Journal of Posthumanism

2025
Volume: 5, No: 5, pp. 4107–4126
ISSN: 2634-3576 (Print) | ISSN 2634-3584 (Online)
posthumanism.co.uk

DOI: https://doi.org/10.63332/joph.v5i5.1857

The Use of Artificial Intelligence Technologies in Public Relations Practices within Saudi Organizations A Survey Study on a Sample of Public Relations Practitioners in the Kingdom of Saudi Arabia

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Abstract

The study aimed to identify the extent to which artificial intelligence (AI) technologies are used in public relations practices in the Kingdom of Saudi Arabia. The research adopted quantitative methodologie to examine the use of AI technologies in public relations within the Kingdom. The study was conducted among all public relations practitioners, including experts in Saudi institutions, using a quantitative approach. A questionnaire was distributed to 53 practitioners, with a sample of 53 respondents. The study yielded several key findings, most notably that the application of AI in public relations across Saudi organizations varies. AI is used more extensively in content creation and data analysis, while its adoption remains limited in some institutions. The majority of practitioners do not view AI as a replacement for human involvement but rather as a supportive tool to enhance efficiency and performance.

Keywords: *Artificial Intelligence, AI Applications, Public Relations, Social Listening Tools, Issue Management.*

Introduction

Artificial intelligence (AI) technologies are among the most prominent modern innovations with significant potential to enhance the effectiveness of professional practices across various fields, particularly in the public relations sector. These technologies contribute to improving multiple aspects of work, from automation to precise data analysis. With the rapid advancement of AI, the world has witnessed an increasing use of innovative AI-based applications in many critical processes, especially in managing social media. These technologies serve as advanced tools for accurately analyzing social media content, enabling the identification of key trends among target audiences and providing deep insights into their interests. This, in turn, helps refine communication strategies, making them more impactful. Furthermore, AI technologies assist in continuously measuring and analyzing performance, allowing organizations to track the success of their various programs, whether through audience engagement or the content they deliver.

One of the most notable benefits of AI technologies is their ability to generate creative digital content. These technologies can produce high-quality digital content, including text, images, and videos, thereby enhancing the quality of media campaigns in public relations. Thanks to this feature, organizations can deliver fresh and diverse content that meets the needs of their target audience, fostering positive engagement and increasing the effectiveness of communication

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efforts.

The advantages of AI extend beyond content creation to include precise analysis of audience behaviors and personal preferences. These analyses enable organizations to offer tailored services and products that accurately meet audience needs. This also paves the way for more effective and data-driven strategies based on in-depth analytics, significantly enhancing audience interaction and delivering positive outcomes.

In crisis management, AI technologies play a vital role in providing immediate and rapid responses. These tools can handle real-time public inquiries, effectively managing crises and delivering swift solutions that enhance an organization's image and safeguard its reputation. Such real-time responses are crucial in an era characterized by the rapid spread of information and its substantial impact on public opinion.

By strategically leveraging AI technologies, companies and organizations in Saudi Arabia's public relations sector can benefit from these innovations to cultivate a positive image through innovative solutions that improve audience communication. This fosters greater public acceptance of technology, builds stronger trust between organizations and their audiences, and ultimately leads to sustainable growth and widespread adoption of AI applications across various fields.

Accordingly, this study aims to explore the extent to which public relations practitioners in Saudi organizations utilize AI technologies. This quantitative study primarily relies on questionnaires as the main tool for data collection. Through this instrument, the study seeks to examine how AI technologies are employed in public relations practices within the Kingdom, focusing on the benefits they offer, and the challenges organizations may face in adopting this advanced technology.

Thus, this study holds significant relevance today, as it provides precise insights into the impact of AI on public relations practices and helps identify strategies to maximize the benefits of these technologies. Additionally, it offers practical evidence to improve interactions between organizations and the public, thereby enhancing organizational reputations and boosting the effectiveness of public relations strategies in Saudi Arabia.

This study is considered one of the quantitative studies that primarily rely on the questionnaire tool as a means of collecting the necessary data. Through this questionnaire tool, which used quantitative methodologie, the study aims to examine the use of artificial intelligence techniques in the practice of public relations in the Kingdom of Saudi Arabia.

Study Objectives

- To determine the extent to which public relations practitioners in Saudi organizations are interested in using AI technologies in public relations.

- To examine the level of interest among Saudi public relations practitioners in managing digital reputation through AI applications.

- To identify the key skills public relations practitioners need to effectively apply AI technologies in public relations from their perspective.

- To highlight the obstacles limiting the use of AI technologies in public relations.

Research Questions

1. To what extent are public relations practitioners in Saudi Arabia interested in using AI technologies in public relations?

2. How capable are public relations practitioners in Saudi organizations of utilizing AI technologies?

3. What are the key skills public relations practitioners need to master in the application of AI technologies in public relations?

4. What are the obstacles limiting the use of AI technologies in public relations?

Study Problem

Artificial intelligence is witnessing extremely rapid development, significantly and visibly impacting various sectors and professional fields, particularly in public relations management. As a result of this advancement, a set of challenges and changes has emerged due to the use of AI technologies. The study's problem lies in the following main question: To what extent are public relations practitioners in the Kingdom of Saudi Arabia using artificial intelligence technologies?

Thus, the core issue of the current study is framed by the main question:

To what extent are artificial intelligence technologies being used in public relations practice in the Kingdom of Saudi Arabia?

Literature Review

Mahmud, M. K., Sultana, T., & Rashid, H. (2025) aimed to examine how public relations (PR) practices in Bangladesh utilize artificial intelligence (AI) in their daily activities to achieve organizational goals, focusing on a specific geographic region. The study employed a diverse sample survey of PR practitioners, allowing researchers to assess the current landscape of AI adoption in PR across various institutions in Bangladesh. Key findings revealed that AI usage in PR within Bangladesh is not as widespread as expected. Additionally, there is a lack of sufficient knowledge among PR practitioners regarding AI.

