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#### ARTICLE

# How AI Is Being Used in Universities: PR Department's Perspective

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#### ABSTRACT

In universities, AI provides intelligent solutions to improve interactions with students and professors from diverse cultures, enhancing the user experience and making the academic environment more inclusive and open to linguistic and cultural diversity PR. The study aims to analyze the use of Artificial Intelligence in Public Relations departments at universities, focusing on the current state and the challenges faced. This research falls under the category of descriptive studies, and the survey method was used to gather data. The study population consisted of public relations practitioners from several Middle East universities (Jordan, UAE); an intentional sample of 65 practitioners was selected, and data was collected using a questionnaire. Results revealed that only 17% of public relations practitioners in universities possess extensive knowledge of artificial intelligence techniques. AI into media operations could help enhance the dissemination of information, improve audience targeting, and foster more interactive and personalized communication experiences in Middle East universities. Additionally, the study emphasized the importance of AI dialogue and language exchange as essential elements to enhance the integration of AI in public relations enhancing cultural exchange efforts by analyzing common languages and dialects and simplifying them into a common language for all. Among the critical challenges identified was the practitioners' which hinders the effective use of AI. The study recommends using AI tech-

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nologies to enhance public relations work in universities and integrating AI dialogue systems and language exchange mechanisms to enhance communication and service delivery.

Keywords: Artificial Intelligence; Public Relations; Jordan; Descriptive Research; Higher Education

#### 1. Introduction

Over the past four decades, the world has experienced remarkable advancements in various fields, profoundly impacting individuals, institutions alike. An unprecedented technological and information revolution drives these changes, compelling countries and organizations to embrace these innovations due to their significant positive effects on performance and development <sup>[1]</sup>. Because of this, there are now few technological obstacles to cross-border service and knowledge exchange, making the world a global village <sup>[2]</sup>. Numerous facets of life have changed as a result of the information revolution, which was sparked by the development of the internet and artificial intelligence <sup>[3]</sup>. In particular, artificial intelligence has impacted many domains, changing the public relations scene<sup>[4]</sup>. Because AI tools have forced a new reality on the industry, public relations professionals are embracing these tools to gain a competitive advantage <sup>[5]</sup>. AI is being used more and more by people for a variety of tasks. Benefiting from unique opportunities to measure public perceptions, gather feedback, and reveal smart insights <sup>[6]</sup>. AI's strength lies in its data-driven methodology, which promotes creative solutions, improved planning, and quicker knowledge exchange in the field of public relations-especially in light of the current technological revolution that is set to further revolutionize the industry <sup>[7]</sup>. As a crucial component of institutional media, public relations provides fertile ground for the growth of AI technologies, which have become essential in all facets of life, particularly in public relations <sup>[8]</sup>. The integration of AI in public relations work is accelerating rapidly, becoming a vital strategy for augmenting human capabilities with automated technology<sup>[9]</sup>. This enhances the effectiveness of public relations activities, ensuring survival, continuity, and adaptation to digital technology<sup>[10]</sup>. AI facilitates the transformation of data, whether numbers, audio, or video-into text within seconds, creating content, designing campaigns, managing crises, and anticipating potential crises before they escalate<sup>[11]</sup>. It automates routine tasks, targets audiences more precise- to diverse audiences by Boerman et al. <sup>[14]</sup>. These technolo-

ly, and enables effective customer communication through instant responses to inquiries and interactions <sup>[12]</sup>. These developments strongly justify the need for the current study, which aims to explore the extent to which AI techniques are employed in public relations within universities <sup>[6]</sup>. Whether in the public or private sector, public relations are an essential part of any organization's administrative and communication process, and it is especially impacted by contemporary technological advancements that facilitate its operations. By creating more precise and effective strategies, the use of AI applications can greatly improve institutional performance and promote growth and development<sup>[12]</sup>. The significance of public relations in organizations has increased as a result of global technological changes, and it is now urgently necessary to incorporate cutting-edge mechanisms and new applications <sup>[4]</sup>. AI represents the pinnacle of digital progress, enriching all aspects of life and various scientific fields. Integrating public relations and AI has resulted in a pivotal shift within organizations, allowing tasks to be completed more quickly and efficiently through advanced, less costly, and labor-intensive tools <sup>[4]</sup>. AI's role in public relations has become a driving force for human development and a crucial requirement for institutional adaptation <sup>[13]</sup>. AI also contributes to enhancing the international student experience by improving admissions processes, providing advanced language support, and enabling AI-powered adaptive learning. For example, instant translation and voice recognition technologies enable students who do not speak the language of instruction to easily understand academic material, enhancing the inclusiveness of education at global universities <sup>[4]</sup>. AI tools also help analyze data on student performance and provide personalized recommendations to improve their learning, making the educational process more adaptive to individual needs. Furthermore, AI plays a crucial role in crafting multilingual media content<sup>[12]</sup>. Advanced AI systems enable universities to create press releases, digital content, and promotional publications in multiple languages, contributing to the clear and accurate delivery of media messages

