



## USE OF ARTIFICIAL INTELLIGENCE IN PUBLIC RELATIONS PRACTICE AMONG INFORMATION OFFICERS IN KADUNA STATE, NIGERIA

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### Abstract

Artificial Intelligence (AI) is increasingly transforming communication practices globally, including public relations (PR). Despite its growing relevance, empirical evidence on AI adoption in public sector public relations at the local government level in Nigeria remains limited. This study examined the use of Artificial Intelligence for public relations practice among Information Officers in the 23 Local Government Areas of Kaduna State, Nigeria. Using a quantitative survey research design, data were collected from 79 Information Officers through structured questionnaires. Findings revealed a moderate level of AI adoption, with 67% of respondents indicating the use of AI tools, primarily for content creation and social media analytics. However, the adoption of advanced tools such as chatbots, predictive analytics, and sentiment analysis remains low. Inadequate infrastructure and lack of training emerged as the major challenges to effective AI integration. The study concludes that while awareness and acceptance of AI among Information Officers are high, systemic constraints such as such as inadequate infrastructure and limited training prevents its full potential and hinder optimal utilization. The paper recommends capacity building, infrastructural development, supportive government policies, and increased funding to enhance effective AI-driven public relations practice in local governance.

**Keywords:** Artificial Intelligence, Public Relations, Information Officers, Local Government, Kaduna State, Nigeria

### Introduction

The rapid advancement of digital technologies has significantly reshaped communication practices across the globe. One of the most transformative developments in recent times is Artificial Intelligence (AI), which has found applications in various professional fields, including public relations (PR). AI-powered tools are increasingly used for content creation, media monitoring, audience segmentation, sentiment analysis, and stakeholder engagement, thereby redefining the scope and efficiency of public relations practice (Chung & Park, 2021; Wright & Hinson, 2021).

In today's fast growing digital world, Artificial Intelligence (AI) is reshaping many professional fields, including public relations (PR). A study by Chung & Park (2021), showed that organisations and governments globally are leveraging AI to enhance communication strategies, improve efficiency, and

foster deeper engagement with stakeholders. From chatbots and predictive analytics to sentiment analysis and automated content creation, AI is redefining how PR professionals operate, enabling more personalised and timely interactions. In many developing countries, including Nigeria, the integration of AI into public administration and PR practices at local government level remains at a nascent stage.

In developing countries such as Nigeria, the integration of AI into public administration and public relations remains at an early stage, particularly at the local government level. Information Officers at the local government level play a critical role in disseminating government information, managing public perception, and fostering government–citizen relationships. However, empirical evidence on the extent to which these officers utilize AI tools in their professional activities are limited. Furthermore, the challenges and opportunities associated with AI adoption in this context remain largely unexplored (Matyek et al., 2022) Public relations is a critical function of governance, serving as the bridge between the government and the people. In Nigeria, Information Officers at the local government level play a pivotal role in disseminating information, managing public perception, and promoting government programmes and policies (Oduenyi & Etumnu, 2024). Despite their crucial role, the traditional methods employed by many Information Officers - such as print, television/radio broadcasts, and manual stakeholder engagement - often lack the efficiency and reach needed to meet the demands of a digitally connected population,” (Ekechukwu et al, 2022).

Another study by Stephen (2020), showed that AI offers a transformative potential for these challenges. It can help Information Officers automate repetitive tasks, gain insights from large volumes of data, and deliver more targeted communication. Tools like AI-powered analytics platforms can assist in monitoring public sentiment, while chatbots and virtual assistants can enhance real-time citizen engagement. Nevertheless, the adoption of AI in PR practices in Nigeria, particularly at the grassroots level in Kaduna state, is a significant challenge which his study hopes to unravel. barriers. Do practitioners understand the importance of AI technologies? Do they have the capacity to handle these new technologies? Are they ready to adapt? These are the issues at stake.

Kaduna State, located in northwest Nigeria, is home to 23 Local Government Areas (LGAs), each responsible for governance and public administration at the local level. The Information Officers in these LGAs play a strategic role in fostering transparency, building trust, and maintaining effective communication between the local government and citizens. With the increasing digitisation of public services in the state, the adoption of AI in PR practices at the local government level could significantly enhance these efforts. However, there is a lack of empirical evidence on the extent to which AI is currently being utilised by Information Officers in Kaduna State. Additionally, the challenges and opportunities associated with AI adoption in this context remain largely unexplored. This gap in knowledge underscores the need for a focused study to understand the role of AI in PR practices among Information Officers in Kaduna State's LGAs.

This study therefore examines the use of Artificial Intelligence for public relations practice among Information Officers in the 23 Local Government Areas of Kaduna State, Nigeria. The study seeks to assess the extent of AI adoption, identify the specific tools in use, examine the challenges faced, and explore strategies for enhancing AI integration to improve public sector communication.

