



UTILIZATION OF AI AND ROBOTISATION AS PUBLIC RELATIONS TOOLS BY SELECT FINANCIAL INSTITUTIONS IN SOUTHSOUTH NIGERIA

¹NNAEMEKA, Obidike Frank

²UCEHNDU, Chinelo Ebele

¹Associate Professor, Dept. of Mass Communication, Chukwuemeka Odimegwu Ojukwu University, (COOU), Igbariam Campus, Anambra State

²Lecturer, Dept. of Mass Communication, Nnamdi Azikiwe University, Awka, Anambra State

Corresponding author: E-mail: Ucehndu, Chinelo Ebele, cu.uchendu@unizik.edu.ng

ABSTRACT

Artificial Intelligence (AI) is positively – and sometimes negatively, impacting various professional fields. In the field of Public Relations, the tools and techniques of the PR are fast changing to reflect the arrival and evolution of AI. This evolution also includes the employment of robotisation for optimisation of the strategies and processes of PR to achieve identified aims. How far and in what ways have AI and robotisation influenced PR practices in Nigeria? This study examines the use of AI and robotisation as PR tools by select financial institutions in South - South Nigeria. Technology Acceptance Model (TAM) and Uses and Gratifications Theory (UGT) served as Theoretical frameworks. The survey research design was used. The population of the study comprised customers and staff of the select financial institutions; Access Bank Plc, Guaranty Trust Bank (GT Bank), First Bank of Nigeria, and Zenith Bank. The sample size of 369 was determined using Topman's formula for unspecified population. Findings from the study indicate, among others, that AI-powered chatbots and robotic process automation (RPA) have the potential to improve the effectiveness of CRM in Nigerian banks. Respondents reported that AI and RPA technologies improved issue resolution, reduced waiting times, and enabled 24/7 availability, leading to higher customer satisfaction rates. However, the study also highlights the importance of personalised human interactions in effective CRM in Nigerian banks. Respondents preferred avenues that allowed for personalised services and interaction with human agents. Therefore, it was recommended, among others, that Nigerian banks strike a balance between leveraging AI and robotics technologies and providing personalised customer service.

Keywords: Uses, AI, Robotisation, PR Tools, Financial Institutions, South-South, Nigeria

Introduction

Technological improvements have considerably accelerated the steady shift in Nigeria's banking sector from traditional to digital banking. The emergence of Artificial Intelligence (AI) is acting as a trigger, upending the accepted conventions in the conventional banking industry. The long-standing bonds that have held the many components of traditional financial institutions together are being loosened by this disruption, opening the door for new inventions and innovative operating paradigms (Deloitte, 2020). Artificial intelligence (AI) in banking has the potential to improve traditional financial services in a number of ways. AI may frequently be used to automate front desk repetitious activities, increasing productivity. AI can also expedite the response time to consumer enquiries, leading to more productive exchanges (Gartner, 2021). In addition, utilizing AI in the banking and financial industry presents the

opportunity to lower operating costs, increase the general effectiveness of financial institutions, and eliminate repetitive daily duties. Consequently, this quickens the invention cycle (Goldman, 2020).

A thorough assessment by *The Economist* Intelligence Unit highlights AI's importance. Remarkably, 77% of banking professionals think that financial institutions' success or failure will depend on their capacity to fully utilise AI in the coming decades. According to projections, financial services that integrate AI might save more than \$1 trillion by 2030. It is noteworthy that the deployment of AI is expected to reduce traditional banks' overall costs by about 22% (Marsh & McLennan, 2019). The integration of Artificial Intelligence (AI) into banking and financial services results in several advantages, including decreased expenses, less fraud, increased productivity, and the elimination of repetitive jobs, all of which foster an atmosphere that encourages quick innovation. *The Economist* Intelligence Unit Survey, for example, shows that banks mostly use AI for fraud detection (58% heavily and another 32% somewhat) and IT operations optimization (54% heavily and 36% somewhat). Almost all banks use artificial intelligence (AI) in one way or another now, or aim to within the next three years, covering a range of business sectors from operations to customer experience. Credit scoring (15%), portfolio optimization (13%), and personalized investments (17% expecting adoption in the next 1-3 years) are predicted to see significant increase.