gies help maintain consistency in communication messages across various media channels, contributing to building a strong university reputation. Furthermore, AI-powered dialogue and language exchange are essential elements for enhancing AI integration in public relations and its practitioners' work, enhancing cross-cultural exchange efforts by analyzing common languages and dialects and simplifying them into a common language for all in the work of public relations firms in Jordan<sup>[15]</sup>. This study aims to identify the extent of public relations awareness of artificial intelligence techniques within Middle East universities and examine the advantages of employing these technologies <sup>[16]</sup>. It also seeks to explore the proposals offered by public relations practitioners in Middle East universities regarding adopting AI tools while identifying the obstacles they face in implementing these techniques. Furthermore, the study aims to pinpoint the areas within Jordanian& UAE universities that most need AI technology from the perspective of public relations practitioners. This study, therefore, seeks to answer the primary question: To what extent are artificial intelligence techniques employed in the public relations departments of Middle East universities, considering both the current reality and the obstacles faced?

#### 2. Literature Review

#### 2.1. Public Relations in Universities

Public relations play a vital role in academic institutions, contributing to building a positive public image and enhancing communication among various components of the university community, including students, academics, administrators, and the wider community <sup>[17]</sup>. Public relations is not merely a promotional tool; it is a strategic function aimed at managing institutional reputation and fostering positive interaction between the university and its internal and external audiences. University public relations also serve as a bridge connecting the university administration, its students, faculty members, and the general public <sup>[18]</sup>. It promotes transparency, instills academic values, and highlights educational and research achievements <sup>[19]</sup>. Through this function, universities seek to build trust and consolidate long-term relationships with stakeholders, ensuring community support and the institution's continued

public relations is managing internal communication. It works to foster effective dialogue within the academic institution and provide clear information channels between various departments, which positively impacts the work environment and enhances loyalty and employee engagement. It also contributes to raising students' awareness of their rights and responsibilities, and providing them with psychological and educational support through targeted communication initiatives and programs. Regarding external communication, public relations contribute to promoting the university's image in the community by organizing academic and cultural events, managing media campaigns, cooperating with the media, and partnering with the public and private sectors. Public relations also play a role in attracting international students by promoting academic and research programs, which enhances the university's global competitiveness. According to Al Jwaniat et al. (2023), the importance of public relations is increasing in the era of digital transformation, as universities increasingly rely on digital platforms and social media to engage with their audiences [22]. In this context, public relations work to produce visual and written media content that is compatible with various digital platforms and reflects the university's vision and mission in an attractive and effective manner. It also monitors online impressions and reactions and responds quickly to potential crises or complaints. Tahat et al. (2023) believe that in addition, public relations are considered a pivotal tool in managing university crises, whether academic, social, or health-related, as it develops well-thought-out communication plans that ensure business continuity and enhance public confidence in the university's ability to deal with challenges <sup>[23]</sup>.

#### 2.2. Integration of AI in Public Relations in **Global Context**

In recent years, the field of public relations has witnessed a radical transformation due to the rapid developments in artificial intelligence (AI) technologies, which have changed the nature of corporate communication and reshaped communication strategies worldwide <sup>[24]</sup>. AI is now an indispensable strategic tool for improving the efficiency of communication processes, enhancing corporate responsiveness, and expanding engagement with diverse, mission <sup>[20,21]</sup>. One of the primary functions of university multicultural, and multilingual audiences <sup>[25]</sup>. Globally,

AI has helped government, educational, and private sector institutions analyze massive audience data, understand behavioral patterns, and accurately target media messages, enhancing corporate reputation and public loyalty <sup>[4]</sup>. Public relations is no longer limited to issuing press releases and organizing conferences; it increasingly relies on intelligent tools for sentiment analysis, automating content production, monitoring media engagement, and crafting corporate discourse <sup>[26]</sup>. In the context of globalization, AI has played a crucial role in enhancing multilingual communication, through AI-powered instant translation systems such as Google Translate and DeepL, which enable organizations to overcome language barriers and engage efficiently with global audiences <sup>[27]</sup>. This role is increasingly important in university environments and educational institutions that attract students and academics from multiple linguistic backgrounds, making the use of AI essential to achieving consistency and clarity in corporate discourse [8]. AI-powered content automation has also saved time and effort for public relations teams, with tools like GPT-4 and Jasper AI generating initial drafts of press releases, campaign texts, and social media posts. This allows public relations practitioners to focus on creative and strategic tasks <sup>[28–30]</sup>.