## Statement of the Problem

Artificial Intelligence (AI) is changing public relations practice (PR) by introducing tools and techniques that enhance communication strategies, improve engagement with stakeholders, and streamline PR processes. A study by Wright and Hinson (2021), observed that the integration of AI into PR practices has transformed how professionals monitor media, manage campaigns, and interact with their audiences. This section discusses the various ways AI enhances PR practice, focusing on automation, personalisation, data analysis, and crisis management.

According to Shao (2021), studies showed that AI enrich this process by enabling government officials to engage with the public more effectively, respond to inquiries in good time, and make data-driven decisions. AI-powered tools are improving transparency and service delivery in public sector communication.

PR activities in governance, according to Swam (2020), include press briefings, public announcements, crisis communication, citizen engagement initiatives, and reputation management. PR officers are also responsible for ensuring that citizens receive accurate and timely information about government policies, programs, and services. However, traditional PR methods have limitations in reaching large audiences quickly and efficiently, which is where AI comes in.

Information Officers in Kaduna State's Local Government Areas are entrusted with managing communication between government institutions and citizens. While AI offers significant potential to optimize PR functions, there is limited empirical evidence of its effective utilization in local government PR practice. Existing studies suggest that AI adoption in Nigerian public sector communication is uneven and constrained by infrastructural, capacity, and policy-related challenges facing Information officers across Local Government areas in Kaduna State.

The lack of comprehensive data on the awareness of AI, the specific tools being used, and the barriers faced by Information Officers in Kaduna State creates a gap in knowledge. Without such understanding, efforts to improve public relations practice through technological innovation may remain ineffective. This study addresses this gap by systematically examining AI use in PR practice among Information Officers at the local government level in Kaduna State.

## Aim and Objectives of the Study

The aim of this study is to assess whether Information officers in Kaduna State utilize AI tools for PR practices. The specific objectives are to:

1. Identify the AI tools used for public relations practices among Kaduna state local government Information Officers.
2. Examine the awareness of AI tools used for PR practice by Kaduna state local government Information Officers
3. Ascertain the level of adoption of AI tools for AI practices by Kaduna state local government Information Officers.

4. Examine the challenges faced by Kaduna state local government Information Officers in adopting AI.
5. Identify the strategies to enhance the integration of Artificial Intelligence (AI) into public relations practices among Information Officers in Kaduna State?

### **Scope of the Study**

The study focuses on the use of Artificial Intelligence tools such as Chatbots, social media analytic tools, and email automation in public relations practice among Information Officers in the 23 Local Government Areas of Kaduna State, Nigeria. It examines the level of AI adoption, tools used, challenges encountered, and perceived benefits. The study is limited to Local government Information Officers directly involved in public communication and does not cover other public servants. Its geographic focus limits the generalizability of findings to other states or regions. Also, the timeframe of the study is from January - June, 2025

### **Literature Review**

#### **Conceptualizing Artificial Intelligence and Public Relations**

Artificial Intelligence (AI) refers to the “simulation of human intelligence processes by machines, particularly computer systems, which perform tasks that traditionally require human cognition, such as learning, problem-solving, and decision-making” (Russell and Norvig, 2021, p. 101). According to the authors, AI comprises many subfields, including Machine Learning (ML), Natural Language Processing (NLP), Computer Vision, and Robotics. These technologies enable AI systems to analyze large volumes of data, recognize patterns, and make predictions or decisions with minimal human intervention.

According to Raschka & Mirjalili (2021), machine learning (ML) is a subset of artificial intelligence (AI) that focuses on the development of algorithms and statistical models that enable computers to perform specific tasks without being explicitly programmed for those tasks. The authors in simple terms, explained that machine learning allows computer systems to learn from data, identify patterns, and make decisions with minimal human intervention.

In conceptualizing artificial intelligence, Healey (2019), highlighted key concepts in machine learning to include the following:

**Learning from Data:** ML algorithms are trained on data, which can be in the form of numbers, images, text, or other forms of information. As the system processes more data, it improves its ability to make accurate predictions or decisions.

Public relations (PR) is a strategic communication process that builds and maintains mutually beneficial relationships between an organization and its various publics. It involves planned and sustained efforts to establish understanding, trust, and goodwill through effective information dissemination, dialogue, and relationship management (Cutlip, Center, & Broom, 2019).

Public relations is also defined as a management function that evaluates public attitudes, identifies organizational policies and procedures in relation to the public interest, and executes programmes of action and communication to earn public understanding and acceptance (Harlow, 1976). This definition emphasizes PR as a continuous, research-based, and managerial activity rather than a one-time communication effort.

Similarly, Grunig and Hunt (1984) describe public relations as the management of communication between an organization and its publics. This perspective highlights the role of PR in facilitating two-way communication, promoting feedback, and ensuring that both the organization and its stakeholders benefit from the relationship.

