Assessment of the Knowledge and Application of Artificial Intelligence (AI) in Public Relations Practice at Agip Oil and Gas

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ABSTRACT

Artificial Intelligence (AI) is increasingly being utilized to enhance Public Relations (PR) practices and improve communication efforts in industries and other sectors. This paper examined the knowledge and application of artificial intelligence in public relations practice within the Agip Oil and Gas industry. Four objectives were formulated for the study. Some of the objectives were to examine the extent to which AI tools such as natural language processing, sentiment analysis, chatbots, content generation tools, predictive analytics, and media monitoring tools, are known and employed in PR activities at Agip Oil and Gas. From the objectives, four research questions were also raised to guide the study. The design used for the study is survey. Interview was the instrument for data collection. Qualitative analysis was adopted to analyze the data gathered. The findings reveal that Agip Oil and Gas is aware of the potential of AI in PR. The researchers also found out that the industry have invested heavily in acquiring some of the AI tools. Key areas of knowledge and application include sentiment analysis for customer feedback analysis and media monitoring tools for tracking public perception and trends. One of the recommendations in this paper is that an in-depth study on the perception and utilization of AI in public relation practices among professionals should be carried out in Agip oil and gas industry.

Background to the Study

Artificial Intelligence or AI, refers to the simulation of human intelligence in machines that are programmed to think and learn. This technology has the potential to revolutionize various industries, including public relations, by automating certain tasks, improving data analysis, and enhancing communication processes. In today's fast-paced world, the integration of artificial intelligence (AI) into various industries has transformed the way businesses operate (Deloitte, 2018). The field of public relations (PR) is no exception, as organizations seek innovative ways to leverage AI technology for enhanced communication and reputation management. Agip Oil and Gas is a prominent player in the energy sector in Nigeria. As AI continues to advance, it presents an opportunity for Agip Oil and Gas to optimize its PR strategies and stay ahead of the competition.

The integration of AI into PR practices offers several potential benefits. Firstly, AI-powered tools can enhance media monitoring and analysis, allowing Agip Oil and Gas to gain real-time insights into public sentiment, industry trends, and competitor activities. This knowledge empowers PR professionals to proactively address issues, identify opportunities, and refine communication strategies. Secondly, AI can streamline the process of content creation and distribution. Natural language processing (NLP) algorithms can generate personalized and engaging content, tailored to the preferences and needs of target audiences. By leveraging AI, Agip Oil and Gas can efficiently produce press releases, social media posts, and other PR materials, saving time and resources while maintaining consistent messaging.

AI-driven chatbots and virtual assistants can enhance customer engagement and support. These automated systems can handle routine inquiries, provide immediate responses, and offer personalized assistance round the clock. By deploying AI chatbots, Agip Oil and Gas can improve customer satisfaction, optimize resource allocation, and ensure efficient communication channels. However, the successful implementation of AI in PR requires a knowledgeable and skilled workforce. Agip Oil and Gas must assess the current knowledge and application of AI among its PR professionals to identify any gaps or areas of improvement. Training programs and workshops can be conducted to enhance their AI capabilities, ensuring they are equipped with the necessary skills to leverage AI tools effectively.

Statement of Problem

The world no doubt is benefiting immensely from technological revolution of the 21st Century. One such area is in increasing production output with minimum human input. Machines have virtually removed human beings from the circle of production. The area of public relations is not an exception. However, the concern that agitated the minds of the researchers to conduct this research on the use of AI in public relations is the fact that truth is the hallmark of PR practice, and it is not clear how the application of this non-human intelligence cope with the principle of truth in PR practice.

Objectives of the Study

The study objectives include (a) examination of AI tools among PR practitioners in Agip Oil and Gas company (b) assessment of the knowledge of AI among PR team at Agip Oil and Gas industry (c) the assessment of the level of application of AI at Agip Oil and Gas industry and the barrier to the application of AI at Agip oil and gas industry.

Literature Review

The technological determinism theory propounded by Marshal McLuhan in 1964 formed the theoretical foundation of the study. The theory posits that a society's technology progresses by following its own internal logic of efficiency, while determining the development of the social structure and cultural values.