Muhortov, D. (2024) discussed crisis management challenges faced by Russian organizations. The study adopted a comprehensive literature review to identify research gaps and build a theoretical framework, supplemented by case studies of organizations implementing AI tools in crisis management. Surveys and assessments were used to measure Russian organizations' readiness to adopt AI, alongside a comparative analysis of traditional versus AI-enhanced methods. The methodology also included data analysis to evaluate AI's impact on decision-making and expert interviews to explore associated challenges and opportunities. Key findings indicated that AI adoption in crisis management remains gradual, with varying levels of implementation across organizations. The study highlighted Russian organizations' preparedness for AI, identifying adoption barriers and drivers. Results demonstrated that AI enhances decision-making speed, improves response times to crises, increases objectivity by reducing human biases, and lowers operational costs, making crisis management more efficient.

Apkhaidze, T., & Gumberidze, N. (2024) explored AI's transformative impact on PR, examining key developments, challenges, and opportunities in AI applications—from real-time media monitoring and sentiment analysis to personalized communication and crisis management. AI is

revolutionizing how PR professionals engage with audiences and manage brand reputation. The study employed qualitative analysis through interviews and surveys to understand practitioners' experiences, alongside comparative analysis to assess differences between traditional and AI-supported methods. Thematic analysis identified challenges and opportunities in AI adoption, addressing ethical concerns, data privacy, and communication strategy development. Key findings emphasized AI'

The study by Volarić, T., Tomić, Z., & Ljubić, H. (2024) aimed to examine the impact of artificial intelligence on the field of public relations through large language models (LLMs) and computer vision models, which integrate advanced tools that enhance work efficiency for PR practitioners in creative tasks by automating repetitive and time-consuming processes. The study identified 16 AI tools dedicated to public relations and content creation, contributing to improved work efficiency and communication strategies. By analyzing big data, AI provides insights into audience behavior and media trends, aiding in the development of more precise and effective communication strategies. The study emphasizes the transformative potential of AI in reshaping public relations practices, engagement, and content creation. Among its key findings was that integrating AI tools into public relations is not merely an efficiency improvement but a radical shift, as these tools reshape communication strategies by automating repetitive tasks, analyzing big data to derive deeper insights, and enhancing creativity and strategy, making PR practices smarter and more effective.

The study by Vanel, Z. (2023) aimed to explore the role of AI in enhancing the efficiency and performance of public relations practices, as well as to highlight the ethical considerations associated with the use of these technologies in the field. The study employed an analytical methodology to identify available tools and their applications, as well as to assess the ethical implications related to biases and stereotypes that may arise from AI implementation. The study reached several key conclusions, most notably AI's potential to automate processes and analyze data, thereby improving the efficiency of PR practices. It also stressed the importance of maintaining a human touch in communication and relationship-building, emphasizing the need for ethical AI system design that considers diversity and transparency to ensure responsible use.

The study by Drar, Khaled, & Al-Danani, Abdulmalik (2023) sought to identify the extent of AI technology usage in public relations in Arab countries. The study used a survey methodology through a questionnaire distributed to a sample of 142 PR professors in the Arab world. Among its key findings was the confirmation of AI's potential in the professional practice of public relations, particularly in assisting with designing advertisements based on the preferences, interests, and interaction patterns of target audiences, scheduling digital PR campaigns, and monitoring and analyzing organizational coverage in digital media.

The study by Sebastião (2020) aimed to explore and highlight public relations and communication practitioners' understanding and perceptions of artificial intelligence, as well as their views on its impacts, challenges, and risks on the profession. Methodologically, the study relied on the EACD database and disseminated it to the professional community through national research collaborators in Portugal. The study yielded several key findings, most notably that practitioners perceive a greater impact from the adoption of AI in how the communication and public relations professions should adapt (macro level). Additionally, the lack of skills among PR practitioners has posed obstacles hindering the use of artificial intelligence technologies in public relations practice.

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Panda, G., Upadhyay, A. K., & Khandelwal, K. (2019) aimed to examine the impact of AI applications in the public relations industry, focusing on AI-based systems and their role in causing strategic disruption in PR. The study relied on semi-structured qualitative interviews with 31 PR professionals, supplemented by insights from research papers, articles, and relevant case studies. Among its key findings were that AI-powered systems can scan social media, intelligently handle inquiries, and post real-time responses to clients. They also save time on routine tasks such as creating media lists, scheduling meetings, and sending follow-up emails, thereby enhancing the efficiency of public relations activities.

Study Terms:

Artificial Intelligence (AI) Techniques:

AI techniques refer to computer systems and software capable of simulating human intelligence through learning, reasoning, decision-making, and problem-solving. These technologies include fields such as machine learning, natural language processing (NLP), computer vision, predictive analytics, and other applications that enhance processes and decision-making across various sectors, including public relations.

Saudi Institutions:

This term refers to all organizations in both the public and private sectors, including government entities and private companies.

Public Relations (PR) Practice:

Operationally, the researcher defines PR practice as all the activities and tasks carried out by PR professionals within institutions.

Theoretical Framework:

Artificial Intelligence (AI):

Artificial Intelligence is a branch of computer science focused on developing systems and software capable of mimicking human cognitive functions such as learning, comprehension, and decision-making. This field relies on advanced technologies like machine learning and artificial neural networks, which enable systems to improve their performance over time by analyzing data and identifying patterns. (Russell, S., & Norvig, P. (2016).Artificial Intelligence: A Modern Approach (3rd ed.). Pearson.)