In the contemporary digital environment, public relations extend beyond traditional media relations to include online engagement, reputation management, crisis communication, and the strategic use of emerging technologies to foster transparency and credibility (Wilcox et al., 2015).

### **Factors Considered in Educating Information Officers on AI Tools**

When educating information officers on the use of Artificial Intelligence (AI) tools, several important factors must be considered to ensure effective learning and practical application in public communication. AI technologies are increasingly influencing communication management and public relations practices, making it necessary for information officers to acquire relevant knowledge and skills (Stacks, 2022).

First, digital literacy and technical skills are essential. Information officers must possess basic knowledge of computers, digital communication platforms, and data management before they can effectively use AI technologies. Training programmes should therefore begin with foundational digital skills that enable officers to understand and operate AI-based communication systems (Kent & Li, 2020).

Second, ethical and responsible use of AI is an important consideration. Information officers need to understand issues such as data privacy, algorithmic bias, and misinformation in order to use AI tools responsibly and maintain public trust in institutional communication (Coombs & Holladay, 2020).

Third, relevance to job functions should guide the training process. AI tools introduced during training should support the core responsibilities of information officers, such as media monitoring, content production, public engagement, and crisis communication management (Stacks, 2022).

Another important factor is access to technological infrastructure. Effective education on AI tools requires reliable internet connectivity, modern communication devices, and access to appropriate software platforms that enable practical training and application.

### **Empirical Review**

#### **AI tools Necessary for PR practices in Nigeria**

Artificial Intelligence (AI) has become an important tool in modern public relations practice. AI technologies help PR professionals analyse information, monitor public opinion, and communicate more effectively with stakeholders. In Nigeria, the rapid growth of digital media and social networking platforms has made AI tools essential for managing organizational reputation and improving communication strategies (Kent & Li, 2020).

One of the most important AI tools used in public relations is media monitoring and listening tools. These tools enable PR practitioners to track news reports, blog posts, and social media conversations about an organization or brand. By analysing large volumes of online content in real time, media monitoring systems help practitioners detect emerging issues and respond quickly to potential crises. They also help organizations measure the tone and reach of media coverage and evaluate the effectiveness of PR campaigns (Stacks, 2022).

Another essential category of AI tools is social media analytics tools. These tools analyse audience engagement, trending topics, and user behaviour across platforms such as Facebook, Instagram, LinkedIn, and X (Twitter). For PR practitioners in Nigeria, where social media is widely used for news and communication, social media analytics provide valuable insights that guide message development and campaign planning (Kent & Li, 2020).

AI content generation tools are also increasingly used in PR practice. These tools assist professionals in drafting press releases, speeches, newsletters, and social media posts quickly and efficiently. By using natural language processing, AI systems help maintain consistency in communication and improve productivity in public relations activities (Coombs & Holladay, 2020).

In addition, chatbots and virtual assistants have become useful for maintaining constant communication with stakeholders. These AI-powered systems provide instant responses to public inquiries through websites and messaging platforms. Chatbots help organizations improve customer relations, provide information quickly, and gather feedback from the public, thereby strengthening stakeholder engagement (Stacks, 2022).

Another important AI application is sentiment analysis, which examines public reactions expressed in online comments, reviews, and social media posts. Sentiment analysis tools categorize public opinions as positive, negative, or neutral. This allows PR practitioners to understand how audiences perceive their organization and to adjust communication strategies accordingly (Kent & Li, 2020).

### **PR and utilization of AI tools in organisations**

In local government, PR plays a critical role in managing communication between government institutions and citizens, whether internal or external communication. According to Smith (2023), studies showed that AI enrich this process by enabling government officials to engage with the public more effectively, respond to inquiries in good time, and make data-driven decisions. AI-powered tools are improving transparency and service delivery in public sector communication.

Public relations in governance involves handling the flow of information with the aim to build trust, foster positive relationships between the government and stakeholders at the local government level. PR activities in governance, according to Swam (2020), include press briefings, public announcements, crisis communication, citizen engagement initiatives, and reputation management.

At the local government level, public relations is crucial for managing communication between government institutions and citizens. Mergel et al. (2020) argue that AI has the potential to transform public sector communication despite challenges such as limited infrastructure and skills gaps. However, studies show uneven adoption across regions, with urban local governments demonstrating higher levels of AI usage compared to rural areas.

## **Future Prospects of AI in Local Government PR**

According to Mergel et al (2020), research shows that the future of artificial intelligence (AI) holds great potential to transform public relations (PR) practices in local governments despite the various challenges. As AI tools become more advanced, they will continue to change PR practices by improving efficiency, accuracy, and audience engagement. “Scholars predict the trends to include increased use of voice assistants by PR professionals to communicate important messages to citizens about government initiatives that may have to do with projects execution,” (Mergel et al, 2020 p. 67), especially on issues of diversity, equality, inclusivity, bias, etc. As the world moves fast toward AI, public relations at the local government will leverage voice-activated AI tools to engage with audiences.