Conceptual Review; Artificial Intelligence (AI) Tools used in Public Relations

There are several AI tools that can be used in the oil and gas industry for public relations. These AI tools include:

Natural Language Processing (NLP): NLP can be used in the Agip Oil and Gas industry for sentiment analysis of customer feedback or online discussions. In public relations, it can help gauge public perception and sentiment towards the company. The advantages include real-time analysis, quick identification of reputation risks, and understanding the impact of PR campaigns. However, NLP may struggle with understanding industry-specific jargon or nuances, and biases in the algorithms may affect the accuracy of sentiment analysis.

Chatbots: Chatbots can be used in the Agip Oil and Gas industry to provide customer support and answer frequently asked questions. They can improve customer experience by providing immediate responses and reducing response time. Additionally, chatbots can assist in disseminating important industry updates and news in a timely manner. However, there is a risk of limitations in handling complex inquiries, and

continuous monitoring is necessary to ensure the accuracy of the responses.

Sentiment Analysis Tools: Sentiment analysis tools can be utilized by Agip Oil and Gas in PR to monitor public opinion and sentiment towards the company. These tools can help identify potential reputation risks and assess the success of PR campaigns. The advantages include real-time monitoring, understanding customer feedback, and quick identification of emerging issues. However, sentiment analysis tools may struggle with accurately interpreting sarcasm or irony and may have challenges in analyzing sentiments in multiple languages.

Content Generation Tools: Content generation tools can assist Agip Oil and Gas in creating and curating content for PR purposes. These tools can analyze existing data to generate study, blog posts, or social media updates. The advantages include time savings, consistent messaging, and assistance in brainstorming ideas. However, relying solely on AI-generated content may lack the creativity and human touch required for effective PR, and human editing and oversight are necessary to ensure the quality and accuracy of the generated content.

Predictive Analytics Tools: Predictive analytics tools can help Agip Oil and Gas in PR by analyzing historical data to predict future outcomes or trends. These tools can be used for demand forecasting, risk assessment, and decision-making support. The advantages include data-driven decision-making, improved forecasting accuracy, and identification of patterns for effective PR strategies. However, predictive analytics tools require extensive historical data, may have biases in their algorithms, and may face challenges in predicting unpredictable events.

Media Monitoring Tools: Media monitoring tools can be used by Agip Oil and Gas in PR to track and analyze media coverage across different platforms. These tools can provide real-time monitoring of news study, social media, and online discussions related to the industry. The advantages include comprehensive coverage, quick identification of trends, and understanding public perception. However, media monitoring tools may have limitations in analyzing visuals or images and may overlook smaller or niche media sources. Selecting and utilizing these AI tools in the Agip Oil and Gas industry should be done with careful consideration and monitoring to ensure the effectiveness and ethical use of these tools in PR efforts.

The Role of AI in Public Relations

The Role of AI in Public Relations has gained significant attention in recent years, with advancements in technology and the increasing demand for personalized communication. AI has the potential to revolutionize traditional PR practices by streamlining processes, improving analytical capabilities, and enabling more effective stakeholder engagement (Singh, Jain, and Garg, 2019).

One of the key areas where AI is transforming public relations is in media monitoring and analysis. Traditional media monitoring involved human analysts manually scanning through various news outlets to identify relevant mentions and sentiment about a brand or organization. That is, the traditional PR methods often use manual monitoring of media coverage, social media platforms, and other digital channels. However, AI-powered tools can now perform this task more efficiently and accurately by scanning a vast amount of news articles, social media posts, and online forums in real-time. These tools employ advanced algorithms and natural language processing techniques to identify mentions, sentiment, and trends related to a brand, enabling PR professionals to make informed decisions based on real-time data (Rodsevich, 2023). Ohanian and Pomeranz (2016) pointed out that AI can not only save time and effort but also provide more accurate and reliable data analysis for effective PR decision-making.

Moreover, AI can assist in improving media relations through automated communication processes. Previously, PR professionals had to manually draft and send press releases to journalists, which was a time-consuming task.

With AI, PR professionals can rely on chatbots and virtual assistants to automate the process of drafting and disseminating information to relevant journalists. These AI-powered tools can also engage with journalists, answer their queries, and provide necessary information, thereby streamlining media relations (Li-Hua, 2019). Moreover, AI has the potential to enhance stakeholder engagement and communication. Chatbots and automated messaging systems powered by AI can provide instant responses and personalized communication to stakeholders, ensuring prompt customer service and engagement. Du, Xu, and Fan (2019) find out that that AI-powered chatbots can successfully handle routine queries while freeing up PR professionals' time for more strategic tasks.