#### 2.3. AI in Public Relations

In general, the field of public relations is considered a highly developed field due to artificial intelligence technologies, which have reshaped corporate communication methods and brought about radical changes in the planning, implementation, and measurement of the effectiveness of communication campaigns <sup>[30]</sup>. AI has become one of the essential tools that modern organizations rely on to enhance their ability to interact with their internal and external audiences efficiently, accurately, and quickly <sup>[29]</sup>. At its core, AI enables public relations practitioners to analyze massive amounts of data to understand audience behavior, needs, and expectations <sup>[31]</sup>. Data analysis algorithms, machine learning, and natural language processing (NLP) provide deep insights that help design more personalized and impactful communication strategies <sup>[32]</sup>. One of the most prominent applications of AI in public relations is sentiment analysis tools, which enable monitoring of public reactions on various digital platforms, including social context of media messages and determine whether they elicit positive or negative reactions, enabling public relations professionals to make quick and effective decisions. AI systems are also being used to automate content production, with intelligent programs, such as GPT-4, able to write press releases, craft media messages, and edit digital publications in a manner consistent with corporate style <sup>[34]</sup>. This does not diminish the importance of the human role; rather, it allows specialists to focus on the creative and planning aspects of content [35,36]. Furthermore, AI has contributed to improved crisis management through its ability to predict negative trends before they escalate. Intelligent systems can detect early warning signs, such as a rise in complaints or a rise in negative tone in online interactions, enabling specialized teams to develop an effective response plan in a timely manner <sup>[37]</sup>. AI has also enabled the personalization of communication messages based on accurate audience analysis. For example, communication campaign content can be customized by age group, interests, or language, ensuring the message is delivered in a more effective manner<sup>[38]</sup>. AI is an important tool that can transform the way universities, including the public relations department, operate through catboats that can be used to answer potential and current student inquiries around the clock, easing the burden on staff <sup>[39]</sup>. The public relations department can also lead efforts to spread knowledge about AI initiatives within the university. AI can be used to create interactive content that enhances the learning experience and reflects the university's efforts in technological integration [11]. AI enhances breaking down language barriers by providing instant automatic translation tools and media discourse language <sup>[40]</sup>. AI can also be used to create virtual experiences for students to learn about different cultures, enhancing cultural exchange efforts by analyzing common languages and dialects and simplifying them into a common language for all <sup>[41,42]</sup>.

# 2.4. AI for Conversation, Language Exchange at Universities

and impactful communication strategies <sup>[32]</sup>. One of the most prominent applications of AI in public relations is sentiment analysis tools, which enable monitoring of public reactions on various digital platforms, including social media <sup>[33]</sup>. These analyses help understand the emotional <sup>[32]</sup>. One of the AI has rather significantly modified the landscape of higher education, especially in dialogue systems, language exchange, and integrating technology <sup>[12]</sup>. Such improvements offer universities novel tools to improve communication, foster diversity, and build a common digital space

the most visible AI applications in higher education institutions involve dialogue systems enabled by NLP<sup>[43]</sup>. These include chatbots and virtual assistants, enhancing realtime student interactions and facilitating administrative tasks more smoothly <sup>[38]</sup>. For example, AI-driven chatbots can support frequently asked questions, course registration guidance, and student issues around the clock <sup>[10]</sup>. This makes the work easier on the administration while increasing efficiency and accessibility. The conversational AI interfaces have also greatly improved in their ability to handle sophisticated queries and provide responses personalized to individual users, leading to increased user satisfaction. One of the major problems in any multicultural academic environment is the problem of language barriers. AI has bridged this gap with language exchange applications and translation technologies <sup>[44]</sup>. Tools like Google Translate and AI-driven platforms such as Duo lingo enable students from diverse linguistic backgrounds to communicate and collaborate effectively <sup>[12,43,45]</sup>. Meanwhile, the AI can find a place in universities' cross-cultural interactions by employing AI-powered language exchange programs which would help students find their ideal match according to their proficiency and learning motives [46]. This would not only strengthen language acquisition and cultural exchange, but also include more diversity on the university campus, as stated by Faridi and Malik<sup>[47]</sup>. AI integrated into the technology system in universities created unified, intelligent ecosystems, allowing easy facilitation of several processes. AI strengthens Learning Management Systems, or LMSs, to facilitate customized learning experiences, automated grading systems, and enables performance analysis for better decisions on behalf of the student by using big data analytics. From the point of view of public relations, AI-enabled tools can have university departments run analysis over social media trends and public sentiments and enable outreach strategies to be optimized <sup>[34]</sup>. For example, sentiment analysis tools allow university PR teams to understand audience reactions to campaigns for more effective and efficient communication efforts <sup>[12,44]</sup>. In addition, AI integration ensures seamless interoperability between different technological platforms, hence improving the overall efficiency of administrative and academic

for students, faculty members, and administrators. Some of language exchange development, and integration of technology, hence giving universities new avenues for transformation. These technologies address challenges in not only administrative and linguistic spheres but also help in making campuses barrier-free, effective, and technologically sound. As AI technology will continue to evolve, applications in higher education will rise and further enrich the academic experience of all stakeholders <sup>[42]</sup>.