Also, according to Grunig and Hunt (2020), PR teams will gain deeper insights into audience behavior through advanced data analytics, noting that the adoption of AI in PR will continue to grow, offering new opportunities for PR professionals to improve their strategies and achieve better results. With AI technology advancements, the authors argued that PR practice will also advance, making it essential for PR practitioners to embrace AI tools to stay competitive in the digital age. More accurate forecasts of public sentiment and policy impact will double as practitioners deploy technology to predict responses to local government activities.

Ekechukwu et al (2022), underscored how automated responses to misinformation will impact the job of PR officers at the local government level relieving them of the stressful manual press release and public announcements that may take longer time to achieve. The researchers emphasised that AI-driven crisis communication will be faster and that targeting demographic audience with repeated messages to engender confidence and elevate transparency in public communication will increase. This means that as AI technology advances, its role in local governance PR will become even more critical in shaping the future of public sector communication.

However, according to Adeyemi and Babalola (2022), local governments must address ethical concerns and ensure that AI tools are used responsibly in public communication.

## **Theoretical Framework**

**Diffusion of Innovations (DOI) Theory** The Diffusion of Innovations (DOI) Theory explains how new ideas, technologies, or practices spread within a social system over time. The theory was developed by Everett M. Rogers in 1962 and later expanded in his book *Diffusion of Innovations* (5th edition). Rogers defined diffusion as the process by which an innovation is communicated through certain channels over time among members of a social system (Rogers, 2003). The theory is widely used in communication, technology adoption, public health, and organizational studies to explain how innovations are accepted or rejected by individuals and institutions.

According to Rogers (2003), the adoption of an innovation follows five stages: knowledge, persuasion, decision, implementation, and confirmation. At the knowledge stage, individuals become aware of the innovation and understand how it functions. During the persuasion stage, individuals develop positive or negative attitudes toward the innovation. This is followed by the decision stage where they choose to

adopt or reject the innovation. The implementation stage involves the actual use of the innovation, while the confirmation stage occurs when individuals seek reinforcement for their decision.

Another important concept in the theory is the classification of adopters. Rogers (2003) identified five categories of adopters: innovators, early adopters, early majority, late majority, and laggards. Innovators are usually risk-takers who are eager to try new ideas, while early adopters act as opinion leaders who influence others in adopting innovations. The early majority and late majority adopt innovations after observing the experiences of others, whereas laggards are often resistant to change and adopt innovations only when they become widely accepted.

Assumptions of the Diffusion of Innovations Theory The Diffusion of Innovations theory is based on several assumptions:

- a. The adoption of innovations occurs gradually through identifiable stages (Rogers, 2003).
- b. Individuals adopt innovations at different rates within a social system.
- c. Communication channels such as mass media and interpersonal networks influence the diffusion process.
- d. Opinion leaders and social networks play a key role in influencing adoption decisions.
- e. The perceived attributes of an innovation determine the speed and success of its adoption.

### **Critique of the Theory**

Despite its popularity, the Diffusion of Innovations theory has been criticized for certain limitations. One criticism is its pro-innovation bias, which assumes that innovations are inherently beneficial and should be adopted by everyone (Rogers, 2003). Critics also argue that the theory tends to focus more on individual adoption decisions while sometimes neglecting structural factors such as economic inequalities, technological infrastructure, and organizational constraints that may affect adoption (Greenhalgh et al., 2019). Furthermore, the theory may oversimplify the complex nature of technology adoption in modern digital communication environments.

Relevance of DOI to the Study The Diffusion of Innovations theory is relevant to this study because it explains how Artificial Intelligence (AI) tools are introduced and adopted among information officers in public relations practice. AI technologies represent new innovations in communication management, and their adoption depends on factors such as awareness, perceived usefulness, training, and organizational support.

The theory also explains why some information officers adopt AI tools earlier than others. For example, technologically skilled officers may function as innovators or early adopters, experimenting with AI applications for media monitoring, data analysis, and content generation, while others may adopt these tools later due to lack of training or technological barriers.

### **Uses and Gratifications Theory (UGT)**

The Uses and Gratifications Theory (UGT) explains why individuals actively choose specific media or communication technologies to satisfy their personal and professional needs. The theory was developed by Elihu Katz, Jay Blumler, and Michael Gurevitch in 1974. Unlike earlier media theories that viewed audiences as passive recipients of media messages, UGT considers media users to be active participants who deliberately select media channels that meet their needs (Katz, Blumler, & Gurevitch, 1974).

According to the theory, audiences use media for different purposes, including information seeking, entertainment, personal identity, social interaction, and surveillance of the environment (McQuail, 2010). In the modern digital communication environment, media users select platforms and technologies that best satisfy their informational and professional needs.