Another significant role of AI in public relations is in crisis management. During a crisis, organizations need to respond swiftly and accurately to maintain their reputation. AI-powered sentiment analysis can provide real-time insights into public sentiment towards a crisis, helping PR professionals understand the impact of their actions and craft appropriate responses. Additionally, AI can assist in predicting and detecting potential crises by analyzing patterns, identifying emerging issues, and monitoring social media conversations (Beebe, Ji, &Lyu, 2020). AI algorithms can analyze real-time data, identify emerging crises, and provide PR professionals with timely alerts. Sniderman et al. (2017) argues that the application of AI technology systems can provide PR professionals with valuable insights to proactively manage and mitigate potential crises (Hansell, G. 2023).

AI algorithms can analyze consumer behavior patterns, preferences, and demographic data to develop personalized PR strategies and targeted communication. This allows PR professionals to tailor their messaging to specific audiences, increasing the effectiveness of their campaigns (Molleda, &Almansa-Moreno, 2019)

However, it is important to note that although AI brings several benefits to public relations, it also presents challenges. For instance, the automation of certain tasks may raise concerns about job displacement for PR professionals. Ethical considerations regarding the collection and use of personal data for AI-powered tools are also essential to address.

Artificial Intelligence (AI) plays a significant role in public relations (PR) by enhancing efficiency, improving decision-making, and enabling personalized communication. Specifically, within AGIP Oil and Gas Company, AI can be leveraged in several ways. AI-powered tools can analyze vast amounts of data, including social media trends, news studys, and customer feedback, to extract meaningful insights. This helps PR professionals at AGIP to understand public sentiment, identify emerging issues, and make data-driven decisions. AI algorithms can monitor media channels and online platforms, allowing AGIP to track mentions, and social media conversations related to their brand. This enables proactive reputation management and timely response to PR crises or issues. AGIP can use AI-powered chatbots or virtual assistants to provide instant and personalized responses to customer inquiries, addressing common queries and freeing up PR staff for more complex tasks. These AI-driven interactions can enhance customer satisfaction and improve overall brand image. AI tools can analyze sentiment in real-time, helping AGIP gauge public opinion and sentiment towards their brand, products, or campaigns. This enables PR teams to tailor their communication strategies and address potential concerns or negative sentiment promptly.

AI assist in generating content for AGIP's PR initiatives. It can help draft press releases, social media posts, and study based on predefined templates, saving time and effort for PR professionals. However, human oversight is crucial to ensure accuracy, tone, and alignment with AGIP's brand values. AI algorithms can identify relevant influencers and analyze their impact and engagement levels. AGIP can leverage this information to form partnerships with influencers who align with their brand values and reach their target audience effectively. Crisis

Management: AI-powered tools can assist AGIP in crisis prediction and management. By analyzing patterns and indicators, AI can help identify potential crises and provide recommendations for mitigating their impact. During crises, AI can aid in monitoring social media sentiment, facilitating real-time response, and managing communication effectively.

Benefits of AI Adoption

There are several benefits of adopting AI in public relations in the Agip Oil and Gas industry:

Human PR professionals, improved Data Analysis: AI can process and analyze large volumes of data quickly and accurately, leading to valuable insights. This capability allows PR professionals to monitor media coverage, track sentiment, identify trends, and understand public perception more effectively.

Enhanced Media Monitoring: AI-powered tools can continually monitor a vast array of media sources, including news studys, social media platforms, and online discussions. This enables PR teams to stay informed about industry trends, track competitor activities, and identify potential reputational risks in real-time.

Efficient Content Generation: AI can assist in generating content such as press releases, blog posts, and social media updates by analyzing existing content, identifying key themes, and proposing relevant ideas. This saves time for PR professionals and helps ensure consistent messaging across various channels.

Personalized Communication: AI can analyze customer data and preferences to facilitate personalized communication. By understanding individual preferences, PR professionals can tailor their messages and target their efforts more effectively, increasing engagement and building stronger relationships with stakeholders.