#### 2.5. Theory of Replacing Jobs with AI

The theory of replacing jobs with artificial intelligence proposing AI will gradually replace human intelligence through four levels: mechanical, analytical, intuitive, and emotional <sup>[32]</sup>. These levels are organized in increasing order of complexity, with mechanical intelligence handling simple, routine tasks and emotional intelligence focusing on understanding and influencing human emotions <sup>[8,27]</sup>. According to the theory, companies should choose the right level of AI intelligence for their particular tasks so that AI can gradually take over everything from basic tasks to more intricate, imaginative, and emotional work. According to the theory, AI will primarily replace human labor at the task level as opposed to the job level. As AI develops, it starts by replacing simpler mechanical tasks <sup>[48]</sup>. According to the theory, companies should choose the right level of AI intelligence for their particular tasks so that AI can gradually take over everything from basic tasks to more intricate, imaginative, and emotional work. According to the theory, AI will primarily replace human labor at the task level as opposed to the job level. As AI develops, it starts by replacing simpler mechanical tasks <sup>[49]</sup>. AI gets better and better at tasks that require emotional intelligence and creativity. This theory is used to investigate the realities and difficulties of using AI techniques in the public relations departments of Middle East universities [11]. The theory has influenced the goals and research questions by offering a framework for comprehending how AI might be incorporated into public relations work and the challenges that practitioners may encounter as they adjust to the technology's expanding role in their industry In improving communication languages and effective communication<sup>[50]</sup> modifying Linguistics is a fundamental branch of language study, focusing on its structure, usage, and evolution over operations [34]. AI has the ability to offer dialogue systems, time. With the advancement of artificial intelligence, its impact on language studies and linguistics has become increasingly evident, particularly in areas such as text analysis, machine translation, and human-machine interaction. Within the context of communication theories, AI helps enhance language communication, adapt discourse strategies, and improve multilingual communication, expanding the scope of interaction with a diverse global audience [51].

## **3. Research Methodology**

This study is categorized as Quantitative approach, which aims to gather and examine information about a particular situation or phenomenon in order to offer a coherent explanation <sup>[52]</sup>. The study sample consisted of public relations practitioners from several Middle East universities (Jordan, UAE) and a purposeful sample of them was chosen based on the largest universities in terms of establishment, student and faculty numbers, and the existence of strong public relations departments [53,54]. 65 Public Relations Department Staff from the universities made up the sample: Yarmouk University, Mutah University, and the University of Jordan, University of Kalba in Sharjah in UAE. The researchers employed a questionnaire as the primary data collection tool to assess the extent to which artificial intelligence techniques are utilized in Middle East universities public relations departments. To measure participants' responses, the study utilized a Likert scale with three levels of approval: Agree (3 points), Neutral (2 points), and Disagree (1 point) [38,41,43,45,46,55,56]. This scale allowed for a nuanced evaluation of how artificial intelligence techniques are integrated into public relations practices within these institutions <sup>[57]</sup>. Table 1 presents the distribution of trend levels and category boundaries based on the arithmetic averages derived from the responses.

Table 1. Trend Levels and Category Limits to the Extent of Employing Artificial Intelligence Techniques in Middle East Universities Public Relations Departments "Reality and Obstacles".

Trend Level	Category Limits	
low	From 1.00 – less than 1.667	
medium	From 1.667 – less than 2.334	
High	from 2.334 – 3.00	

#### 3.1. Data Analysis Methods

the social sciences, commonly called SPSS, to process its data effectively. Several statistical methods were employed to analyze the data comprehensively. Frequency tables and percentages were used to assess the distribution and frequency of personal data within the study sample, providing a clear overview of the demographic characteristics <sup>[23]</sup>. Besides, arithmetic averages were calculated to determine the mean responses of the study participants, offering insights into the central tendencies of their answers <sup>[58]</sup>. The standard deviation was applied to measure the variability and dispersion in the participants' responses, highlighting how much individual answers deviated from the average <sup>[59]</sup>. The Cronbach alpha coefficient was used to ensure the reliability and consistency of the study instrument, which evaluated the stability and internal consistency of the measurement tools used in the research.

The results in Table 2 indicate that the values of the Cronbach alpha stability coefficient ranged between (82% - 86%), which are values that indicate that the resolution is the study tool with a high degree of internal consistency between the paragraphs and that the axes of the resolution have high reliability and applicability, as the total stability value of the resolution amounted to 0.85%.

Table 2. Cronbach Alpha Coefficients Values for Internal Consistency of Main Resolution Axes.