Recent studies have shown that communication professionals increasingly use digital technologies and artificial intelligence tools to enhance communication efficiency, analyse media data, and engage audiences more effectively (Appel et al., 2020; Dwivedi et al., 2021). This demonstrates the continued relevance of the Uses and Gratifications theory in explaining how individuals utilize emerging communication technologies.

**Assumptions of the Uses and Gratifications Theory** The Uses and Gratifications theory is based on the following assumptions:

- a. Media audiences are active participants in the communication process (Katz et al., 1974).
- b. Individuals use media to satisfy specific psychological or social needs.
- c. Media compete with other information sources to satisfy audience needs.
- d. Users are aware of their motivations for selecting particular media channels.
- e. Different individuals may use the same media for different purposes.

### **Critique of the Theory**

Although widely used in communication research, UGT has been criticized for relying heavily on self-reported data, which may not always accurately reflect actual media behaviour (McQuail, 2010). Critics also argue that the theory focuses primarily on individual motivations while sometimes neglecting broader social, technological, and institutional influences that shape media usage patterns.

**Relevance of UGT to the Study** The Uses and Gratifications theory is relevant to this study because it explains why information officers choose to use AI tools in their professional activities. Information officers may adopt AI technologies to satisfy professional needs such as improving communication efficiency, monitoring media coverage, generating content, and enhancing interaction with stakeholders.

By applying this theory, the study can better understand the motivations behind the adoption and use of AI tools in public relations practice. It also explains why different information officers may use AI technologies differently depending on their communication needs, professional responsibilities, and technological skills.

### **Relationship Between the Theories and the Study Objectives**

Both theories complement each other in explaining the adoption and use of AI tools among information officers. The Diffusion of Innovations theory explains the process through which AI technologies spread and are adopted, while the Uses and Gratifications theory explains the motivations behind the use of these technologies.

Together, these theories provide a comprehensive framework for understanding both how AI tools are adopted and why information officers choose to use them, thereby supporting the objectives of this study.

## Methodology

The survey method therefore is convenient for collecting data from a sample of Information Officers across the 23 Local Government Areas (LGAs) of Kaduna State using a questionnaire as the primary data collection tool. The survey method is appropriate for this study because it allows the researcher to gather information from a large population within a limited timeframe. It also provides a structured way to collect quantitative data, enabling the researcher to measure the extent of Artificial Intelligence (AI) adoption in public relations practices and understand the challenges faced by Information Officers.

## Population of The Study

The population of a study, according to Neuman (2022), is the entire group of individuals or elements that the researcher intends to study. For this research, the population comprises 117 personnel in the information unit across the 23 Local Government Areas (LGAs) of Kaduna State. These officers are responsible for managing information, disseminating government policies, and engaging with the public in their respective LGAs.

For this study, the simple random sampling method was used. Simple random sampling is a sampling technique where every individual in a population has an equal chance of being selected. The sample size was calculated using Survey sample size calculator for a population of 117, assuming a 95% confidence level and a 5% margin of error to arrive at 83 respondents.

Data were collected using a structured questionnaire and analyzed using frequency and percentage distribution tables. The instrument was validated by two academic staff of Mass Communication Department of ABU, while reliability was ensured through a pilot study involving 10% of the sample size.

## Data Presentation, Interpretation and Analysis

**A total of 83 copies of questionnaire were administered and 79 were duly filled and recovered, representing 95 percent.**

**Obj 1: To assess the extent of AI adoption in public relations practices among Information Officers in the 23 Local Government Areas of Kaduna State.**

**Table 1:** Whether respondents actively use AI tools in PR practice

| Response         | No of respondents | Percentage  |
|------------------|-------------------|-------------|
| Active users     | 53                | 67%         |
| Non active users | 26                | 33%         |
| <b>Total</b>     | <b>79</b>         | <b>100%</b> |

*Source: Field Survey, 2025*

Tables 1 shows that 67% of respondents use artificial intelligence tools in their public relations activities, while 26 respondents representing 33% admitted that they are non-active users of artificial intelligence tools in performing their public relations activities. This indicates that two-thirds of Information Officers in local governments have already integrated AI tools to varying degrees into their professional workflow.

**Obj. 2: To identify the specific AI tools and technologies being utilized in PR practices by these officers**

**Table 2: Particular AI tools respondents use**

| AI Tool                      | No of respondents | Percentage  |
|------------------------------|-------------------|-------------|
| Chatbots                     | 10                | 13%         |
| Social media analytics tools | 15                | 19%         |
| Email automation             | 9                 | 11%         |
| Content generation tools     | 45                | 57%         |
| Others (specify)             | Nil               | 0%          |
| <b>Total</b>                 | <b>79</b>         | <b>100%</b> |

*Source: Field Survey, 2025*

As shown in Table 2, content creation tools were by far the most frequently used AI application, with 57% of respondents selecting this option. This confirms a trend observed in earlier responses, where AI was most commonly linked to content development and automation. These tools likely assist with drafting press releases, social media posts, reports, and other communication materials, indicating a clear practical reliance on AI for writing intensive PR tasks.

