

# Perception and Utilization of Artificial Intelligence among Public Relations Practitioners in Nigeria

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**Abstract** – The concept of Artificial Intelligence (AI) has been highly valued and investigated in recent times as a technological intervention. Because of its unprecedented opportunities for sustainable development, economic prosperity, and human well-being, there is intense interest in understanding how professionals, especially public relations practitioners, navigate this technological innovation which emerged as a result of today's highly mediated environment. This study investigates the perception and utilization of AI among public relations practitioners in Nigeria, seeking to ascertain the extent of diffusion of the technology. Based on a national survey of public relations practitioners in Nigeria, the study finds that, there is a negative perception of AI among Nigerian public relations practitioners, as a majority of them (86.3%) do not agree that AI can be used in communicating the corporate image of their organizations. With a chi-square analysis ( $\chi^2 = 0.3094$ ) which is less than ( $\chi^2 = 12.6$ ), the paper concludes that, the extent of utilizing AI is dependent on the public relations practitioners' perception of AI as a corporate communication tool and recommends AI training programmes for the public relations practitioners to use AI solutions to ease their professional undertakings.

**Keywords**—Artificial intelligence, perception, innovation, public relations, Nigeria

## I. INTRODUCTION

Artificial intelligence (AI) generally consists of robots that can carry out activities that normally call for human intellect. It is also the use of constellation of technology to carry out effective work through the use of machine learning. The emergence of AI can be traced to a combination of technological breakthroughs in the 1950s, changing the way tasks are performed, and shifts in consumer behaviour. Because of the uniqueness of having machines to learn and behave much as humans can, AI is technically regarded as “the science and engineering of making intelligent machines, especially intelligent computer programs” [1].

AI has become part of everyday life of individuals and groups, changing not only the landscape of communication but also permeate all facets of life, including commerce, governance, security, corporate management, relations, family affairs, banking and finance and aviation. For example, in the United States, UK, China, South Africa and many other countries, the adoption of AI is increasing exponentially with manufacturing and information firms

leading with adoption rates of over 12 percent per year [2; 3; 4; 5]

In Nigeria, governments have keyed into the drive of accelerating AI adoption and sector transformation. This has led to the inauguration of National Artificial Intelligence Strategy (NAIS) by the Federal Ministry of Communication, Innovation and Digital Economy on 15th April 2024 to harness the transformative power of AI for sustainable development [6]. Since the launch of the initiative, there have been several AI technologies introduced to improve productivity in various sectors of the Nigerian economy. For example, in the banking industry, PayStack – an AI processor is used in fraud detection, prevention and personalized financial services. AI is also used in the health sector as diagnostic tools, for medical record management and analysis [7]. The introduction of AI in Nigeria has also helped in traffic prediction and navigation in Lagos.

Technology experts have acknowledged the high efficacy of AI tools in improving outcomes in all sectors of the economy, including health, education, transport, business, finance, agriculture, manufacturing, entertainment and corporate governance. Human errors and cost have been reduced; decision-making is being enhanced with zero risk and services are personalized. From enhanced safety and fraud prevention to advanced data analysis for investment decisions, AI has become integral to modern life.

In the fast-paced world of today, the need for efficiency and productivity in daily professional practice is greater than ever. Fortunately, the advent of AI technology has brought about digital assistance with 24 hours availability to every professional, including public relations practitioners pursuing efficiency. Public relations is the practice of researching public opinion, implementing action plans, and disseminating information to the public via various media in an effort to gain their acceptance and support [8].

The contemporary public relations practitioner faces a new vista of challenge of selecting effective media in solving real and perceived image and reputation problems of his organizations. Therefore, as AI is ushering in a better world in telecommunication, AI solutions can become indispensable companions in public relations practice. Interestingly, while substantial scholarly investigations have been carried out to clarify the rate of adoption of AI in various societies [2; 3], such studies, however, are mostly done outside Africa, thus,

lacking equivalent measurement across countries and may well turn out to be inappropriate for universal generalization. In low resource settings with weak public institutions, low AI literacy level, and poor technology infrastructure; to what extent do public relations practitioners prioritize the use of AI in their daily professional practice? To what extent have public relations practitioners utilized AI in their daily professional practice?