AI is defined as computational systems with the ability to perform processes that emulate human intelligence, such as learning, adaptation, synthesis, self-correction, and data analysis to carry out complex processing tasks. Several advanced technologies have contributed to advancing AI understanding, most notably natural language processing (NLP) and large language models (LLMs), which include applications like ChatGPT.

Analyzing the Functions of Artificial Intelligence in Public Relations According to the OSPC Model:

This model serves as a comprehensive theoretical framework for analyzing and predicting the changes brought about by artificial intelligence in public relations by emphasizing the interplay between four key factors: Organization, Situation, Public, and Communication. The model

assumes that effective public relations practices are influenced by the interaction of these factors, enabling a more detailed examination of public relations dynamics. Below is a conceptual map of the OSPC model.

Organization	Situation	Public	Communication
Corporate Public Relations	Public: Relationship Management	Consumer: Consumer Relations	Corporate/Product Advertising, etc.
	Issues: Issue Management	Community: Community Relations	Monitoring & Surveys, Lobbying, etc.
	Crisis: Crisis Management	Media: Media Relations	Press Conferences, Apologies, etc.

Table 1) Example of Detailed Corporate Public Relations Practices According to the OSPC Model Jeong, J., & Park, N. (2023).

1. Organization

This element refers to the internal dynamics of an institution, including its organizational structure, culture, and policies, which influence the adopted communication strategies.

In the OSPC model, the "Organization" component refers to public relations efforts toward the external environment. AI can monitor and analyze vast amounts of data to better understand this environment and proactively respond to emerging trends and issues (Chung et al., 2020).

In crisis contexts, AI-powered tools—often called social listening or tracking tools—such as Brandwatch (used for deep text analysis on social media, trend monitoring, and comprehensive conversation understanding) provide deep insights into perceptions and trends. Another tool, Sprout Social, primarily manages customer interaction and communication, enabling users to track keywords, analyze engagement, and handle scheduling and analytics, with a focus on enhancing brand-customer interactions. Mention is another tool designed for online conversation tracking, allowing brands to monitor public discussions about them in real-time, making it ideal for rapid monitoring and immediate response to positive or negative feedback. Meanwhile, Talkwalker specializes in trend and sentiment analysis, offering in-depth social analytics with listening and data analysis tools. Its focus on providing insights into general trends and perceptions helps PR practitioners develop strategies.

On the other hand, the rapid advancement of AI may intensify competition, as organizations that fail to adapt to this technology risk falling behind in the fast-paced, competitive landscape that characterizes modern communication.

2. Situation Level

The Situation" component in the OSPC model refers to the external context in which an organization operates and carries out its PR efforts. AI can significantly influence situational factors by enabling organizations to analyze vast amounts of data to better understand the external environment and respond proactively to emerging issues.

During crises, AI-powered tools like Brand24 and Mention help identify and quickly address crises to minimize reputational damage. Sentiment analysis tools like IBM Watson also measure

public opinion and adapt PR strategies according to changes.

However, AI advancements may also increase competitive pressures, threatening organizations that fail to adapt to this technology.

3. Audience Level

The "Audience" component in the OSPC model addresses the diverse stakeholders an organization interacts, such as customers, employees, investors, and media (Smith, 2017). AI plays a crucial role in enhancing relationships with these groups by enabling more precise, personalized communication.

- For example, AI-powered chatbots like IBM's Watson Assistant provide instant, tailored responses to stakeholder inquiries, improving customer service and engagement (IBM, 2019).

- AI tools like Salesforce Marketing Cloud and IBM Watson Marketing help segment audiences and customize messages according to each stakeholder group's needs, increasing communication effectiveness (Liu et al.).

However, AI use in PR raises concerns about data privacy and potential manipulation. For instance, the Cambridge Analytica scandal demonstrated how personal data could be exploited for political purposes without consent, highlighting risks associated with AI in this field. While AI enhances personalized communication and customer service, it also introduces ethical concerns regarding privacy and data manipulation.

4. Communication

The "Communication" component in the OSPC model focuses on the strategies and techniques an organization uses to effectively communicate with target audiences and deliver its messages. AI technologies demonstrate significant potential in influencing PR communication by enabling more sophisticated and precise strategies.

For example, AI tools like Google's Dialogflow can be used in PR to improve customer service through automated responses to public inquiries, sentiment analysis in conversations, and customized messaging based on audience needs. It also automates communication processes by scheduling appointments and sending automatic notifications, enhancing operational efficiency. Dialogflow is a strategic tool that allows organizations to improve communication experiences with their audiences by leveraging AI technologies.

To achieve the highest levels of audience engagement and accomplish communication goals, it becomes essential to develop methods to enhance the efficiency of AI-generated content, in addition to evaluating the effectiveness of these techniques in improving audience interaction levels. Furthermore, studying the feasibility of AI-powered tools is crucial to understanding their impact on communication strategies in public relations, within the framework of using the OSPC model to analyze the role of AI in this field.

Challenges of the Public Relations Profession in the Age of Artificial Intelligence:

The practice of public relations faces numerous challenges amid the advancement of artificial intelligence (AI) technologies. Among these are skill- and expertise-related challenges, as PR practitioners struggle to keep up with rapidly evolving technologies, which may hinder their ability to efficiently utilize modern tools and software.

Additionally, concerns about job displacement due to intelligent systems replacing humans in

certain traditional tasks have sparked widespread anxiety among professionals.

Moreover, ethical issues pose significant challenges, particularly regarding privacy and potential biases in AI algorithms. This necessitates that PR specialists adopt a critical approach in analyzing data sources to ensure integrity and fairness, while also verifying the accuracy and transparency of communication to avoid misleading the public.

Other concerns include authenticity, transparency, data privacy issues, the ease of impersonation, and the dual role of AI: while it enhances efficiency, it also raises ethical concerns.