Social media analytics tools were the second most used category (19%), suggesting that a minority of Information Officers are beginning to leverage AI for monitoring engagement, tracking campaign performance, and understanding audience behavior.

Chatbots (13%) and email automation tools (11%) had more limited use among respondents, likely due to infrastructure constraints, lack of technical support, or minimal public-facing web platforms at the local government level.

Notably, no respondents selected “Others,” indicating that the list of tools provided in the survey was sufficiently comprehensive for capturing current usage trends.

**Obj. 3: To examine the challenges faced by Information Officers in adopting AI for public relations activities.**

**Table 3: Challenges respondents face using AI tools**

| Challenge                 | No of respondents | Percentage  |
|---------------------------|-------------------|-------------|
| Lack of awareness         | 3                 | 4%          |
| Lack of training          | 19                | 24%         |
| Inadequate infrastructure | 54                | 68%         |
| Resistance to change      | 1                 | 1%          |
| Budget constraint         | 2                 | 3%          |
| <b>Total</b>              | <b>79</b>         | <b>100%</b> |

*Source: Field Survey, 2025*

The results are presented in Table 3 shows that inadequate infrastructure emerged as the most significant challenge, cited by 68% of respondents. This indicates that many local government offices may lack the basic technological capacity such as reliable internet, hardware, or software to support the effective use of AI in PR activities.

The second most reported challenge was lack of training (24%), suggesting that even where infrastructure exists, many information officers may not have the skills or technical knowledge required to utilize AI tools effectively. This highlights a gap in professional development and underscores the need for targeted training initiatives.

A smaller portion of respondents pointed to lack of awareness (4%), budget constraints (3%), and resistance to change (1%) as barriers. The low figures for resistance and budget suggest that while financial and cultural obstacles exist, they may be less critical than infrastructural and educational limitations.

Overall, the data indicates that successful AI integration in public relations within local government structures requires strategic investment in infrastructure and capacity-building programmes. Addressing these foundational issues is essential to unlocking the full potential of AI in enhancing communication practices.

**Obj. 4: To explore the potential benefits and opportunities AI offers for improving public relations effectiveness in local governance.**

**Table 4: Area of improvement while using AI in PR activities**

| <b>Improvement Area</b>      | <b>No of respondents</b> | <b>Percentage</b> |
|------------------------------|--------------------------|-------------------|
| Increased efficiency         | 15                       | 19%               |
| Improved audience engagement | 18                       | 23%               |
| Better data analysis         | 8                        | 10%               |
| Faster content creation      | 38                       | 48%               |
| Enhanced crisis management   | Nil                      | 0%                |
| <b>Total</b>                 | <b>79</b>                | <b>100%</b>       |

Source: Field Survey, 2025

Data from Table 4 shows that majority of respondents (48%) identified faster content creation as the most significant contribution of AI to their PR work. This suggests that AI tools are widely recognized for their ability to streamline the content development process, enabling PR officers to generate materials more efficiently and maintain regular communication with the public.

The second most frequently cited benefit was audience engagement (23%), indicating that AI is also seen as enhancing the interactivity and reach of PR campaigns. A smaller proportion of respondents (19%) mentioned increased efficiency, which points to the perceived value of AI in automating routine tasks and improving workflow management.

Only 10% of respondents indicated better data analysis as a benefit, which may reflect limited use or awareness of AI's analytical capabilities in tracking public sentiment and evaluating communication outcomes. Notably, no respondents (0%) selected crisis communication as an area improved by AI, implying either a lack of trust in AI for high-stakes communication or a preference for human-led strategies during crises.

These results suggest that while AI is already being leveraged for operational and creative functions in PR, its adoption for strategic decision-making and crisis management remains limited. This presents opportunities for further training and integration of AI tools in more complex aspects of public communication

**Obj. 5: To provide recommendations for enhancing AI integration into public relations practices among Information Officers in Kaduna State.**

**Table 5: Solutions to the challenges of using AI**

| <b>Suggested Solution</b>           | <b>No. of respondents</b> | <b>Percentage</b> |
|-------------------------------------|---------------------------|-------------------|
| Training and capacity building      | 30                        | 38%               |
| Improved infrastructure             | 20                        | 25%               |
| Policy support from government      | 15                        | 19%               |
| Increased funding for digital tools | 14                        | 18%               |
| Others (Specify)                    | Nil                       | 0%                |
| <b>Total</b>                        | <b>79</b>                 | <b>100%</b>       |

Source: Field Survey, 2025

Sata from Table 5, said the most frequently suggested solution was training and capacity building, identified by 38% of respondents. This highlights the recognition among information officers that skill development is critical for maximizing the benefits of AI in PR practice. Respondents appear aware that without adequate training, even well-resourced PR departments may struggle to implement AI effectively. Improved infrastructure was the second most commonly cited solution (25%), reinforcing earlier findings that infrastructural limitations are a core barrier to AI adoption.