Nigeria is a non-Western, post-colonial, unindustrialized nascent democracy in sub-Sahara Africa characterized by low AI literacy level, poor technology infrastructure and high level of unprofessional public relations practice [9]. Nigerian public relations practice unarguably is not a recent phenomenon. It dates back to 1850s, acquiring a professional body, a chartered status and membership to the Global Alliance for Public Relations and Communication Management in 1963, 1990 and 2015 respectively [10; 11]. The practice can also boast of availability of public relations education at undergraduate and postgraduate levels in Nigerian universities.

In spite of the above milestones, the practice of public relations in Nigeria is still bedeviled by many challenges, such as practitioner incompetence, inconsistent public relations education scope and curricula, lack of monitoring by the Nigerian Institute of Public Relations, poor funding, unprofessionalism, among others. Consequently, public relations practice has wobbled and is yet to gain effective recognition and acceptance as a reputable profession in the country [8]. The above circumstance indicates a growing need for professionalization and transformation of public relations practice in both public and private sectors in the country, which themselves are favorable conditions for utilizing AI solutions.

Most studies on utilization of AI in Nigeria have tended to focus predominantly on the online population and selected firms in some urban areas to conclude that AI technologies have been optimized in the country [12]. Surprisingly, no study has attempted a national assessment of the utilization of AI among a specific professional group such as public relations practitioners.

Therefore, as the quest for utilizing AI solutions continues even locally among technology managers, policy makers, researchers and professionals, it is the purpose of this study to provide data about public relations practitioners' perception and utilization of AI in Nigeria. It is our belief that fostering such understanding will provide not only insights into the practitioners' psychology and trust of AI, but also a strong platform from which to examine the impact of AI on public relation practice in Nigeria.

Specifically, the objectives of this paper are to:

1. Identify the extent to which public relations practitioners in Nigeria are aware of artificial intelligence;
2. Ascertain the interpretation of artificial intelligence among public relations practitioners in Nigeria in relation to their role as image makers;

3. Determine the proportion of public relations practitioners in Nigeria that believe in the primacy of using AI for developing their organization's reputation building strategies;
4. Identify the extent to which public relations practitioners in Nigeria utilize AI in creating corporate communications.

The following hypothesis serves as a guide for the paper:

H<sub>1</sub>: The extent of utilizing AI is not dependent on the Nigerian public relations practitioners' perception of AI as a corporate communication tool.

## II. THE CONCEPT OF ARTIFICIAL INTELLIGENCE

Technological determinism theory is a useful foundation for discussing the impact of AI on public relations practice. The theory not only examines the extent to which human thought or action is influenced by technological factors, such as AI tools, but also provides a causative link between technology and human development [13]. Proposed by Marshall McLuhan in 1962, the theory suggests that technological advancements drive and shape social, cultural, and economic change. The perspective asserts that the development and adoption of new technologies shape socio-technical systems, cultural values, and even human behaviour, often in ways that can be profound and unexpected. Theory essentially posits that technology acts as the primary agent of change in society, rather than merely being a product of cultural or historical factors.

Artificial Intelligence generally is the study of creating intelligent computers that can carry out activities that normally call for human intellect. These duties involve learning, making decisions, and solving problems. AI systems are made to effectively handle enormous volumes of data and make decisions based on that data [9]. AI technologies have become integral in sectors such as education, security, agriculture, and communication. Some of the AI technologies commonly used by professionals include:

- Natural Language Processing (NLP) which allows robots to comprehend, produce, and interpret human language. It is employed in applications such as chatbot interactions, speech recognition, sentiment analysis, and translation [14].
- Machine Learning (ML) facilitates computers to infer patterns from data without explicit programming. It encompasses methods like reinforcement learning, supervised learning, and unsupervised learning [15]. Deep learning, a subfield of machine learning, uses neural networks to accomplish difficult tasks like speech and picture recognition.
- Data Analytics entails finding patterns and trends in big datasets through mining and analysis. It aids in making decision [16]. Applications include predictive modelling, prescriptive analytics, and big data analysis.