Cronbach Alpha Value	Number of Paragraphs	Axis
0.88%	14	Features
0.82%	9	Constraints
0.85%	7	Propositions
0.85%	30	Overall Scale

Furthermore, the questionnaire designed for this study was structured around several key axes: the personal data of public relations practitioners in Middle East universities, their familiarity with artificial intelligence techniques, the advantages of employing these techniques, their proposals for further utilization, and the obstacles they face in implementing artificial intelligence. This comprehensive framework aimed to capture a broad spectrum of information related to AI integration in public relations within these institutions. Procedures for honesty and consistency were meticulously applied to ensure the questionnaire's accuracy and reliability. For honesty, the questionnaire was reviewed by a panel of esteemed professors with significant scientific and practical This study used the statistical package program for expertise in public relations. Their feedback led to revisions,

including adding, deleting, and modifying certain sections, thereby enhancing the content's validity and ensuring that the questionnaire accurately reflects the intended measurements. For consistency, the Test-Retest method was employed to assess the stability of the questionnaire. A pre-study was conducted with 10% of the original sample to test the instrument's reliability. The consistency of the responses was measured using Cronbach's Alpha equation, as detailed in Table 2. This technique confirmed the stability and reliability of the questionnaire, reinforcing its effectiveness as a tool for gathering precise data on the employment of artificial intelligence techniques in Middle East universities public relations departments. The results in Table 2 indicate that the values of the Cronbach alpha stability coefficient ranged between (82% -86%), which are values that indicate that the resolution is the study tool with a high degree of internal consistency between the paragraphs and that the axes of the resolution have high reliability and applicability, as the total stability value of the resolution amounted to 0.85%.

#### 4. Data Analysis and Discussion

**Table 3** shows the personal data of the study sample starting from the 65 gender variables, where it showed that the percentage of males was 61.5% while the percentage of females was 38.5%.

Percentage	Iteration	Gender
61.5%	40	male
38.5%	25	female
100%	65	Total
Percentage	Iteration	lifetime
11%	7	From 33–23
26%	17	From 44–34
63%	41	45 years and above
100%	65	Total
Percentage	Iteration	Education Qualification
7.7%	5	diploma
61.5%	40	Bachelor
30.8%	20	Graduate
100%	65	Total
Percentage	Iteration	Work Experience
10.8%	7	Less than 4 years
38.4%	25	5 to 9 years
50.8%	33	More than 10 years
100%	65	Total

**Table 3**. Gender Distribution of Community Members.

The personal data of the study sample for the 65-age variable shows that the percentage of 33–23 reached 11%, 44–34 amounted to 26%, while 45 years and over was the highest percentage reaching 63%. **Table 3** is a breakdown of the study population based on personal data.

As for the personal data of the study sample for the 65 educational qualification variables, the results showed that the percentage of public relations practitioners in Middle East universities who obtained a diploma degree was 7.7%, the percentage of public relations practitioners in UAE universities who obtained a bachelor's degree was 61.5%, and the percentage of public relations practitioners in Middle East universities who obtained postgraduate studies was 30.8%.

The personal data of the study sample shows for the 65 educational qualification variables, where the results showed that the experience of public relations practitioners in UAE universities less than 4 years amounted to 10.8%, the experience of public relations practitioners in UAE universities from 5 years to 9 years amounted to 38.4%, and the experience of public relations practitioners in UAE universities amounted to more than 10 years. 50.8%.

The main question of the study "What is the extent of employing artificial intelligence techniques in the UAE university public relations departments" reality and obstacles" was answered by answering the questions of the sub-study emanating from it, and the following is a presentation of the results of the study according to the sequence of its questions: How knowledgeable are you in artificial intelligence techniques?

**Table 4** shows the extent to which public relations practitioners in Middle East universities know artificial intelligence techniques, where the percentage of public relations practitioners in Middle East universities who have extensive knowledge in artificial intelligence was 17%, and the percentage of public relations practitioners in Middle East universities who have medium knowledge in artificial intelligence techniques is 52.3%, and the percentage of public relations practitioners in Middle East universities who have medium knowledge in artificial intelligence techniques is 52.3%, and the percentage of public relations practitioners in Middle East universities who have little knowledge in artificial intelligence techniques 30.7%. This result is expected because artificial intelligence techniques are a modern digital tool that is still in its early stages and its use is somewhat limited, and the level of awareness of public relations practitioners in

Middle East universities is relatively low due to the lack of hancing engagement with audiences. It also plays a pivotal human competencies specialized in artificial intelligence techniques and the limited technological competencies capable of dealing with them professionally, in addition to the weak confidence of the owners of organizations in dealing with artificial intelligence techniques as they violate privacy and confidentiality.

Table 4. Knowledge in AI.

