. *Gender and Society, Journal of Centre for Gender and Women Studies*, Alex Ekwueme Federal University Ndufu Alike (AE-FUNAI). Vol. 1 Pp 28-41. (Online)
- Smith, R., & Jones, T. (2020). The impact of AI on audience engagement in broadcasting. *Journal of Audience Studies*, 7(1), 55-70.
- Uche, R. (2021). Media Independence and Political Pressure in Nigeria: The Case of State Broadcasters. *Journal of Media Ethics*, 10(1), 15-30.
- Uche, A. O. & Obiora, A.V. (2022). *Book Publishing for Today & Tomorrow*. Enugu: His Glory Publishers.
- Udeze, S. E, Nwodu, L. C. and Nwodu, G. E. (2015). Social media and global news flow: what has changed? In J. E. Alide (ed) *Studies in communication, mass media and society, discourses and debates*. Pp247-254
- Wang, Q., Li, Y., & Zhang, H. (2020). Automated journalism: The future of news production. *Journal of Digital Journalism*, 8(1), 15-30.
- Wang, Y., & Weng, X. (2020). The role of AI in broadcasting: Opportunities and challenges. *Television & New Media*, 21(7), 682-697.