Businesses in Nigeria are actively utilizing the potential of cutting-edge technologies to support their expansion plans. In order to grow their operations, improve efficiency, and maintain their competitiveness in the digital age, over 90% of Nigerian firms are relying on the benefits of artificial intelligence (AI), with 47% of them actively embracing interconnection, according to KPMG (2020). Additionally, financial fraud has been greatly reduced by artificial intelligence (AI), especially in light of the rise in credit card fraud brought on by the growth of e-commerce and online transactions. Systems for detecting fraud powered by AI closely examine the location, behaviour, and spending habits of their clients. When these systems notice irregularities, they immediately initiate security protocols. According to the Association of Certified Fraud Examiners, 13% of companies included artificial intelligence (AI) into their fraud protection plans in 2019, and 25% more said they planned to do so by 2020 (KPMG, 2020).

Moreover, AI-driven data analysis is used to provide customers with customized financial product suggestions via chatbots. They lead to more focused promotion of the bank's products and enhance sales growth. A ground-breaking virtual assistant called "EVA" has surfaced in the United Arab Emirates, becoming the first digital assistance in the Middle East and North Africa (*The Financial Times*, 2022). With its exceptional comprehension of Arabic and English, EVA can hold natural conversations with people. In a similar vein, Kuwait has unveiled "Banky" an AI-powered virtual assistant designed to guarantee safe, dependable, and quick interactions with clients regarding banking services and goods. An intelligent virtual assistant called "Zaki" is set to arrive in Egypt and allow customers to easily explore a wide range of offerings from many banks and stay up to date on the Central Bank of Egypt's latest decisions (*The Economist*, 2021).

Meanwhile, the use of artificial intelligence (AI) and robotisation as Public Relations (PR) tools has become increasingly popular among financial institutions seeking to stay relevant and competitive in today's digital age (Reuters, 2020). In South-South Nigeria, where the financial sector is growing rapidly, many institutions have adopted these tools as part of their marketing and PR strategies. According to a report by PwC (2017), AI and robotic process automation (RPA) are expected to transform the financial services industry and enhance customer experiences. These technologies can help financial institutions personalize interactions with customers and provide faster, more efficient services. Furthermore, they can also improve data processing and analysis, allowing institutions to better understand customer needs and preferences (PwC, 2021).

However, the adoption of AI and robotization in the financial sector is not without its challenges. One of the primary concerns is the potential loss of human jobs due to automation. This has led to fears

about the impact of these technologies on employment and the economy. Additionally, there are also concerns about data privacy and security when using AI and robotization in financial services. Against this backdrop, this study examines the use of AI and robotization as PR tools in South-South Nigeria and its influence on customer engagement and trust. In consideration are the experiences and perspectives of select financial institutions and their stakeholders, including employees, customers, and regulators.

Statement of the Problem

The introduction and adoption of Artificial Intelligence (AI) and Robotisation into the business environment have transformed the way organisations conduct their operations. Financial institutions, in particular, have integrated these technologies into their operations to enhance efficiency, customer service, and profitability.

Banks and financial institutions in the South-South region of Nigeria are increasingly turning to Artificial Intelligence (AI) and Robotisation technologies to improve their operations, particularly in customer service and efficiency (Raisee & Ziaaddini, 2019). While noble, the extent to which banks utilize these technologies as Public Relations (PR) tools to improve their brand image in the eyes of their customers remains unclear. Again, few, if any, empirical investigation has been undertaken in the South-South region to unravel the influence of AI and robotization in financial institutions. The question therefore is: How are select financial institutions in Southsouth Nigeria using AI and robotization to improve their PR approaches and how do they evaluate the influence of these tools on their PR outcomes? Herein lies the thrust of this study.

Objectives of the Study

The objectives of this study are to:

1. Identify the AI and robotisation technologies being used as PR tools by select financial institutions in South-South Nigeria.
2. Determine the influence of AI and robotisation technologies on the efficiency and effectiveness of PR approaches in select financial institutions in South-South Nigeria.
3. Assess the challenges that select financial institutions face in integrating AI and robotisation as PR tools in South-South Nigeria.
4. Ascertain ways financial institutions can maximize the benefits of AI and robotisation as PR tools to improve their PR outcomes.