Percentage	Iteration	Categories
17%	11	two
52.3%	34	Medium knowledge
30.7%	20	Little knowledge
100%	65	Total

Table 5 shows that the most prominent advantages resulting from the employment of public relations practitioners in Middle East universities in artificial intelligence techniques were represented in the paragraph that states "professionalism in content production" with an arithmetic mean of 2.80 and a standard deviation of 0.47, while the paragraph that states "improving the image of the organization through the services it provides" ranked last among the advantages resulting from the employment of public relations practitioners in Middle East universities artificial intelligence techniques with an arithmetic average of 2.23 and a standard deviation of 0.58. Artificial intelligence techniques create professional and creative content using the technologies they provide, and content production is the most important field through which artificial intelligence can make an impact. Smart robots work in collecting material quickly and accurately, surpassing humans in producing traditional content, automating tasks, generating data, and creating automated texts. This contributes to improving the professional competence of public relations practitioners and speeds up the production process. The theory of replacing jobs with artificial intelligence was employed in this context, as the theory focuses on mechanical intelligence, which requires training and non-extensive experience. Here, the production of content for Middle Eastern universities falls within artificial intelligence, which is based on creating press reports, bulletins, or data more efficiently and accurately. Additionally, AI tools use big data analytics to predict audience reactions to media campaigns, helping to improve public relations strategies. AI also helps develop public relations by automating processes and en- operation between human intelligence and artificial intel-

role in improving language exchange through translation and machine learning. Applications such as Duolingo and LingO provide an interactive learning experience based on AI to determine the learner's level, provide personalized lessons, and enhance translation and language exchange of data in the context of public relations. Table 6 shows that the most prominent obstacles facing public relations practitioners in Middle East universities towards employing artificial intelligence techniques were represented in the paragraph that states "poor knowledge in programming and algorithms" with an arithmetic mean of 2.78 and a standard deviation of 0.50, while the paragraph that states "the difficulty of the social and economic environment" ranked last among the obstacles facing public relations practitioners in Middle East universities towards employing artificial intelligence techniques with an arithmetic average 2.39 and standard deviation 0.71. This result is attributed to the fact that artificial intelligence techniques require high and continuous training to deal with software, deep knowledge of algorithms, and the need for high skills in data analysis, application development and problem solving.

Table 7 shows that the most prominent proposals of public relations practitioners in Middle East universities towards employing artificial intelligence techniques were represented in the paragraph that states "cooperation between artificial intelligence and human intelligence without dispensing with one of them" with an arithmetic mean of 2.58 and a standard deviation of 0.39, while the paragraph that states "attention to infrastructure" ranked last among the proposals of public relations practitioners in Middle East universities towards employing artificial intelligence techniques with an arithmetic average of 2.55 and a standard deviation of 0.61.

There is no doubt that the basis of public relations practice is based on personal communication between the organization and its audience and not on dealing with machines, robots or robots, but artificial intelligence applications are a new technology that has begun to make its way to work in all organizations and it has become an absolute necessity to apply and benefit from it without dispensing with the human element, which is described as the origin of creativity and the root of thinking, and the need for coligence and striking a balance between them to automate tasks and enhance performance more effectively and efficiently, Leveraging AI tools to craft content that matches the interests of the target audience, taking into account the cultural and linguistic context to ensure the effectiveness of targeted messages. This result differed with the Shuaibi 2023 study, which showed that the most prominent suggestions of public relations practitioners to promote the use of artificial intelligence tools were "not putting full trust in automated systems."

Grade	Standard Deviation	Arithmetic Mean	netic Mean Items		Figure
High	0.47	2.80	Professional content production	1	1
Medium	0.55	2.21	Technical skills development	14	2
High	0.61	2.51	Solve problems easily	9	3
High	0.57	2.72	Foster creativity and innovation	4	4
High	0.59	2.65	Improve design skills and increase efficiency	6	5
High	0.65	2.42	Enhancing competitiveness	10	6
High	0.69	2.35	Save time and effort	12	7
Medium	0.58	2.23	Improving the image of the organization through the services it provides	13	8
High	0.58	2.68	Easy to set up PR campaigns	5	9
High	0.43	2.77	Reduce human error	2	10
High	0.63	2.61	Speed in response and completion of tasks	7	11
High	0.72	2.40	Keeping pace with modern technology	11	12
High	0.48	2.75	Conduct public opinion polls	3	13
High	0.66	2.57	Crisis Avoiding	8	14

**Table 5**. Employment of Public Relations (AI) in Middle East Universities.

Table 6. Obstacles Facing Public Relations Practitioners in Middle East Universities Towards Employing AI.