Furthermore, resources significantly impact the implementation of AI technologies, requiring advanced infrastructure, trained personnel, and sufficient budgets to ensure effective application. On the other hand, regulatory factors impose constraints on AI usage, such as government policies, privacy laws, and professional ethics, which may limit the scope of these technologies in organizations.

Research Methodology:

The study adopted quantitative approache to examine the use of AI technologies in public relations practices in Saudi Arabia.

Study Population: All PR practitioners in Saudi organizations.

Study Sample: The research was applied to a sample of PR practitioners consisting of 53 respondents and 12 interviewees—PR managers in Saudi organizations.

Research Tools: The study utilized one instrument: surveys

Reliability Statistics		
N of Items	**Cronbach's Alpha Based on Standardized Items**	**Cronbach's Alpha**
27	0.936	0.942

Table (1): Validity and Reliability of Data Related to the Study Tool (Cronbach's Alpha Coefficient)

This table confirms the high internal consistency and reliability of the study tool, as the Cronbach's Alpha coefficient (0.942) exceeds the acceptable threshold (typically 0.7 or higher), indicating strong reliability.

Table 1: Data Analysis:

The data in Table 1 shows that the overall reliability coefficient (Cronbach's Alpha) for the study questions is high, reaching 0.

Construct	Item	Corrected Item-Total Correlation
Employment	Q3.1	0.757**
	Q3.2	0.649**
	Q3.3	0.681**
	Q3.4	0.807**
	Q3.5	0.742**

	Q3.6	0.806**
	Q3.7	0.723**
	Q3.8	0.753**
	Q3.9	0.887**
	Q3.10	0.841**
Digital Reputation Management	Q4.1	0.856**
	Q4.2	0.720**
	Q4.3	0.789**
	Q4.4	0.894**
	Q4.5	0.904**
	Q4.6	0.906**
Skills	Q5.1	0.850**
	Q5.2	0.784**
	Q5.3	0.853**
	Q5.4	0.755**
Challenges	Q7.1	0.546**
	Q7.2	0.853**
	Q7.3	0.852**
	Q7.4	0.883**

Table 2): Internal Consistency Validity of the Study Tool (Pearson's Item-Total Correlation)

Internal Consistency refers to the degree to which each item in the questionnaire aligns with the dimension (construction) it belongs. The validity of internal consistency is verified by calculating Spearman's correlation coefficients between the score of each item within a dimension and the total score of that dimension. This process ensures the overall validity of the questionnaire.

The data in the previous tables display the correlation coefficients between each item in the tool's dimensions (Employment, Digital Reputation Management, Skills, and Challenges) and the total score of their respective dimensions. The results show that all correlation coefficients are statistically significant at $\alpha = 0.05$, confirming that these dimensions are valid for measuring what they were designed to assess.

Section One: Personal Data

Socio-demographic profile of the respondents (n = 53)		
Variables	Frequency	Percent
Gender		
Male	32	60.4
Female	21	39.6
Total	53	100.0
Age		
20-25	18	34.0
25-35	9	17.0
35-45	14	26.4
45-55	9	17.0

< 55 years	3	5.7
Total	53	100.0
Experience		
> 5 years	23	43.4
5-10	7	13.2
10-15	8	15.1
15-20	9	17.0
< 20 years	6	11.3
Total	53	100.0
institution		
Government sector	24	45.3
Private sector	13	24.5
A sector of a special nature	16	30.2
Total	53	100.0
Job description		
Administration Manager	8	15.1
Assistant manager	5	9.4
Head of department	4	7.5
Advisor	4	7.5
Public Relations Specialist	20	37.7
practitioner	12	22.6
Total	53	100.0

The study was conducted on a sample of public relations workers in organizations that include the government sector and the private sector, represented by companies and private institutions in the Kingdom of Saudi Arabia. During the selection of the sample, it was observed that the participants had different demographic characteristics (gender, age, experience, etc.) at approximately the same rate.

Section Two: Descriptive Statistics of the Study Questions

First question: To what extent are artificial intelligence applications used in public relations work?

Subgroup		Frequency	Percent
	Always	20	37.7
	sometimes	27	50.9
	Rarely	6	11.3
	Total	53	100.0

Table (3): Frequencies and Percentages of The Rate of Use (Study Sample) Of Artificial Intelligence Applications in Public Relations Work.

The data in Table No. (3) shows that 50.9% of public relations professionals in organizations

across both the government sector and the private sector, represented by companies and institutions in Saudi Arabia, the study's sample, use AI applications in public relations work moderately (sometimes). Meanwhile, 37.3% reported high usage (always), while low usage (rarely) came in at 11.3%.

This finding aligns with the study by Volarić & Ljubić (2024), which emphasized that integrating AI tools into public relations is not merely an efficiency improvement but rather a radical transformation. These tools are reshaping communication strategies by:

- Automating repetitive tasks,

- Analyzing big data to extract deeper insights, and

- Enhancing creativity and strategy,

thereby making PR practices smarter and more effective.

This finding aligns with a study by Saber (2022), which confirmed that public relations practitioners are aware of the importance of employing AI applications in banks and that they are fully knowledgeable about the use of AI in the public relations industry in general and are comfortable with it.

This finding contradicts a study by Mahmud & Rashid H. 2025), which emphasized that the use of AI in public relations in Bangladesh is not as widespread as expected. Additionally, there is a lack of sufficient knowledge among PR practitioners regarding AI.

Question Two: To what extent are artificial intelligence applications used in crisis prediction?