The above AI tools play several roles in modern communication which include personalized content delivery

through audience data analysis, fact-checking and misinformation detection, translation services for cross-cultural communication and insights for content creation.

True AI entails computers' capacity to learn without the aid of human programming [17]. However, reference [18] divided AI into two categories, to account for a variety of AI tools: general AI, which imitates human cognitive capacities, and narrow AI, which carries out specific tasks. But, whatever the categorization, AI generally has the potential to transform many aspects of professional life, including public relations.

The potential of AI-driven social media listening tools such as chatbots can be exploited in public relations practice to collect and analyze vast amounts of data. Chatbots can provide public relations practitioners with valuable insights into media coverage, audience sentiment, and industry trends. Chatbots can also automate repetitive tasks such as responding to emails and scheduling social media posts, freeing up public relations practitioners to focus on more strategic activities. It can help public relations practitioners to tailor their messages and outreach efforts to specific audiences, based on their preferences and behaviours. AI tools can also provide detailed analytics to public relations practitioners to measure the effectiveness of their campaigns and demonstrate their value to clients.

Therefore, as AI tools are positively changing communication and media landscape, it is imperative to investigate the perception of AI among practitioners in a field struggling to become a reputable profession in a low resource setting such as public relations practitioners in Nigeria. This will provide basis for technology managers to measure their level of compliance with the global best practices of AI solutions as enunciated in the ninth Goal of SDGs which is to "guarantee and build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation." It will also identify the extent of adoption of the AI tools for management and policy interventions. This leads us to the first two research questions:

RQ1: To what extent are Nigerian public relations practitioners aware of AI?

RQ2: What is Nigerian public relations practitioners' interpretation of AI in relation to communicating the corporate image of their organizations?

### III. UTILIZATION OF ARTIFICIAL INTELLIGENCE

Again, the diffusion of innovations paradigm can provide a theoretical springboard for a fruitful discussion of the perception and utilization of AI in enhancing efficiency and productivity in daily professional practice among public relations practitioners in Nigeria. Proposed by reference [19], the theory describes the passage of a new idea or technology through stages of adoption by different people who participate in or begin using the new technology. In other words, the adoption of a new technology is not done at the same rate by countries, cultures, regions or continents. It follows some stages which include: awareness stage, interest stage,

evaluation stage, trial and evaluation stage [20]. This may explain the differences in the rate of utilization of AI in various cultures, countries and regions.

Artificial Intelligence (AI) has become one of the most important technologies of the 21st century. A report from McKinsey Global Institute in 2018 suggests that AI could add \$15 billion to Nigeria's economy by 2030, which is about 2.6% of its GDP [6]. This potential comes from AI's ability to improve productivity, help with decision-making, and encourage new ideas in different industries. In farming, AI tools are being used to increase crop production through precise farming methods, allowing farmers to make informed choices based on data. Technologies such as drone surveillance and AI-driven predictive analytics are helping farmers combat challenges such as pest infestations and climate change effects [6].

The diffusion of innovation paradigm seeks to explain not only the extent of adoption, but also how and why new technology, ideas and practices are adopted, including why the adoption of new technology can be spread out over long periods. Other factors that affect the rate of adoption of an innovation include the mix of rural to urban within a society's population, the society's level of education, and the extent of industrialization and development [20]. The diffusion principles can be operationalized to accelerate the rate of adoption and broaden the reach of technological innovations, such as AI. Hence, using the primacy and extent of using AI as indices of diffusion of the technology, the following research questions and hypothesis are formulated to guide this study:

RQ 3: What proportion of public relations practitioners in Nigeria believe in the primacy of using AI for developing their organization's reputation building strategies?

RQ 4: To what extent do public relations practitioners in Nigeria utilize AI in creating corporate communications?

H<sub>1</sub>: The extent of utilizing AI is not dependent on the Nigerian public relations practitioners' perception of AI as a corporate communication tool.