Policy support from government was mentioned by 19% of respondents. This suggests that respondents view political will and formal institutional backing as essential for ensuring the successful integration of AI in public communication.

Additionally, 18% of respondents pointed to the need for increased funding to facilitate AI integration. Financial support is necessary not only for acquiring tools and infrastructure but also for sustaining ongoing training and maintenance.

Importantly, no respondents selected “Others,” indicating that the listed options adequately captured the core needs of the officers. This strengthens the case for a targeted response focusing on skill development, infrastructure investment, policy formulation, and budget allocation.

## Discussion of Findings

As shown in the table 1, 67% of Information Officers reported that they currently use AI tools in their public relations work. Meanwhile, 33% do not, suggesting a moderate but meaningful level of adoption of AI among Information Officers across the local government areas.

The 67% usage rate shows that AI tools are being integrated into government PR functions. Adoption is largely focused on basic operational tasks, especially content generation. This indicates a pattern of functional rather than transformational use of AI. While there is strong awareness and a willingness to use AI, many officers may lack the training, infrastructure, or policy support to fully leverage advanced AI capabilities.

This finding is supported by empirical review of Abubakar and Musa (2022) survey involving 120 communication personnel in local governments across northern Nigerian states, including Kaduna, Katsina, Kano, and Zamfara, which emphasised a low level of AI integration but showed high willingness to adopt AI if training and institutional support are provided.

This pattern of adoption can be explained using the Diffusion of Innovations (DOI) theory proposed by Rogers (1962; 2003). The theory explains how new technologies spread gradually within a social system through different categories of adopters such as innovators, early adopters, early majority, late majority, and laggards. In the context of this study, the Information Officers who currently use AI tools represent the early adopters and early majority who have begun integrating the innovation into their communication practices. However, the limited use of advanced AI applications suggests that the diffusion process is still at an early stage, where adoption is mostly limited to basic functions such as content generation. According to Rogers (2003), the adoption of innovations is influenced by factors such as perceived usefulness, ease of use, compatibility with existing practices, and access to resources. The infrastructure and training challenges identified in this study therefore help explain the slow diffusion of advanced AI tools among Information Officers in Kaduna State.

Results in Table 2 shows that content creation tools are by far the most commonly used form of AI among Information Officers, with 57% of respondents. These likely include AI-powered platforms such as Grammarly, Copy.ai, or ChatGPT for drafting press releases, reports, and social media posts. This aligns with findings (in table 4) that highlighted faster content creation as AI's most beneficial impact.

Social media analytics tools, selected by 19%, are the second most used. This suggests that a smaller segment of respondents are using AI for measuring audience engagement, monitoring trends, or evaluating campaign effectiveness on platforms like Facebook and X (formerly Twitter).

Chatbots (13%) and email automation tools (11%) saw even lower adoption. These tools are typically used for automated customer service, public query handling, and scheduled public information dissemination, indicating that AI-based interactivity is still emerging within local government PR practices. Notably, no respondent selected "Others," which may indicate that the survey captured the main AI tools relevant in the context, or that there is limited awareness or access to broader AI technologies (e.g., sentiment analysis, predictive analytics).

The study aligns with a qualitative case study focusing on Kaduna South and Zaria LGAs, conducted by Ishaya and Okoro (2023) where a significant awareness-practice gap in AI use among LGA PR officers in Kaduna State was discovered with many using traditional form of communication due to infrastructure deficiency and training. These constraints hinder the exploration and deployment of more advanced AI tools.

The preference for AI tools used in content generation can also be understood through the Uses and Gratifications Theory, which posits that users actively choose communication technologies that provide the most immediate and practical benefits (Katz et al., 1974; McQuail, 2010). For Information Officers, AI writing tools provide direct professional benefits such as saving time, improving writing quality, and simplifying the preparation of press releases and reports. As a result, these tools are more widely adopted compared to other AI applications that require higher technical skills or additional institutional support.

As shown in table 3, the most significant challenge reported is inadequate infrastructure, cited by 68% of respondents. This includes the absence or unreliability of internet connectivity, modern computer systems, and access to digital tools, all of which are foundational for AI deployment. The second major barrier is lack of training (24%), reflecting a shortage of structured capacity-building programmes to upskill Information Officers on AI use, functionalities, and integration into PR work. A smaller proportion of respondents pointed to lack of awareness (4%), budget constraints (3%), and resistance to change (1%). These lower-frequency responses suggest that while basic familiarity with AI is relatively widespread (as supported by earlier responses in tables 4.5 and 4.6), the technical and institutional support required for effective use is still lacking.