Subgroup		Frequency	Percent
	Always	19	35.8
	sometimes	26	49.1
	Rarely	8	15.1
	Total	53	100.0

Table (4): Frequencies and Percentages of the Study Sample's Usage Rate of Artificial Intelligence Applications in Crisis Prediction

The data in the table shows that 49.1% of (public relations professionals in organizations across both the government and private sectors—represented by companies and institutions in Saudi Arabia)—the study sample—use AI applications for crisis prediction to a moderate degree (sometimes). In comparison, 35.8% use them to a high degree (always), and finally, 15.1% use them to a low degree (rarely).

This finding aligns with a study by Muhortov (D. 2024), which confirmed that AI enhances decision-making speed, helping organizations respond to crises more quickly. It also improves the quality and objectivity of decision-making processes by reducing human biases, lowering operational costs, and making crisis management more efficient.

Question 3: To what extent are AI applications employed in public relations practices?

No	Use of AI Applications	Mean	Std. Deviation	General Trend
1	**Using AI applications for data analysis**	**4.43**	**0.721**	**Strongly agree**
2	**Using AI applications in preparing digital PR campaigns**	**4.25**	**0.806**	**Strongly agree**
3	**Using AI applications for media monitoring of the organization**	**4.36**	**0.811**	**Strongly agree**
4	**Using AI applications to respond to customer inquiries**	**4.00**	**1.038**	**Agree**
5	**Using AI applications for scheduling meetings**	**4.04**	**1.073**	**Agree**
6	**Using AI applications for task follow-up**	**4.09**	**0.791**	**Agree**
7	**Using AI applications to enhance content writing**	**4.09**	**1.043**	**Agree**
8	**Using AI applications in designing media materials**	**4.26**	**0.880**	**Strongly agree**
9	**Using AI applications to assess situations**	**3.85**	**1.081**	**Agree**
10	**Using AI applications to respond to rumors**	**3.79**	**1.230**	**Agree**
Total	**Overall Use of AI Applications**	**4.12**	**0.730**	

Table 5: Mean and Standard Deviation of the Extent of AI Application Use in Public Relations Practices.

Table 5 presents the responses of the study sample regarding the use of artificial intelligence (AI) applications in public relations practice. The arithmetic means for this variable ranged between 3.79 – 4.43, with an overall mean of 4.12 on a five-point Likert scale and a standard deviation of 0.730. All responses to the questionnaire items on employing AI applications in public relations practice indicated an "Agree" level of approval.

The statement "I use AI applications for data analysis" ranked first, with an arithmetic mean of (4.43)—the highest among all statements related to AI applications in public relations, along with a standard deviation of (0.721) and an approval level of "Strongly Agree."

Use of AI Applications	Attitude	Frequency	Percentage
	Strongly agree	227	42.8%
	Agree	187	35.3%
	Neutral	76	14.3%
	Disagree	31	5.8%
	Strongly disagree	9	1.7%

Table (6): Percentage Distribution of the Sample's Responses To Statements on The Extent of Employing AI Applications in Public Relations Practice.

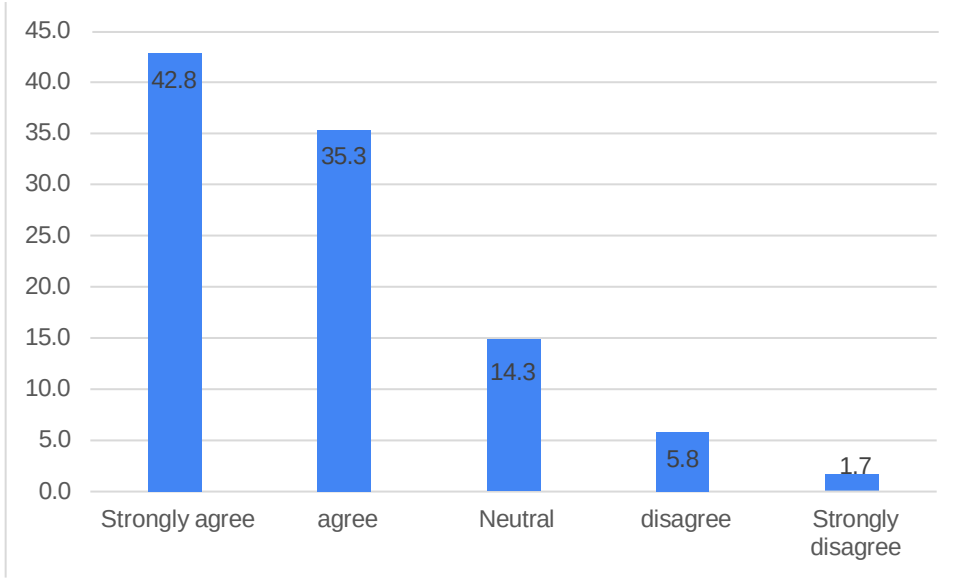


Figure 1

To confirm the previous finding, we analyzed the responses of the study sample regarding the extent to which AI applications are employed in public relations practices. The combined percentage of respondents who answered "Strongly agree" and "Agree" was 78.1%, indicating the overall trend of the sample. This percentage is significantly higher compared to the 7.5% who responded, "Strongly Disagree" and "Disagree" (excluding the "Neutral" responses), which was reflected in the item averages and the overall mean.

This result aligns with the study by Yassen, S. B. (2025), which confirmed that AI has the potential to significantly enhance public relations practices. It also agrees with Vanel, Z. (2023), who highlighted AI's ability to automate processes and analyze data, thereby improving the efficiency of PR practices. Furthermore, it is consistent with Taha (2023), who found that most PR practitioners acknowledge the connection between their work and AI technologies. Finally, it supports the findings of Panda & Khandelwal (2019), which demonstrated that AI enhances the effectiveness of public relations activities.