### IV. METHODOLOGY

Survey research design is employed in the study. This is considered appropriate, since the work is a perception-based assessment study, measuring the extent of utilization of AI among public relations practitioners in Nigeria. All the public relations officers in Nigeria practicing in parastatals, public and private organizations constitute the population of the study. According to the official documents of the Nigeria Institute of Public Relations (NIPR), the population of registered public relations practitioners in the 36 NIPR State Chapters in the country and FCT is 12,520. Using reference [21] formula, a sample size of 372 is drawn with 0.05 error margin. The formula states thus:

$$S = \frac{X^2NP(1-P)}{d^2(N-1)+X^2P(1-P)}$$

Where:

$S$  = required sample size

$I$  = confidence level e.g. 1.96 for 95%;

$N$  = population size

$P$  = population proportion (assumed to be 0.5 (50%))

$d$  = degree of accuracy = 5% or 0.05

For this study, therefore, the sample size is:

$$\frac{1.962 \times 12,520 \times 0.5(1-0.5)}{0.052 \times (12,520-1) + 1.962 \times 0.5(1-0.5)}$$

$$\frac{(3.8416 \times 12,520 \times 0.25)}{(31.2975 + 0.96)} = \frac{12,024.21}{32.3} = 372.26$$

$S = 372.26$  or 372 approximately.

A multi-stage sampling technique is utilized which includes cluster, simple random, purposive, convenience and snowball sampling techniques. In stage one, the entire country is clustered into six zones, following the six (6) geopolitical zones of the country. This is to ensure that the peculiarities of all public relations practitioners in every part of the country are included in the sample. In stage two, simple random sampling is employed to choose one State from each of the zones. This technique is adopted to give equal probability to each State in Nigeria to be part of the sample. The following states are thus selected: Lagos (South-West); Adamawa (North-East); Rivers (South-South); Kaduna (North-West); Ebonyi (South-East); and Benue (North-Central).

In stage three, the capital territories of the six selected states are further selected using the purposive sampling technique. The method is adopted at this stage because it affords the researcher the opportunity of considering typical cases which may quickly and easily provide the required information. The capital cities are chosen based on the knowledge that all the NIPR State chapters are domiciled in the state capitals and will therefore have the greater number of their members reached in these cities.

In stage four, the copies of the research instrument, for convenience purposes, are distributed equally to the individual six states. The result of the distribution covers the six geopolitical zones of Nigeria, comprising North-East, North-Central, North-West, South-West, South-South and South-East. One state was sampled from each of the zones. The states and their capital territories are Adamawa - Yola, Benue - Makurdi, Kaduna - Kaduna, Lagos - Ikeja, Rivers - Port-Harcourt and Ebonyi - Abakaliki. The study took place in the state capitals of the six selected states where 62 respondents were selected from each of the state chapters, giving the total of 372. Details are shown in Table 1.

Table 1: Details of the Geopolitical Zones, the Selected States, their capitals and Samples

SN	Geo-Political Zones	States	Capital	Sampl es
1	North-Central	Benue	Makurdi	62
2	North-East	Adamawa	Yola	62
3	North-West	Kaduna	Kaduna	62
4	South-East	Ebonyi	Abakaliki	62
5	South-South	Rivers	Port Harcourt	62
6	South-West	Lagos	Ikeja	62
	Total	-	-	372

Finally in stage five, the copies of the research instrument are shared to the public relations practitioners in the selected capital cities with the help of five trained research assistants, using the snowball sampling technique. This method involves the researcher depending on a respondent to refer him to other respondents. Hence, the leaders of the selected state chapters of NIPR are approached to identify their members for administration of the research instrument. The dependence on the referrals of the leaders of NIPR state chapters to their members is necessary because the researcher does not know some of the practitioners before then. Questionnaire serves as the instrument for collecting data. The instrument is face-validated by two professors of Mass Communication. To ensure reliability, test-re-test approach is used. The test-re-test reliability study is conducted on twenty members of the Abakaliki Chapter of NIPR, Ebonyi State, using twenty (20) copies of the questionnaire and four (4) errors are observed. The Guttman scale of coefficient of reproducibility is used to measure reliability of consistency of the instrument. The details are as shown below:

$$1 - \frac{\text{totalerror}}{\text{totalresponses}} = 1 - \frac{4}{20} = 1 - 0.2 = 0.8.$$

The calculation yields 0.8 (80%) which is considered high. Data generated are presented using simple frequency distribution tables and percentages. Chi-Square statistical tool is used to test the hypothesis with the level of significance, ( $\alpha$ ) = 0.05.