Crisis Management: AI tools can help detect and analyze early warning signs of potential crises, enabling PR teams to respond proactively. By monitoring social media sentiment, news trends, and online conversations, AI can provide valuable insights that assist in mitigating potential reputation risks before they escalate.

Automation and Efficiency: AI can automate, be repetitive and time-consuming tasks, freeing up PR professionals to focus on strategic and creative aspects of their work. This leads to increased productivity, efficiency, and the ability to handle multiple projects simultaneously.

Predictive Analytics: AI algorithms can analyze historical data and predict future trends and outcomes. This capability allows PR professionals to make data-informed decisions, refine their strategies, and anticipate public opinion, enabling more proactive and effective public relations campaigns.

Cost savings: Adopting AI can lead to significant cost savings in terms of time, resources, and personnel. By automating tasks and streamlining processes, organizations can optimize their PR efforts, reduce manual labor, and allocate resources more efficiently. By leveraging AI capabilities, PR professionals in the Agip Oil and Gas industry can enhance their strategic decision-making, improve communication effectiveness, and achieve better outcomes in managing their public image and reputation.

Agip Oil and Gas and AI Adoption

Agip Oil and Gas, a prominent player in the energy sector, has recognized the importance of AI in modern PR practices. The company has invested resources into exploring AI applications that align with their communication objectives. Agip has implemented AI-driven media monitoring platforms to track news coverage, social media trends, and public sentiment, allowing them to identify potential issues and respond proactively. The adoption of AI in the public relations (PR) unit of AGIP Oil and Gas Industry has revolutionized the way the company communicates and engages with its stakeholders. AI technology has paved the way for more efficient and effective PR strategies, enabling AGIP to better manage its reputation, enhance brand image, and build strong relationships with various stakeholders. One notable area where AI has made a significant impact is media monitoring and analysis. AGIP can now leverage AI-powered tools to monitor and analyze vast

amounts of news study's, social media posts, and online discussions in real-time. This enables the PR team to stay updated on the latest trends, identify potential issues or crises, and track public sentiment towards the company. By leveraging AI, AGIP can proactively address emerging issues and respond promptly, ensuring the preservation of its reputation (Manesh and Hossain, 2019).

Challenges of the Adoption of AI in public Relations

The challenges of AI in public relations in the Agip Oil and Gas industry can include:

Limited Human Interaction: AI-powered systems may struggle to provide the same level of personalized and human interaction that is often necessary in public relations. Building relationships with journalists, stakeholders, and the public requires emotional intelligence and a human touch, which AI may find challenging to replicate (Li-Hua, 2019).

Language and Cultural Nuances: Public relations activities often involve intricate language and cultural nuances that can be difficult for AI systems to fully understand and navigate. AI algorithms may struggle to interpret subtle meanings, tone, and context in different languages and cultural settings, potentially leading to misinterpretations or misunderstandings.

Lack of Contextual Understanding: AI systems typically rely on data and algorithms to make decisions and generate responses. However, public relations often require a deep understanding of the context and specific circumstances surrounding an issue or crisis. AI may struggle to accurately assess and respond to complex and evolving situations that require human judgment and intuition.

Trust and Ethics: Public relations relies heavily on building and maintaining trust with various stakeholders. However, AI systems may raise concerns about the transparency, accountability, and ethics of automated decision-making. Issues related to privacy, data protection, and bias in algorithms can impact the trustworthiness of AI-powered public relations initiatives.

Public relations professionals often play a critical role in managing and mitigating crises. AI may struggle to effectively respond to rapidly evolving situations, assess and understand public sentiment, and provide the necessary strategic guidance during a crisis. Human intuition and experience are often essential in crisis management; which AI may lack. The field of public relations is constantly evolving, with new platforms, technologies, and channels emerging regularly. AI systems may face challenges in keeping up with these changes and adapting their strategies and tactics accordingly. With their ability to learn and adapt quickly, may still be necessary to navigate the evolving landscape effectively. To overcome these challenges, organizations in the Agip Oil and Gas industry can consider striking a balance between AI and human involvement in their public relations efforts. By leveraging AI for data analysis, automation, and efficiency, while also relying on human judgment and understanding for relationship building, crisis management, and strategic decision-making, companies can harness the potential of AI while ensuring a personalized and contextually appropriate approach to public relations. Additionally, organizations should prioritize continuous training and development for their PR professionals to equip them with the necessary skills to effectively work alongside AI technologies.