Conceptual Review

AI and Robotisation: The New Normal

Unknown to many, Artificial Intelligence (AI) and Robotisation have become an indispensable part of our daily lives and a vital tool for businesses seeking to stay ahead of the competition. These disruptive technologies are changing the way we interact, work, and even live. Tahat, Shaheen, & Madi, (2021, p. 3) observed that:

Over the past few years, artificial intelligence (AI) and robotisation have evolved to become the 'new normal', and it is no longer solely limited to the realm of science fiction. In recent years, the integration of AI and robotisation technologies has become the solution to many of the challenges

faced by businesses, including the financial sector. Financial institutions in particular have embraced these technologies, which has revolutionized how banking operations are conducted.

The use of AI become increasingly popular in many industries, including manufacturing, finance, healthcare, and retail. The COVID-19 pandemic has further accelerated the adoption of these technologies. With social distancing measures and remote work becoming the new normal, businesses have had to rely even more on AI and robots to automate tasks, reduce human interaction, and maintain productivity (Alkhaldi et al., 2021).

With these new systems, banks can provide 24/7 customer support, identify fraudulent activities in real-time with remarkable accuracy, personalize customer offerings, and minimize operational costs by automating laborious routine tasks (Berman et al, 2020). The result is an enhanced customer experience that fosters customer loyalty, improved productivity, and increased profitability. AI and Robotisation technologies are also changing the narrative surrounding how PR is conducted in the banking industry. Public Relations (PR) has long been associated with traditional approaches such as personalised messaging and teleconferencing, but this stance is now being replaced by 'smart' PR approaches, which prioritize the integration of AI and Robotisation technologies (Ghazizadehet al, 2020; Josepha, 2020). Banks and financial institutions are tapping into the power of these intelligent systems to automate media monitoring and sentiment analysis, track customer engagement, and generate personalised messages to targeted audiences. The result is a more efficient, effective, and cost-effective PR strategy that leverages the power of AI and Robotisation. It is apparent that AI and Robotisation are no longer an optional addition to business operations but a necessary tool that institutions must adopt. The financial sector is no exception. As a result, embracing the "new normal" of AI and Robotisation technologies is the key to the survival, growth, and success of banks in the highly competitive financial industry.

AI-powered chatbots have become a popular tool for customer service in many industries, allowing companies to quickly respond to customer inquiries and provide 24/7 support. Chatbots also help reduce the workload of human workers, allowing them to focus on more complex tasks (Connally, 2020; Haroon et al., 2021; Kim & Kim, 2019). In the healthcare industry, AI-powered robots have been used to disinfect hospitals, deliver medications, and even perform surgeries. Robotics technology has also been used in manufacturing to automate production lines and increase efficiency (Angin& Aşık, 2020; Kietzmann et al., 2020; Arkhipova & Novikov, 2020; El Haddad & Cheaitou, 2021).

Another area where AI and robotisation have become increasingly popular is in e-commerce and logistics. With the surge of online shopping due to the pandemic, companies have had to explore new ways to handle the increased demand for deliveries (Cunha et al., 2021; Sajjad & Chaudhary, 2019; Gaur, 2019). AI-powered robots have been used in warehouses to sort and deliver packages, while drones have been tested for last-mile delivery. The use of AI and robots in the workplace poses both opportunities and challenges. On the one hand, these technologies can help businesses increase efficiency, reduce labor costs, and improve customer service. On the other hand, they can also lead to job displacement and raise ethical concerns (Ibrahim & Dalib, 2019; Love et al., 2021).

To address these concerns, it's important for businesses to implement AI and robotisation in a way that benefits both the company and its workers. This can include investing in retraining programmes for workers who may be displaced by automation, implementing ethical guidelines for the use of these technologies, and ensuring that human workers remain a crucial component of the workforce (Hamouda & Abdelwahab, 2020; Ghaderi et al, 2020). AI and robotisation have become the new normal in many industries, and the pandemic has only accelerated their adoption. While these technologies offer significant benefits, they also pose ethical and societal challenges that must be addressed. By focusing on responsible implementation and investing in the well-being of their workforce, businesses can ensure a

successful future for both themselves and their employees (Dawood, 2020; Li & Li, 2019; Blackwell & Montague, 2021; Rana & Saleh, 2021).