## V. FINDINGS

The total of 372 copies of the questionnaire is distributed to the respondents in the selected state chapters of NIPR. After the distribution, 329 complete copies are collected within four months. Out of the 329 copies turned in, 30 of the potential respondents turned out not to belong to the population. The questionnaire is filled in by 299 members of NIPR in the selected state chapters, resulting in a response rate of 80 percent. Data are examined with reference to the responses obtained from the 299 valid copies of the questionnaire and the research questions.

Table 2 below shows that; a majority of the respondents (60%) know about AI at a low extent. Yet (20%) of the respondents are aware of it at a very low extent.

Similarly, majority of the respondents (86.3%) do not agree that AI is a tool for communicating the corporate image of their organizations. Worse still, (7.3%) of the respondents are not sure.

In the bid to ascertain the proportion of public relations practitioners in Nigeria that believe in the primacy of using AI for developing their organization’s reputation building strategies, findings show that majority of the respondents (64%) disagree that using AI should be their primary tool in developing their organization’s reputation building strategies. Still, (10.7%) of the respondents are neutral. Regarding the extent to which public relations practitioners in Nigeria utilize AI in creating corporate communications, findings show that majority of the respondents (54%) never used AI at all. While only (14.4%) sometimes utilize AI tools, (24.2%) use them rarely, mainly due to lack of liability for the consequences of using the AI tools (50%).

Table 2: Descriptive Statistics of the Substantive Issues in Perception and Utilization of AI among Public Relations Practitioners in Nigeria (n = 299)

Question	Responses	Respondents	Percentage
To what extent do you know AI for easing day-to-day operations?	Low extent	179	60%
	Very Low Extent	60	20%
	Significant Extent	30	10%
	Very Significant extent	30	10%
	<b>Total</b>	<b>299</b>	<b>100%</b>
Do you think that AI is a tool for communicating the corporate image of your organizations?	Yes	19	6.4%
	No	258	86.3%
	Not sure	22	7.3%
	<b>Total</b>	<b>299</b>	<b>100%</b>
Using AI should be the primary tool for developing organization’s reputation building strategies in this 21 <sup>st</sup> century.	Strongly Agree	23	7.7%
	Agree	52	17.5%
	Disagree	192	64%
	Neutral	32	10.7%
	<b>Total</b>	<b>299</b>	<b>100%</b>
How often have you used AI to create your corporate communications?	Always	22	7.4%
	Sometimes	43	14.4%
	Rarely	72	24.2%
	Never	162	54%
	<b>Total</b>	<b>299</b>	<b>100%</b>
What do you think are the challenges to effective utilization of AI in your daily operations?	Private concerns	51	17%
	Data accuracy	60	20%
	Digital literacy	39	13%
	Lack of liability	149	50%
	<b>Total</b>	<b>299</b>	<b>100%</b>

Source: Field Survey, 2025

Test of Hypothesis and Analysis

H<sub>1</sub>: The extent of utilizing AI is not dependent on the Nigerian public relations practitioners’ perception of AI as a corporate communication tool.

H<sub>0</sub>: The extent of utilizing AI is dependent on the Nigerian public relations practitioners’ perception of AI as a corporate communication tool.

The above hypothesis is statistically analyzed, using chi-square method of test for independent classification of the two variables.

The test statistic:  $X^2 = \sum \frac{(O-E)^2}{E}$  Where:

X<sup>2</sup> = Chi-Square;

∑ = Summation;

O = Observed Frequency;

E = Expected Frequency

The Level of Significance, as used in sampling (α) = 0.05.

The Degree of Freedom for test for Independent Classification (V) = (r – 1) (c – 1), where:

r = number of items in the row, while

c = number of items in the column.

Thus, the Observed Frequency (FO) for the indices – extent of utilizing AI and the public relations practitioners’ perception of AI as a tool for communicating the corporate image of organizations – obtained through item 12 and 7 of the questionnaire (see Table 2 above) were cross-tabulated as shown in table 3 below, with the Expected Frequency (FE) calculated and encapsulated in ( ), using the formula:

$$\frac{(rt)(ct)}{N} \quad \text{Where,}$$

rt = row total;

ct = column total and

N = total number of items.