Question Four: Digital Reputation Management Through the Use of AI Applications

Table 00: Mean and standard deviation of 00

No	Digital Reputation Management	Mean	Std. Deviation	General Trend
1	**Media analysis is linked to digital reputation**	**4.30**	**0.868**	**Strongly agree**
2	**Monitoring social media platforms**	**4.36**	**0.811**	**Strongly agree**
3	**Creating a database of media organizations**	**4.32**	**0.850**	**Strongly agree**
4	**News dissemination**	**4.15**	**0.988**	**Agree**
5	**Interaction with media**	**4.13**	**1.020**	**Agree**
6	**Participation in promotional campaigns**	**4.21**	**0.927**	**Strongly**

	on social media			**agree**
Total		**4.24**	**0.733**	

Table 7: Mean and Standard Deviation of Digital Reputation Management Through the Use of AI Applications

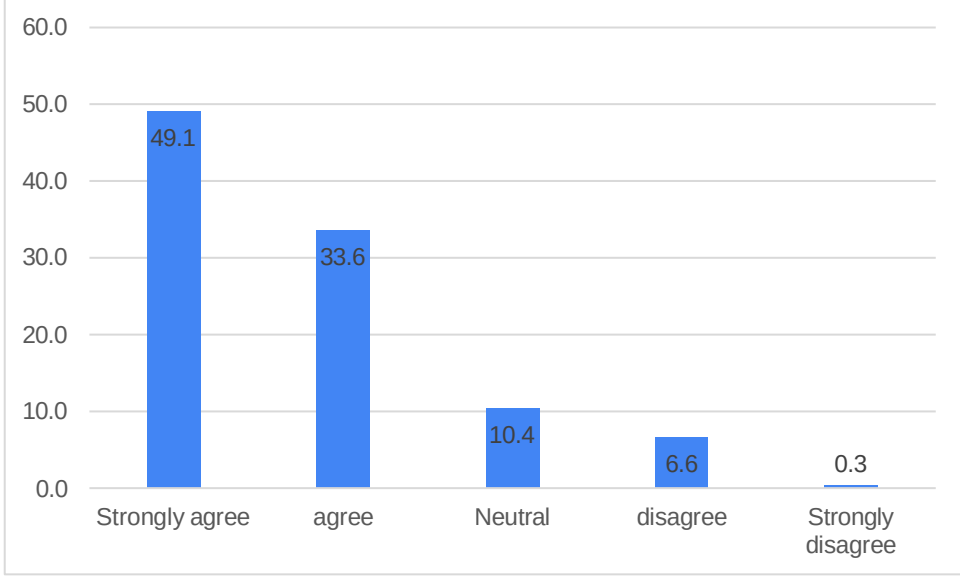
Table 7 presents the study sample's responses to statements regarding digital reputation management through AI applications. The arithmetic means for this variable ranged between 4.13 – 4.36, with an overall mean of 4.24 on a five-point Likert scale and a standard deviation of 0.733. The responses indicated "Strongly Agree" for all questionnaire items related to digital reputation management using AI applications.

The statement "Monitoring social media platforms" ranked first, achieving the highest mean score of 4.36 among all digital reputation management statements, with a standard deviation of 0.811 and an agreement level of "Strongly Agree."

Digital Reputation Management	Attitude	Frequency	Percentage
	Strongly agree	156	49.1%
	Agree	107	33.6%
	Neutral	33	10.4%
	Disagree	21	6.6%
	Strongly disagree	1	0.3%

Table (8): Percentage Distribution of Sample Responses on Digital Reputation Management Statements Using AI Applications

Table 00 Distribution of percentages of sample answers to



To confirm the previous findings, we analyzed the response rates of the study sample regarding digital reputation management through the use of AI applications. The combined percentage of respondents who selected "Strongly agree" and "Agree" was 82.7%, indicating a strong positive trend among participants. This figure is significantly higher compared to the 6.9% who chose

"Strongly Disagree" and "Disagree" (excluding neutral responses), which was reflected in both individual item scores and the overall average.

This finding aligns with the study by Muhortov (2024), which confirmed that AI is used in public relations to automate repetitive tasks, such as content creation, data analysis, and predicting audience trends, helping to personalize messages and refine strategies.

Similarly, the results are consistent with research by Apkhaidze & Gumberidze (2024), which highlighted that AI significantly enhances PR effectiveness by improving audience engagement and enabling more precise and efficient reputation management.

Additionally, this outcome supports the study by Drar, Khalid, & Al-Danani, Abdulmalik (2023), which emphasized the potential of AI in professional PR practices, including:

- Assisting in ad design based on audience preferences, interests, and interaction patterns.

- Scheduling digital PR campaigns.

- Monitoring and analyzing organizational mentions across digital media platforms.

Question Five: The Necessary Skills for PR Practitioners to Utilize AI Technology Applications

No	Skills	Mean	Std. Deviation	General Trend
1	Ability to use modern technologies	4.70	0.540	Strongly agree
2	Ability for critical and creative thinking	4.53	0.575	Strongly agree
3	Ability to work with interactive platforms and AI programs	4.64	0.591	Strongly agree
4	Adherence to professional ethics	4.60	0.599	Strongly agree
Total		**4.61**	**0.466**	

Table (9): Mean and Standard Deviation of the Necessary Skills for PR Practitioners to Utilize AI Technology Applications