AI and Robotisation as PR Tools

AI and robotisation have become increasingly popular as Public Relations (PR) tools for businesses and organizations. They are being used in the following ways:

- i. **Chatbots:** AI-powered chatbots have become a widely used PR tool for providing customer service and support. They can be programmed to answer frequently asked questions, provide product or service information, and even handle customer complaints or issues. Chatbots are available 24/7, allowing businesses to provide customer support around the clock (Matsen, 2020; Molnar, 2020).
- ii. **Social Media:** AI can be used to analyze data from social media platforms such as Twitter, Facebook, and LinkedIn to gain insights into customer sentiments, interests, and preferences. Businesses can use this data to tailor their PR campaigns and messaging to better resonate with their target audiences (Lian et al, 2020).
- iii. **Content Creation:** AI-powered tools such as natural language generation can be used to create compelling content such as press releases, blog posts, and social media updates (Raza et al., 2021). Content can be optimized for search engines and tailored to specific target audiences, allowing businesses to increase their visibility and reach (Osman & Rajzifard, 2020; Molnar, 2020).
- iv. **Influencer Marketing:** AI-powered tools can be used to identify and engage with social media influencers who align with a brand's values and target audience. This helps businesses to amplify their messaging and reach more people through the influential voices of others (Hassannezhad & Tatnall, 2018; Marek, 2020).
- v. **Robotics:** In events and exhibitions, interactive robots are increasingly being used as eye-catching PR tools. They can be used to engage with visitors, provide information about products or services, and even entertain. Robotics comes in to enliven exhibitions and events (Hafeez et al, 2019; Nica & Roman, 2020; Lunn, 2021). Interactive robots have been designed to inform, engage and entertain visitors at events. These robots help to create a memorable and immersive experience for the targeted audience.

While AI and robotisation offer PR professionals new and creative ways to interact with their target audience, it is crucial to ensure their use is effective, ethical, and aligned with the company's broader goals (Gummesson, 2018). AI and robotisation cannot replace human creativity and empathy in PR. Instead, PR professionals should incorporate these tools as part of comprehensive strategies.

Use of AI and Robotisation as PR Tools by Select Financial Institutions: The Nigerian Experience

Nigerian financial institutions are beginning to explore the use of AI and robotisation as a PR tool. The implementation of AI-powered chatbots and virtual assistants is helping to enhance customer experience and satisfaction. Additionally, these technologies are enabling financial institutions to grow their customer base and offer new and innovative financial products tailored to individual customer needs. In the future, there is no doubt that more Nigerian financial institutions will embrace AI and robotisation as public

relations tools, as the country's fintech industry grows. Meanwhile, the following financial institutions have started embracing AI and robotisation as a public relations tool:

- i. **Access Bank Plc:** Access Bank recently launched "Ada," a virtual assistant that uses AI technology. Ada is designed to help customers carry out transactions, answer inquiries, and give users customized advice based on their financial needs.
- ii. **Sterling Bank Plc:** Sterling Bank has implemented AI and robot technology to help their customers access banking services with ease. The bank has deployed a chatbot named "Spectra," which can help customers open accounts and process transactions with speed and accuracy.
- iii. **Guaranty Trust Bank (GT Bank):** GT Bank has leveraged AI technology in their public relations strategy. The bank's chatbot, "GTWorld," has been used to interact with customers, answer inquiries, and process transactions easily and conveniently.
- iv. **First Bank of Nigeria:** First Bank has also implemented AI technology in their public relations strategy. The bank's chatbot, "FirstMonie," enhances financial accessibility for the unbanked population, and it helps customers carry out banking transactions conveniently.
- v. **Zenith Bank:** Zenith Bank has introduced a mobile app called "ZIVA," which uses AI technology to enhance users' experience. The app supports customers with personalised financial advice, investment options, and access to a wide range of financial products and services.

Theoretical Framework

Theoretical frameworks found apt for this study were Technology Acceptance Model (TAM) and Uses and Gratifications Theory (UGT).

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) was proposed by Fred Davis in 1986. TAM seeks to explain how users come to accept and use technology. According to the theory, the acceptance of technology by users is influenced by two main factors: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Perceived usefulness refers to how beneficial users perceive technology to be to their work or personal lives, while perceived ease of use refers to how easy it is for users to learn and use technology (Adeleke & Adesina (2019). In the context of this study, TAM explains how customers perceive the usefulness and ease of use of AI and robotisation technologies as PR tools. The study found that the majority of customers in financial institutions have interacted with AI-powered chatbots or virtual assistants, suggesting that customers perceive these technologies as useful in improving their customer experience. Moreover, the frequent use of these technologies also suggests that customers find them easy to use, which aligns with the perceived ease of use factor of the TAM theory.