Table 3: Cross-Tabulation between Extent of Utilizing AI and Perception of AI as a Tool for Communicating the Corporate Image of Organizations

Statements		Extent of Utilizing AI				Total
		Always	Some -times	Rarely	Never	
Do you think that AI is a tool for communicating the corporate image of your organizations?	Yes	1 (1.4)	3 (2.7)	5 (4.6)	10 (10.3)	19
	No	19 (19)	37 (37)	62 (62.1)	140 (139.8)	258
	Not Sure	2 (1.6)	3 (3.2)	5 (5.3)	12 (11.9)	22
	<b>Total</b>	<b>22</b>	<b>43</b>	<b>72</b>	<b>162</b>	<b>299</b>

Substituting with the formula:  $X^2 = \sum \frac{(O_i - E_i)^2}{E}$

$$X^2 = \{(1 - 1.4)^2 \div 1.4\} + \{(3 - 2.7)^2 \div 2.7\} + \{(5 - 4.6)^2 \div 4.6\} + \{(10 - 10.3)^2 \div 10.3\} + \{(19 - 19)^2 \div 19\} + \{(37 - 37)^2 \div 37\} + \{(62 - 62.1)^2 \div 62.1\} + \{(140 - 139.8)^2 \div 139.8\} + \{(2 - 1.6)^2 \div 1.6\} + \{(3 - 3.2)^2 \div 3.2\} + \{(5 - 5.3)^2 \div 5.3\} + \{(12 - 11.9)^2 \div 11.9\} = 0.3094.$$

The Calculated  $X^2 = 0.3094$ .

$V = (r - 1)(c - 1)$ , is  $(4 - 1)(3 - 1) = 6$ .

Then, the critical region (Tab  $X^2$ ) = 12.6.

Interpretation: At  $\alpha = 0.05$ ;  $V = 6$ ; Cal  $X^2 = 0.3094$ ; the critical region (Tab  $X^2$ ) = 12.6. The Cal  $X^2 = 0.3094$  is less than Tab  $X^2 = 12.6$ , suggesting that the difference between the FO and the FE is not statistically significant. Therefore, the substantive hypothesis ( $H_1$ ) – the extent of utilizing AI is not dependent on the Nigerian public relations practitioners' perception of AI as a corporate communication tool – is rejected. This shows that the extent of utilizing AI is dependent on the Nigerian public relations practitioners' perception of AI as a corporate communication tool.

## VI. DISCUSSION OF FINDINGS

This paper investigates public relations practitioners' perception and utilization of AI in Nigeria. The extent to which public relations practitioners are aware of AI is first identified. There is low awareness of AI among most public relations practitioners in Nigeria. Only few of them (10%) know to a significant extent that AI can ease day-to-day professional operations. On the interpretation of AI in relation to their role as image makers, which is the focus of the second objective, majority of the practitioners (86.3%) do not agree that AI can be used in communicating the corporate image of their organizations. This kind of perception of AI is negative and can only undermine the adoption of AI tools among the very professionals, who are supposed to be the arrowhead in utilizing the technology to transform the sector. The finding is contrary to reference [12] assertion that there was a high level of knowledge and positive perception of AI among the Nigerian online population.

The third objective of this paper is to determine the proportion of public relations practitioners in Nigeria that believe in the primacy of using AI for developing their organization's reputation building strategies. Majority of the respondents (64%) disagree that AI should be their primary tool for developing their reputation building strategies. Again, answers to the fourth research question show more than half of the respondents (54%) do not use AI at all, owing mainly to lack of liability in using the AI tools (50%) among other challenges.

This finding is further elaborated by the hypothesis, which attempts to ascertain if the extent of utilizing AI is not dependent on the Nigerian public relations practitioners' perception of AI as a corporate communication tool. The chi-square analysis of the hypothesis shows that the extent of utilizing AI is dependent on the Nigerian public relations practitioners' perception of AI as a corporate communication

tool. The Cal  $X^2 = 0.3094$  is less than Tab  $X^2 = 12.6$ , suggesting that the difference between the FO and the FE is not statistically significant. Therefore, the substantive hypothesis ( $H_1$ ) is rejected, lending substantial support for acceptance of the null hypothesis  $H_0$ .