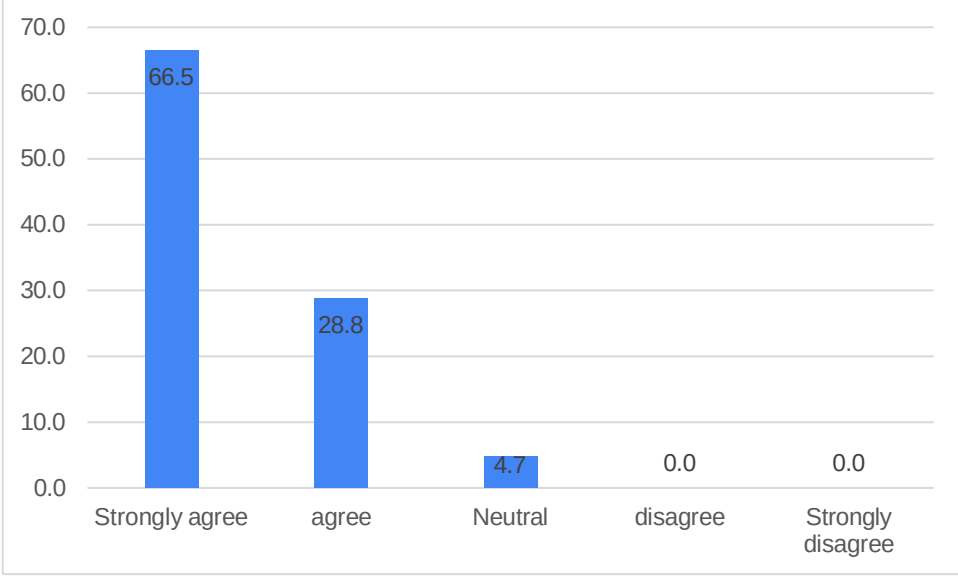
Table (9) presents the study sample's responses regarding the skills required for public relations professionals to utilize AI technology applications. The arithmetic means for this variable ranged between **(4.70 – 4.53)**, with an overall mean of **(4.61)** on a five-point Likert scale and a standard deviation of **(0.466)**. All responses to the questionnaire items related to **the necessary skills for applying AI technology in public relations** showed a **"Strongly Agree"** level of agreement.

The statement **"Ability to use modern technologies"** ranked first with a mean score of **4.70,** the highest among all skill-related statements, along with a standard deviation of **0.540** and an agreement level of **"Strongly Agree."**

Skills	Attitude	Frequency	Percentage
	Strongly agree	141	66.5%
	Agree	61	28.8%
	Neutral	10	4.7%
	Disagree	0	0.0%
	Strongly disagree	0	0.0%

Table 10: Percentage Distribution of Sample Responses Regarding Necessary Skills for Applying AI Technology Among Public Relations Employees

Table 00: Distribution of percentages of sample answers to



To confirm the previous findings, we examined the percentages of respondents' answers regarding the necessary skills for using AI applications among public relations employees. The combined percentage of respondents who answered, "Strongly agree" and "Agree" was 95.3%, indicating the study sample's overall tendency. This percentage is significantly higher compared to 0.0% for "Strongly Disagree" and "Disagree" (excluding "Neutral" responses), which was reflected in the item means and the overall average.

This result aligns with the study by Sebastião, S. P. (2020), which emphasized that the lack of skills among PR practitioners has been a barrier preventing the effective use of AI technologies in public relations practices.

Question Six: In your opinion, can artificial intelligence be implemented in all Saudi institutions?

Subgroup	Frequency	Percent
Yes	**44**	**83%**
No	**9**	**17%**
Total	**53**	**100.0%**

Table (10): Frequencies and Percentages of the Study Sample's Views on the Feasibility of Implementing AI in All Saudi Institutions.

The table data reveals that **83% of public relations professionals in organizations across both the government and private sectors (represented by companies and institutions in Saudi Arabia)**—the study sample—confirm the feasibility of implementing artificial intelligence in all Saudi institutions. Meanwhile, **17% of respondents disagree (reject the idea)**.

This finding aligns with a **2024 study by Muhortov, D.**, which emphasized the readiness of Russian organizations to adopt these technologies while identifying the associated **challenges and drivers**

Question Seven: Challenges Facing the Use of AI Applications in Public Relations Practice

No	Challenges	Mean	Std. Deviation	General Trend
1	Lack of professional expertise	4.62	0.627	Strongly agree
2	Absence of training programs on AI applications	4.45	0.722	Strongly agree
3	Lack of top management interest in AI applications	4.49	0.800	Strongly agree
4	Insufficient budget allocation for AI applications	4.47	0.799	Strongly agree
Total		**4.50**	**0.586**	**Strongly agree**

Table (11): Mean and Standard Deviation of Challenges Facing the Use of AI Applications in Public Relations Practice

Table 00: Mean and standard deviation of 00

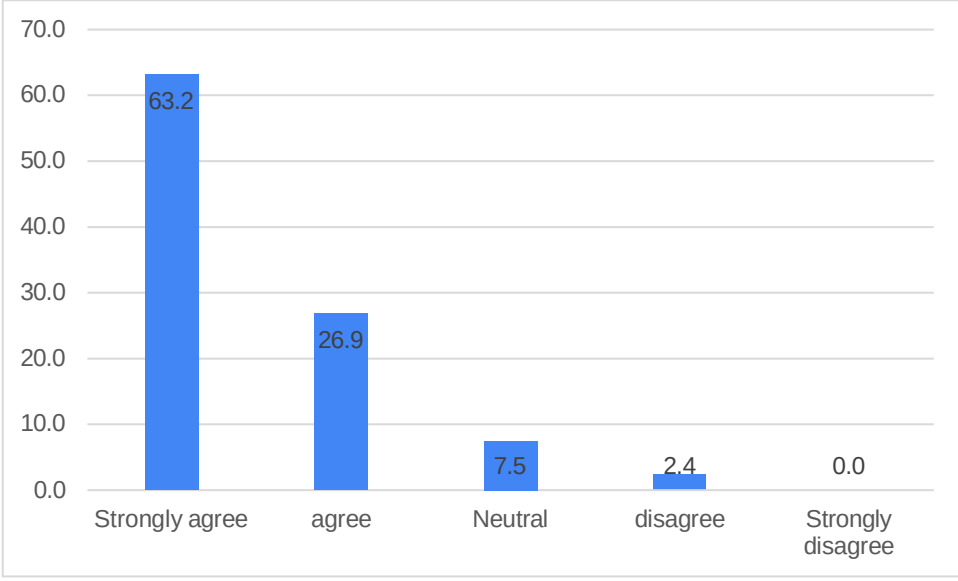
Table 11 presents the study sample's responses to statements regarding the challenges faced when using AI applications in public relations practice. The arithmetic means for this variable ranged between **(4.45 – 4.62)**, with an overall mean of **(4.50)** on a five-point Likert scale, a standard deviation of **(0.586)**, and an agreement level of **"Strongly Agree"** for all responses to the questionnaire items on AI application challenges in public relations.