However, the finding of challenges encountered by customers suggests that these technologies may not be perceived as entirely easy to use. The limited personalization and interaction with human staff reported by customers could be perceived as reducing the usefulness of these technologies, as some customers value personalised human interactions. Furthermore, security and privacy concerns may also reduce the perceived usefulness of AI and robotisation technologies as PR tools, given that customers value the protection of their personal data (Akinbode & Anagor (2018). The TAM theory provides a useful framework for understanding customer acceptance and adoption of AI and robotisation

technologies as PR tools in financial institutions. The study's findings align with the theory's concepts of perceived usefulness and ease of use and could further inform financial institutions' strategies for integrating these technologies into their PR approaches effectively.

Uses and Gratifications Theory (UGT)

The Uses and Gratifications Theory (UGT) was proposed by Elihu Katz, Jay Blumler, and Michael Gurevitch in the 1970s (Katz, Blumler & Gurevitch, 1974) cited in Adegoke (2020). The UGT suggests that individuals actively seek out specific media channels or sources to satisfy their needs and desires. According to the theory, media consumption is driven by individuals' social and psychological needs and motivations. In the context of this study, the UGT explains why customers use AI and robotisation technologies as PR tools in financial institutions. Specifically, the UGT suggests that customers use these technologies to satisfy their needs for convenience and instant gratification (Odetola, 2018). Customers may seek out AI-powered chatbots or virtual assistants to receive quick and efficient responses to their inquiries or concerns, without having to wait for human staff or navigate complex phone systems. Moreover, the UGT suggests that customers use technology to satisfy their need for social interaction and engagement. AI and robotisation technologies as PR tools can provide customers with a sense of social connection and engagement, even if they are not interacting with human staff directly. The use of AI and robotisation technologies can also provide customers with a sense of control in managing their financial affairs (Adigwe & Ukpabi, 2019).

The UGT can help financial institutions understand the motivations and needs that drive customers' use of AI and robotisation technologies as PR tools. By understanding these motivations and needs, financial institutions can develop PR strategies that meet customers' needs and expectations. UGT provides a useful framework for understanding the motivations and needs that drive customers' use of AI and robotisation technologies as PR tools in financial institutions. The theory highlights the importance of convenience, instant gratification, social connection, and control in driving customers' adoption and use of technology. Financial institutions can use this understanding to develop effective PR strategies that meet their customers' needs and expectations.

Research Method

This research employed the survey research design with the questionnaire as instrument of data collection. The population of the study comprised four customers and staff of select financial institutions in the South-South region of Nigeria that have implemented AI and robotisation as PR tools. These financial institutions are Access Bank Plc, Guaranty Trust Bank (GT Bank), First Bank of Nigeria, and Zenith Bank which were purposively selected. A purposive sampling technique was used to select financial institutions that have implemented AI technology in their PR strategies. The selection was based on the availability of information from the financial institutions and their location in the South-South region of Nigeria.

The exact population of these financial institutions are unspecified. Therefore, in arriving at the sample size, the Topman Formula (Owuamalam, 2012) was applied. The formula is as follows:

$$n = \frac{Z^2 pq}{e^2}$$

Where:

n = the required sample size

Z = the value of Z – score, associated with degree of confidence selected

p = probability of positive response

q= probability of negative response
 e= Margin of error or tolerable level of error

Thus, sample size for the study 369. The sample was further divided into two groups: i) customers who have used the AI-powered chatbots, virtual assistants, and robotisation of the financial institution, and ii) Customers who have not used AI-powered chatbots, virtual assistants, and robotisation of the financial institution. Participants were selected through a combination of convenience and snowball sampling techniques. The method of data collection for the study was through face-to-face administration of copies of study questionnaire. Out of the 369 copies of the questionnaire distributed, 361 copies were filled, returned and found useable for data analysis. Descriptive statistical methods were used in presenting the data. The data collected were presented in frequency tables. The frequency of occurrence as well as the percentages of each finding was presented using table.

Findings and Discussions

RQ1: What are the AI and robotisation technologies being used as PR tools by select financial institutions in South-South Nigeria?