The above finding reinforces recent research findings, regarding the low extent of utilization of AI solutions even among university students in Nigeria [22]. The low adoption and utilization of AI solutions has also been reported in Ghana, South-Africa and Kenya - other African countries, in which there is a pessimistic understanding of AI [23]. This finding is not surprising, given the similarity in historical, cultural, political and technological systems that these African nations share in common. These elements are likely to influence socio-technical system in the region.

Furthermore, the finding of this paper is consistent with the tenets of the diffusion of innovation theory, which postulates that the rate of adoption of AI solutions in various settings, cultures, countries and regions may differ and can take a long time [20]. This is because, as the findings show, despite the efficacy of AI in improving professional competence, the perception and utilization of AI solutions are currently low among Nigerian public relations practitioners. The Nigerian public relations practitioners do not agree that AI is a tool for communicating the corporate image of their organizations; neither do they accept that AI should be used for developing their reputation building strategies. This finding represents a modest effort towards forging a better socio-technical conceptualization of the adoption of AI solutions among Nigerian public relations practitioners that will capture the adoption decision first at the individual level before extending to organizational and societal levels.

Another practical implication of this paper is that, given the low utilization of AI, the Nigerian public relations practitioners may not, at the moment, be able to tap from the solutions that inhere in using AI to enhance their competence and professionalize their job in Nigeria. But the tendency for citizens and indeed, an occupational group to abdicate proven technological innovations, such as AI, for whatever reason, detracts fundamentally from the ethos of technological determinism, which links technological interventions to human development. If this situation continues, a further implication is that inefficiency will continue, low productivity among Nigerian public relations practitioners may continue unabated and finally, effective public relations practice may be grounded to a halt.

## VII. CONCLUSION

The contributions of this paper allow us to state that the current low status of professional public relations practice in Nigeria may continue if the current level of utilization of AI solutions continues. This is because, as the findings indicate, the extent of utilization of AI among Nigerian public relations practitioners is dependent on their perception of AI as a corporate communication tool. Unfortunately, as the results further shows, the perception of AI among Nigerian public relations practitioners is negative (86.3%), as a majority of

them is of the view that AI is neither a tool for communicating the corporate image of their organizations, nor for developing their reputation building strategies. Perhaps, this explains why the extent of utilizing AI among Nigerian public relations practitioners is currently low (54%). The negative perception and low utilization of AI can only undermine productivity in public relations practice. It shows that many Nigerian public relations practitioners are yet to prioritize AI usage in their day-to-day professional operations. AI is a technological intervention with unprecedented opportunities for professional excellence, sustainable development, economic prosperity, and human well-being. So, the negative perception and low utilization of AI among public relations practitioners indicate that the AI solutions are yet to diffuse significantly in Nigeria.

## VIII. RECOMMENDATIONS

Therefore, there is an urgent need for AI training programs for public relations practitioners and indeed Nigerians to know how AI can be of help to them both in private and public undertakings. To this end, university managements, governments, non-governmental organizations, technology managers and entrepreneurs in Nigeria, international donor agencies and others in policy formulation towards proper/adequate use of AI solutions, should close ranks to step down the sensitization programmes to campuses to create awareness about the effectiveness of AI in easing day-to-day operations.

Professionals, especially public relations officers, should understand that it will not always be convenient to have timely in-person consultations with their clients at all times. This is why it is expedient in this contemporary time to prioritize AI solutions as alternatives. This is more so, especially for public relations practitioners who have variegated interests from their different publics to harmonize.