Grade	<b>Standard Deviation</b>	Arithmetic Mean	Items	Rank	Figure
High	0.65	2.58	High cost of AI applications	6	1
High	0.51	2.66	The difficulty of training public relations practitioners in how to use artificial intelligence techniques	3	2
High	0.48	2.73	Dispensing with the human element	2	3
High	0.71	2.39	The difficulty of the socio-economic environment	9	4
High	0.66	2.57	Lack of specialized human competencies in artificial intelligence and limited technological competencies	7	5
High	0.60	2.52	Violation of privacy and loss of data confidentiality	8	6
High	0.63	2.61	Lack of confidence in artificial intelligence technologies and lack of acceptance of decision-makers to deal with them	5	7
High	0.50	2.78	Poor knowledge in programming and algorithms	1	8
High	0.57	2.64	Inability to track unethical practices	4	9

Table 7. Proposals of Public Relations Practitioners in Middle East Universities Towards Employing AI.

Grade	<b>Standard Deviation</b>	Arithmetic Mean	Items	Rank	Figure
High	0.48	2.73	Enacting laws and legal legislation to protect privacy and confidentiality	2	1
High	0.58	2.65	The need to provide continuous technical support	4	2
High	0.39	2.85	Cooperation between AI and human intelligence without dispensing with one of them	1	3
High	0.50	2.57	Subjecting PR practitioners to training on the use of artificial intelligence applications	6	4
High	0.61	2.55	Attention to infrastructure	7	5

	Table 7. Cont.				
Grade	Standard Deviation	Arithmetic Mean	Items	Rank	Figure
High	0.55	2.63	Benefiting from the successful experiences of international universities in employing artificial intelligence techniques	5	6
High	0.59	2.67	Raising awareness of the importance of employing artificial intelligence through courses and seminars	3	7

view of public relations practitioners are the media field with 47.7%, followed by the administrative field with 33.8%, and the advertising field with 18.5%. This result is attributed from the researcher's point of view because the media field in Middle East universities is more necessary to employ artificial intelligence applications for its contribution to the creation of media content and press reports easily, and the speed in the process of producing news and providing digital content dedicated to the target audience based on its interests, and the use of automated chat to respond to inquiries, in addition to translation techniques, linguistic correction, verifying the source of the news and many others, and this would improve work productivity, enhance strategies, raise efficiency and accuracy, which will reflect positively On the approval of the public and the achievement of satisfaction towards the organization <sup>[23,60-62]</sup>. In addition to enhancing simultaneous translation, improving multilingual communication, analyzing linguistic content, improving writing skills, and natural language analysis (NLP) to study language development, and developing advanced linguistic models that contribute to improving teaching and communication methods at the university.

Table 8. Employing AI in Middle East Universities.

Percentage	Iteration	Categories	
33.8%	22	Administrative field	
18.5%	12	Advertising Industry	
47.7%	31	Media field	
100%	65	Total	

## 5. Discussion on Results

This research examined the familiarity of public relations practitioners in Middle East universities with artificial intelligence (AI). Only 17% of these professionals possessed adequate knowledge of AI approaches. This finding highlights a significant gap in understanding and

Table 8 shows that the area's most in need of em- low percentage suggests that many practitioners may need ploying AI in Middle East universities from the point of to be fully equipped to leverage AI in their day-to-day responsibilities, which could hinder the advancement of public relations practices in an increasingly digital world. The lack of widespread AI knowledge may also impact the ability of these professionals to stay competitive and innovative within the global public relations landscape as suggested by the existing literature <sup>[8,12,63]</sup>. Among the advantages of integrating AI into public relations activities within Middle East universities, the most notable was the enhanced professionalism in content production. This aspect was quantitatively assessed, yielding an arithmetic mean of 2.80 and a standard deviation of 0.47. AI tools, such as automated content generation and data-driven insights, significantly improve public relations content creation efficiency, accuracy, and quality. According to Arief and Gustomo, the ability to use AI for professional content production enables practitioners to craft more targeted, consistent, and engaging messages that resonate with their audiences, thereby increasing the overall effectiveness of their communication strategies <sup>[24]</sup>. Despite the potential benefits, notable obstacles hinder the adoption of AI by public relations professionals in Middle East universities (Jordan, UAE). The most noticeable challenge is a deficiency of knowledge in programming and algorithms, as reflected in the results showing an arithmetic mean of 2.78 and a standard deviation of 0.50. This issue underscores a critical skills gap that prevents practitioners from fully utilizing AI tools. Notably, Kaleel & Alomari, 2024 consider that with a strong foundation in the technical aspects of AI, public relations professionals may be able to effectively implement AI-driven strategies <sup>[31]</sup>, further highlighting the need for specialized training and educational programs to bridge this gap <sup>[51,64,65]</sup>. One of the key proposals from public relations practitioners for overcoming these challenges involves promoting cooperation between artificial intelligence and human intelligence without entirely relying on one over the other <sup>[35]</sup>. This indication was highly regarded, awareness of emerging technologies in the field. Such a with an arithmetic mean of 2.58 and a standard deviation of 0.39. The notion of synergy between AI and human skills highlights the importance of balancing automation and the creative, strategic thinking that human professionals bring to the table. By working together, AI can assist human intelligence by handling repetitive, data-intensive tasks, allowing professionals to focus on higher-order functions such as relationship-building, crisis management, and strategic planning <sup>[41,66]</sup>. Finally, from the perspective of public relations practitioners, the media field was identified as the area most in need of AI adoption within Middle East universities, with 47.7% of respondents indicating this as a priority. Given the rapidly evolving media terrain, integrating AI into media operations could help enhance the dissemination of information, improve audience targeting, and foster more interactive and personalized communication experiences. Therefore, public relations practitioners can better manage media relations <sup>[24]</sup>, predict trends <sup>[41]</sup>, and engage with audiences across various platforms by using AI<sup>[25]</sup>, ensuring they remain relevant and effective in a digital-first environment <sup>[33]</sup>. In any case, successful implementation of AI doesn't require focusing exclusively on purely technical features such as programming and algorithms but also developing AI dialogue and language exchange. These components help to provide for effective interaction of AI systems with human users, smoothing the process of communication. AI also contributes to the issues of integration of technology that facilitates work processes and makes them more efficient to promote better decisionmaking in public relations practices. Therefore, collaboration between artificial intelligence and human intelligence is greatly essential for fully expressing the potent capacity of AI within the field.