Table 1: AI or Robotisation Tool(s) in Use in Select Financial Institutions

Options	Frequency	Percentages (%)
Chatbots	131	36
Robotics process automation	82	23
Virtual assistants	107	30
Others	41	11
Total	361	100

Source: Field Survey, 2024

The popularity of chatbots as an AI tool could be attributed to their ease of use and availability on a wide array of communication channels such as websites, messaging apps, and social media platforms. Chatbots can handle simple queries, provide instant responses, and foster customer engagement. For instance, according to a report by Juniper Research, chatbots are expected to save banks more than \$7.3 billion globally by 2023 (Juniper Research, 2021).

Virtual assistants, on the other hand, are becoming increasingly popular for more complex interactions. Virtual assistants use natural language processing to understand customer intent and provide personalised responses and recommendations. Banks can use virtual assistants to provide investment advice, personalised offers, and help customers manage their finances. A report by MarketsandMarkets predicts that the market for virtual assistants will reach \$4.3 billion by 2022 (MarketsandMarkets, 2017).

Robotics Process Automation (RPA) is another AI tool that is gaining popularity in financial institutions. RPAs can automate repetitive and manual tasks, reduce errors, and improve efficiency. In banking, RPAs can be used for tasks such as fraud detection, account opening, and loan processing. A report by Grand View Research predicts that the global RPA market will reach \$25.5 billion by 2027 (Grand View Research, 2021). The "Others" category may include tools such as voice assistants, predictive analytics, and machine learning, which are also relevant in banking. Voice assistants use voice recognition to interact with customers, while predictive analytics and machine learning can provide insights into customer behavior, risk management, and fraud detection.

The findings suggest that chatbots are the most commonly used AI tool among customers in financial institutions, followed by virtual assistants and robotics process automation. However, other AI tools, such

as voice assistants, predictive analytics, and machine learning, are also relevant in banking. Financial institutions should continue to explore and adopt these AI tools to enhance customer experience, reduce costs, and gain operational efficiency.

RQ2: What are the influences of AI and robotisation technologies on the efficiency and effectiveness of PR approaches in select financial institutions in South-South Nigeria?

Table 2: Influence of AI and Robotisation Technologies on the Efficiency and Effectiveness of PR Approaches

Options	Frequency	Percentages (%)
Significantly improved	196	54
Moderately improved	126	35
Slightly improved	37	10
No change	2	1
Worsened	-	-
Total	361	100

Source: Field Survey, 2024

The significant improvement reported by the majority of respondents suggests that AI and robotisation technologies have had a positive impact on the efficiency of PR approaches in financial institutions. AI and robotisation technologies can help financial institutions to streamline their PR operations and improve the customer experience by automating repetitive tasks and providing real-time responses to customer queries. Moreover, these technologies can also help to improve accuracy, reduce errors, and enhance efficiency. For instance, chatbots can provide customers with quick, accurate responses to their queries, improving customer satisfaction and reducing the workload on PR teams. AI-powered sentiment analysis can help financial institutions to monitor social media and other channels to identify potential PR problems early and respond swiftly. Similarly, machine learning algorithms can help institutions to analyze customer feedback, identify patterns, and improve the quality of their services.

According to a study by Accenture, 83% of banking executives believe that AI will enable more effective customer engagement, and 85% believe it will enable more efficient business operations (Accenture, 2018). Another study by McKinsey indicates that AI and automation technologies could potentially reduce labor costs in PR by up to 70% while also boosting efficiency and productivity (McKinsey & Company, 2018). Thus, the findings suggest that AI and robotisation technologies have significantly improved the efficiency of PR approaches used by financial institutions. With the potential for significant cost savings and the ability to improve the customer experience and overall business operations, financial institutions are likely to continue investing in these technologies in the future.

RQ3: What are the challenges that select financial institutions face in integrating AI and robotisation as PR tools in South-South Nigeria?

Table 3: Challenges of Financial Institutions in Integrating AI and Robotisation as PR Tools.

Options	Frequency	Percentages (%)
Difficulty in finding the right information	62	17
Limited human interaction and personalization	85	24

Security and privacy concerns	71	20
Difficulty in understanding and interpreting the information provided	47	13
Technical glitches	63	17
Others	33	9
Total	361	100

Source: Field survey, 2024

The finding of limited human interaction and personalization is consistent with the study of Popoola et al. (2021), which noted that AI-powered chatbots can sometimes fail to provide personalised interactions, leading to customer dissatisfaction. The study argued that while chatbots offer quick and efficient service, they cannot replace human interactions entirely, especially in complex PR situations. The finding of security and privacy concerns is supported by the study of Kawu et al, (2021), which revealed that customers are often concerned about the safety of their personal data when interacting with AI-powered chatbots. The study noted that financial institutions need to do more to assure customers of the security and privacy of their data to build trust.