## REFERENCES

- [1] Manning, C. (2020). AI Definitions: Human centered AI. *Stanford University*. Retrieved from [https://hai-production.s3.amazonaws.com/files/2020-09/AI-Definitions-HAI.pdf](https://chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://hai-production.s3.amazonaws.com/files/2020-09/AI-Definitions-HAI.pdf)
- [2] McElheran, K., Li, F. J., Brynjolfsson, E., Kroff, Z., Dinlersoz, Foster, L. & Zolas, N. (2024) AI adoption in America: Who what and where. *Journal of Economics & Management Strategy*. <https://doi.org/10.1111/jems.12576>
- [3] Office of National Statistics (2025). Management practices and adoption of technology & AI in UK firms: 2023. Retrieved from <https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/articles/managementpracticesandtheadoptionoftechnologyandartificialintelligenceinukfirms2023/2025-03-24>
- [4] Hoosen, K. F. (2023). Factors Influencing Artificial Intelligence Adoption in South African Organisations: A Technology, Organisation, Environment (TOE) Framework [Master's dissertation, University of the Witwatersrand, Johannesburg]. WireDSpace. <https://hdl.handle.net/10539/38741>
- [5] World Economic Forum, (2025) Blueprint to action: China's path to AI powered industry transformation.
- [6] National Artificial Intelligence Strategy (NAIS) (2024). Federal Ministry of Communication, Innovation and Digital Economy.
- [7] Taherdoost, H. & Ghofrani, A. (2024). AI's role in revolutionizing personalized medicine by reshaping pharmacogenomics and drug therapy. *Intelligent Pharmacy*, 2(5) P. 643-650. <https://doi.org/10.1016/j.ipha.2024.08.005>
- [8] Aja, U. S., Chukwu, J. N., & Odoh, V. O. (2019). Emergence of New Media Technologies and the Challenges of Media Relations Practice in Nigeria, in *EBSU Journal of Mass Communication*, Vol. 6, No. 1, pp 62 – 71. [http:// www.ebsujmc.com/index](http://www.ebsujmc.com/index)
- [9] Copeland, B. J. (2022). Artificial Intelligence: A Philosophical Introduction.
- [10] Nigeria Institute of Public Relations (2025). Our history.
- [11] Global Alliance for Public Relations and Communication Management (2024). Global Alliance signs agreement with the Nigeria Institute of Public Relations.
- [12] Okonji, E. (2025, June 27) Nigeria online population shows high use of Artificial Intelligence Tools. Retrieved from <https://www.thisdaylive.com/2025/01/16/report-nigerian-online-population-shows-high-use-of-artificial-intelligence-tools/#:~:text=According%20to%20the%20report%2C%20in.its%20benefits%20outweighing%20the%20risks.>
- [13] Dafoe, A. (2015). On Technological Determinism: A Typology, Scope Conditions, and a Mechanism. *Science, Technology, & Human Values*, 40(6), 1047–1076. <http://www.jstor.org/stable/43671266>
- [14] Jurafsky, D., & Martin, J. H. (2019). Speech and Language Processing (3rd ed.). *Pearson*.
- [15] Tella, A. (1997). Understanding Machine Learning.
- [16] Shmueli, G., Bruce, P. C., & Patel, N. R. (2019). Data Mining for Business Analytics: Concepts, Techniques, and Applications. *Wiley*.
- [17] Guanah, O., Obi, C., & Ginikachukwu, E. (2020). AI and the Future of Communication.
- [18] Searl, J. (1980). Minds, brains and programs. *The Behavioural and Brain Sciences*, 3, 417–457
- [19] Rogers, E. M. (1962). *The diffusion of innovation*. Glencoe, Illinois: Free press.
- [20] Dearing, J. W. & Cox, J. G. (2018). Diffusion of innovations theory, principles and practice. *Health Affairs*, 37(2). <https://www.healthaffairs.org/doi/10.1377/hlthaff.2017.1104>
- [21] Krejcie R V & Morgan D W (1970) Determining sample size for research activities. *Educational and Psychological Measurements*, 30(3)607 – 610. <https://doi.org/10.1177/001316447003000308>
- [22] Anayochukwu, A. A. (2025). Artificial intelligence awareness and adoption patterns among university students in nigeria: A review. *World Journal of Innovation and Technology*. 9(5). DOI: 10.56201/wjimt.v9.no5.2025.pg101.114
- [23] Umejei, E., Ayisi, A., Phiri, M., & Tallam, E. (2025). Artificial Intelligence and Journalism in Four African Countries: Optimists, Pessimists, and Pragmatists. *Journalism Practice*, 1–17. <https://doi.org/10.1080/17512786.2025.2489590>