These findings indicate that while Information Officers are generally familiar with AI and its potential (as evidenced in earlier questions), they face substantial systemic and capacity-related obstacles to adopting it effectively in their PR work. This aligns with empirical studies of Abubakar and Musa (2022), Ishaya and Okoro (2023) and Dogo and Terver (2022). Findings by these researchers revealed that absence of government policies on AI, lack of infrastructure, low digital literacy, lack of funding are challenges bedevilling AI growth among Information Officers.

Data from table 4, shows the most frequently suggested improvement of AI's impact on PR practices was faster content creation, endorsed by 48% of respondents. This highlights the importance of equipping Information Officers with the necessary skills to use AI tools effectively in content creation, data analysis, social media engagement, and more.

Followed by improved audience engagement, selected by 23%, was also an area that saw improvement. This finding complements earlier responses about AI tools mostly used in PR activities cited as one of the biggest areas of improvement.

Additionally, increased efficiency was selected by 19% which goes to show that respondents recognised it as another vital area of improvement when AI tools are used for PR functions. That means their PR jobs are healthier and effectively executed than when they used old-fashion, manual methods. The fact that no respondents selected "Crisis communication" suggests that respondents have yet to deploy

analytics tools in solving communication issues arising from campaigns on social media and other platforms of PR operations in local government.

This study aligns with Oladeji and Akinbode (2023) findings that evaluated AI-driven sentiment analysis tools in Ibadan North and Egbeda LGAs of Oyo State. Their study found that AI tools used to monitor social media comments and community feedback helped improved communication efficiency. Local government officers reported a 23% improvement in response time to public complaints and a noticeable increase in citizen engagement.

This finding can also be interpreted using the Uses and Gratifications Theory (UGT) developed by Katz, Blumler, and Gurevitch (1974). The theory suggests that individuals actively select media technologies that satisfy their professional or personal needs. In this study, Information Officers appear to prefer AI tools that help them achieve immediate work-related gratifications such as faster content creation, improved audience engagement, and increased efficiency. This explains why AI tools used for operational tasks such as writing assistance and social media engagement are more common than advanced tools like predictive analytics or crisis communication systems.

As shown in table 5, the most frequently suggested strategy is AI training programmes, cited by 37% of respondents. This highlights a widespread recognition that Information Officers must be equipped with the necessary digital literacy and technical know-how to use AI tools effectively for content generation, media monitoring, analytics, and citizen engagement.

Access to digital tools (28%) was the second most cited strategy. Here, lack of reliable internet, modern computing tools, or power supply, all foundational for AI use, can hinder effective AI integration in many local government PR departments. Thus, infrastructure development is seen as essential to enable AI integration.

Government policies supporting AI Use (24%) is another key enabler. Respondents recognized that institutional frameworks, including guidelines, incentives, and regulations are necessary to create a conducive environment for the digital transformation of public communication.

Funding for technological adoption (11%) is also considered important, especially in a context where budgetary constraints often limit access to software acquisition, training programs, and ICT tools.

This study aligns with findings by Adeola and Ogunbanwo (2021) who conducted research on 80 information officers in Lagos and Ogun states to determine strategies for AI integration in local governments. The researchers found that 42% of respondents in Lagos had more access to advanced AI tools and training opportunities due to higher budget allocations and better ICT infrastructure. They concluded that this reflects the digital divide between urban and rural regions in Nigeria, suggesting that a good strategy to encourage AI adoption would be to ensure the availability of infrastructure and incentives backed by budgetary allocation.

## Conclusion

The study concludes that although Information Officers in Kaduna State demonstrate high awareness and acceptance of Artificial Intelligence, effective integration of AI into public relations practice remains

limited. AI has positively impacted PR functions, particularly in content creation and audience engagement, but systemic challenges such as inadequate infrastructure and limited training hinder its full potential. With appropriate support, AI can significantly enhance the efficiency and effectiveness of local government public relations practice.

## Recommendations

1. Local governments should organize regular training workshops and professional development programmes to equip Information Officers with the necessary skills to effectively use artificial intelligence tools in public relations practice.
2. Government authorities should invest in improving digital infrastructure such as reliable internet connectivity, modern computer systems, and access to AI-enabled communication tools.
3. There is a need for clear policies and institutional frameworks that encourage the integration of artificial intelligence technologies in public relations activities at the local government level.
4. Local governments should allocate sufficient funding for the acquisition of AI tools, digital platforms, and related technologies that can enhance the efficiency of public relations activities.
5. Information Officers should be encouraged to expand the use of AI beyond basic content creation to include strategic applications such as social media analytics, audience engagement analysis, and data-driven decision-making.

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