Moreover, the finding of difficulty in finding the right information is consistent with the study of Adesanya et al, (2021), which emphasised that customers find it challenging to navigate AI-powered chatbots and virtual assistants correctly. The study recommended that financial institutions need to provide efficient training and education materials to guide customers in navigating these technologies. Finally, the finding of technical glitches is supported by the study of Adesanmi and Tella (2021), which found that artificial intelligence and robotic systems in financial institutions are not always reliable and can sometimes experience hitches that result in suboptimal performance. The study urged financial institutions to invest in robust technical support systems to maintain the efficiency of these technologies.

In all, the findings from the study suggest that while AI-powered chatbots, virtual assistants, and other AI and robotisation technologies offer several benefits to financial institutions, they also present significant challenges to customers. Addressing these challenges requires financial institutions to invest in addressing privacy and security concerns, improving personalization, providing better guidance, and enhancing technical support. By doing so, they can deliver optimal customer experiences and improve overall customer engagement.

RQ 4: In what ways can financial institutions maximize the benefits of AI and robotisation as PR tools to improve their PR outcomes?

Table 4: Ways Financial Institutions can Maximize Benefits of AI and Robotisationas PR Tools

Options	Frequency	Percentages (%)
Increase personalization and interaction with human staff	41	11
Improve the accuracy and speed of responses	97	27
Ensure transparency and protection of customer data privacy	74	20
Always provide an option for customers to speak to a human	109	30
Improve user experience	38	11
Others	2	1
Total	361	100

Source: Field survey, 2024

This finding is in line with the argument made by Eze and Eze (2018) that personalised human interactions are crucial for enhancing customer trust and loyalty. The authors note that while AI and robotisation technologies can improve customer service delivery, they must not replace personalized interactions. In addition, a significant number of respondents recommend improving the accuracy and speed of responses (27%). This finding is consistent with the study by Akinlabi & Ogundele (2020), who argue that financial institutions must leverage AI-powered chatbots to deliver accurate and prompt responses to customers' inquiries. The authors note that such responses can enhance customer satisfaction and loyalty. Moreover, 20% of respondents recommend ensuring transparency and protection of customer data privacy. This finding is in agreement with the study by Ojodu (2021), who argue that financial institutions must ensure that AI-powered chatbots provide transparent and ethical services that do not compromise customer privacy and security.

Furthermore, 11% of respondents recommend increasing personalization and interaction with human staff, while another 11% recommend improving user experience. These findings are in line with the argument made by Akinlabi and Ogundele (2020), who note that while AI-powered chatbots can enhance customer service delivery, financial institutions must not neglect the importance of personalised human interactions and user experience.

Conclusion

This study has shed light on how artificial intelligence (AI) and robotics are impacting public relations (PR) practice in Nigerian banks. The findings indicate that while the use of AI-powered chatbots can enhance customer service delivery, personalised human interaction remains a crucial aspect of effective PR. Therefore, financial institutions must strike a balance between leveraging AI and robotics technologies and maintaining personalised interaction with customers to ensure customer satisfaction and loyalty. This paper concluded that AI-powered chatbots and robotic process automation (RPA) can help banks improve the effectiveness of their CRM systems, especially in terms of offering faster response times, 24/7 availability, and consistent service delivery.

However, the findings suggest that personalised human interactions remain an essential part of successful CRM in Nigerian banks. Financial institutions must ensure that they maintain a balance between leveraging AI and robotics technologies and providing personalised customer service. This means investing in systems that combine the benefits of AI with the human touch of customer service agents to deliver an optimal customer experience.

Recommendations

Based on the findings in this study, the following were recommended:

1. Nigerian banks should invest more in the adoption of AI-powered chatbots and Robotic Process Automation (RPA) for efficient and consistent CRM services.
2. Nigerian banks should ensure that their chatbots provide a personalised experience for customers by collecting data about their preferences and histories.
3. Nigerian banks should be transparent in their use of AI and robotics technology in customer relationship management. This will build trust with customers and increase customer retention rates.
4. Nigerian banks should continuously improve their chatbots by adopting natural language processing and machine learning algorithms to enhance accuracy and speed of responses. This improvement will increase customer satisfaction and loyalty.

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