# 6. Conclusion, Future Research

The study aims to analyze the use of Artificial Intelligence in Public Relations departments at universities, focusing on the current state and the challenges faced. This research falls under the category of descriptive studies, and the survey method was used to gather data. The study population consisted of public relations practitioners from several Middle East universities (Jordan, UAE); an intentional sample of 65 practitioners was selected, and data was collected using a questionnaire. Results revealed that

possess extensive knowledge of artificial intelligence techniques. AI into media operations could help enhance the dissemination of information, improve audience targeting, and foster more interactive and personalized communication experiences in Middle East universities. This study concluded with several key recommendations to advance the integration and application of artificial intelligence. First, given its significance in the modern era, there is a critical need to intensify scientific research on artificial intelligence. This includes augmenting scientific libraries with relevant research and studies on emerging technologies transforming various fields and sectors. Further, incorporating an "Artificial Intelligence" course into school and university curricula is crucial for developing a generation equipped to handle and innovate with these technologies. Furthermore, it is essential to activate legal frameworks that regulate the use of artificial intelligence to safeguard privacy and data confidentiality while preventing potential abuses. Public relations practitioners in Middle East universities (Jordan, UAE) should acquire targeted training on artificial intelligence techniques through courses, seminars, and workshops. This will help refine their skills and enhance their awareness of digital technologies, which are increasingly critical across various domains. To keep pace with the technological advancements of the Fourth Industrial Revolution, Middle East universities must also focus on implementing artificial intelligence techniques to restructure and improve educational institutions. Raising awareness about the benefits of AI in organizations and institutions is also essential, as is learning from the successful experiences of international universities. Adopting the most appropriate technological tools for public relations from these global practices can further enhance the effectiveness of AI in Middle East universities in Jordan, UAE. It is suggested that universities should also focus on integrating AI dialoguing systems and the mechanisms of language exchange in order to enhance the workflow related to communication and service delivery. Finally, public relations departments should focus on the integration of AI in the media field, as it has been identified as the area most in need of AI integration. The study's limitations encompass several vital aspects. Firstly, the temporal scope of the research was limited to a specific period, with the study only 17% of public relations practitioners in universities being conducted from February 2024 to June 2024. This timeframe may affect the relevance and applicability of the results to different periods or future developments. Spatially, the study was restricted to the Hashemite Kingdom of Jordan, so the results may not be generalizable beyond this geographic region. Also, the study focused exclusively on public relations practitioners within both public and private universities in Jordan. This human-centric limitation emphasizes that the insights gathered are specific to this group and may not reflect the experiences or perspectives of practitioners in other sectors or regions. These boundaries define the study's scope and must be considered when interpreting the results and their broader implications.

## **Author Contributions**

Conceptualization, F.A.O. and A.A.; methodology, M.H.; software, A.A.H.; validation, Z.Y.T. and M.H.; formal analysis, M.H.; investigation, A.M.; resources, A.A.; data curation, M.H.; writing—original draft preparation, F.A.O.; writing—review and editing, M.H.; visualization, Z.Y.T.; supervision, A.A.H.; project administration, A.Y.B.A.H.; funding acquisition, A.A. All authors have read and agreed to the published version of the manuscript.

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# **Institutional Review Board Statement**

Not applicable.

# **Informed Consent Statement**

Informed consent was obtained from all subjects involved in the study.

## **Data Availability Statement**

The data will be provided by storing it via a link via the email mohammad.habes@yu.edu.jo and sending it to those interested if they request it.

# **Conflicts of Interest**

The authors declare no conflict of interest.

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