Consideration for the use of AI in Public Relations in the oil and gas industry

When considering the use of AI in public relations in the Agip Oil and Gas industry, several factors should be taken into account:

Goals and Objectives: Clearly define the specific goals and objectives that AI will help achieve in the public relations strategy. This could include tasks such as data analysis, media monitoring, sentiment analysis, or content generation.

Data Availability and Quality: Assess the availability and quality of the data required for AI

algorithms to operate effectively. Ensure that the necessary data sources, such as media databases, customer feedback, and social media platforms, are accessible and provide accurate and reliable information.

Integration with Existing Systems: Evaluate how AI systems will integrate with existing public relations tools and workflows. Consider compatibility, data sharing, and potential workflow disruptions when implementing AI technologies. Scalability and Cost: Consider the scalability and cost implications of AI implementation. Assess whether the organization has the necessary resources, infrastructure, and budget to effectively deploy and maintain AI systems in the long term.

Ethical and Legal Considerations: Ensure that the use of AI in public relations aligns with ethical guidelines and legal requirements, such as data privacy regulations and industry standards. Be transparent about the use of AI technologies and address any concerns related to privacy and data protection.

Human Collaboration: Recognize that AI is a tool that can enhance and support human efforts, rather than replace them entirely. Consider how AI can complement the expertise and skills of PR professionals and foster collaboration between humans and machines. Training and Education: Invest in training and educating PR professionals on AI technologies, their capabilities, and limitations. Encourage continuous learning and development to ensure that PR practitioners can effectively work alongside AI systems and leverage their potential.

Evaluation and Monitoring: Establish metrics and performance indicators to evaluate the effectiveness of AI in public relations. Monitor and analyze the results regularly to understand the impact of AI on outcomes and refine strategies as needed.   By considering these factors, organizations in the Agip Oil and Gas industry can make informed decisions on the use of AI in public relations, ensuring that it aligns with their goals, resources, and ethical standards.

Methodology
The design used for the study is survey. The staff of public relations unit numbering thirteen were the population for the sudy. Census was then used as the sampling technique. Interview formed the instrument for data collection. The data collected were analysed qualitatively and recorded.

Findings
Findings revealed that AI has transformed the way AGIP interacts with its stakeholders. Chatbots and virtual assistants powered by AI technology have become increasingly prevalent in the PR landscape. AGIP can utilize these tools to provide instant and personalized responses to inquiries from the public, investors, or employees. This not only improves customer satisfaction but also frees up valuable time for the PR team to focus on more strategic initiatives.   Furthermore, AI-driven data analytics has enabled AGIP to gain valuable insights into its target audience. By analyzing user behavior, preferences, and demographics, the company can tailor its PR campaigns and messages to resonate with specific segments of the population. This level of personalization enhances AGIP's communication efforts, ensuring that the right message reaches the right audience at the right time.

Another area where AI has proven beneficial is crisis management. AGIP can leverage AI-powered algorithms to identify potential crisis situations based on patterns and anomalies in data. This early warning system allows the PR team to respond promptly and mitigate the impact of crises on the company's reputation. Additionally, AI can assist in developing crisis communication strategies, providing suggested responses and monitoring the effectiveness of crisis-related messaging. It is worth noting that while AI brings numerous advantages to AGIP's PR unit, there are also challenges to consider. Ethical considerations, data privacy, and the

potential for bias in AI algorithms must be carefully addressed. AGIP must ensure transparency, accountability, and responsible use of AI technology to maintain trust among stakeholders.

Conclusion

Agip Oil and Gas has recognized the potential of AI in revolutionizing their PR practices. By adopting AI-driven tools and strategies, the company can gain valuable insights, enhance customer engagement, and effectively manage their reputation. As Agip continues to navigate the ever-changing PR landscape, a thoughtful and strategic integration of AI will be instrumental in staying ahead of the competition and fostering meaningful connections with stakeholders.

Recommendations

The following recommendations were made:

1. An in-depth study on the perception andUtilization of AI in public relation practices among professionals should be carried out in Agip oil and gas industry

2. Study should be carried ou in other fields and industry on the impact of AI o public relation practices.

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