The statement **"Lack of professional expertise"** ranked first, with a mean of **(4.62)**—the highest among all statements on **digital reputation management using AI applications**—a standard deviation of **(0.627)**, and an agreement level of **"Strongly Agree."**

Challenges	Attitude	Frequency	Percentage
	Strongly agree	134	63.2%
	Agree	57	26.9%
	Neutral	16	7.5%
	Disagree	5	2.4%
	Strongly disagree	0	0.0%

"Table (12) Percentage Distribution of Sample Responses on The Challenges Facing the Use of AI Applications in Public Relations Practice"

Table 00: Distribution of percentages of sample answers to



To confirm the previous findings, we examined the distribution of respondents' answers regarding the challenges of using AI applications in public relations practice. The combined percentage of respondents who selected **"Strongly agree"** and **"Agree"** was **90.1%**, indicating a strong consensus within the study sample. This figure is significantly high compared to the **2.4%** who chose **"Strongly Disagree"** and **"Disagree"** (excluding neutral responses), which was reflected in the item averages and the overall mean.

This result aligns with the study by **Yassen, S. B. (2025)**, which emphasized that AI introduces new challenges, particularly concerning **data security and privacy**.

Additionally, **Muhortov, D. (2024)** highlighted a critical finding: AI faces **ethical challenges related to transparency and accuracy**, along with the risks of **over-reliance on AI**, as it cannot **build relationships** or **craft compelling narratives** the way humans can.

Section 3: Correlation Relationships

Descriptive Statistics			
	Mean	Std. Deviation	N
Q1	2.26	.655	53
Q2	2.21	.689	53
Q3	4.1170	.73031	53
Q4	4.2453	.77391	53
Q5	4.6179	.46669	53
Q7	4.5094	.58622	53

Table 12:

Correlations							
		Q1	Q2	Q3	Q4	Q5	Q7
Q1	Pearson Correlation	1	.515**	.272*	.376**	-.009	-.082
	Sig. (2-tailed)		.000	.049	.006	.946	.561
	N	53	53	53	53	53	53
Q2	Pearson Correlation	.515**	1	.593**	.491**	.162	.328*
	Sig. (2-tailed)	.000		.000	.000	.248	.016
	N	53	53	53	53	53	53
Q3	Pearson Correlation	.272*	.593**	1	.827**	.320*	.548**
	Sig. (2-tailed)	.049	.000		.000	.020	.000
	N	53	53	53	53	53	53
Q4	Pearson Correlation	.376**	.491**	.827**	1	.449**	.458**
	Sig. (2-tailed)	.006	.000	.000		.001	.001
	N	53	53	53	53	53	53
Q5	Pearson Correlation	-.009	.162	.320*	.449**	1	.440**
	Sig. (2-tailed)	.946	.248	.020	.001		.001
	N	53	53	53	53	53	53
Q7	Pearson Correlation	-.082	.328*	.548**	.458**	.440**	1
	Sig. (2-tailed)	.561	.016	.000	.001	.001	
	N	53	53	53	53	53	53
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Key Findings on AI Applications in Public Relations:

1- A statistically significant correlation exists between PR professionals' usage rate of AI applications in PR work and their actual implementation in PR practices ($r=0.272$, $p<0.05$), though the effect size is small ($r<0.3$).

2- A statistically significant moderate correlation was found between PR professionals' use of AI applications and digital reputation management ($r=0.374$, $p<0.01$).

3- A statistically significant strong correlation exists between PR professionals' use of AI for crisis prediction and its implementation in PR practices ($r=0.593$, $p<0.001$).

4- A statistically significant moderate-to-strong correlation was found between AI use for crisis prediction and digital reputation management ($r=0.491$, $p<0.001$).

5- A statistically significant small-to-moderate correlation exists between AI used for crisis prediction and the challenges faced by PR professionals ($r=0.328$, $p<0.05$).

6- A statistically significant small-to-moderate correlation was found between AI implementation in PR practices and the required skills of PR professionals in organizations ($r=0.320$, $p<0.05$).

Summary of Findings

The study reached the following conclusions:

1. **Varied Adoption of AI in PR**:

-AI applications in Saudi organizations' public relations are used unevenly.

-Highest usage is in **content creation** and **data analysis**, while adoption remains limited in some institutions.

2. **AI as a Support Tool, not a Replacement**:

-Most practitioners view AI as a **supportive tool** to enhance efficiency and performance, **not a substitute** for human roles.

3. **Digital Reputation Management Relies on AI**:

-Tools for digital reputation management heavily depend on **social listening** and **sentiment analysis** via social media platforms.

4. **Statistically Significant Correlations**:

-AI application usage correlates strongly with:

Digital reputation management.Crisis prediction.

Professional skills development.

Organizational challenges.

Acknowledgement

This work was supported and funded by the Deanship of Scientific Research at Imam Mohammad Ibn Saud Islamic University (IMSIU) (grant number IMSIU-DDRSP2504).

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