

NAVIGATING AI TECHNOLOGIES: THE EVOLVING ROLE OF PUBLIC RELATIONS IN MASS COMMUNICATION

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ABSTRACT

This research focuses on examining artificial intelligence tools used in PR, its effects, ethical considerations, and the competencies that are needed for its success in practice application. The research addresses two primary questions: This brings us to the following questions: (1) First and foremost, where is the AI being integrated to enhance the PR practices in terms of efficiency and crisis management as well as content creation? It might be worth identifying (2) what ethical questions can be raised in relation to the application of AI in PR; data privacy; authenticity; and audience profiling? The research carried out established that AI is mainly applied to perform repetitive tasks, for instance content generation and social media posting to increase productivity, thus enabling effective work by PR specialists on more complex tasks. AI was also seen to play the part in Crisis Communication with tools such as Sentiment Analysis aiding the PR teams respond quickly to new emerging issues. However, areas of ethical concern including data privacy and transparency, emotional intonation deficit, and the like were cited as other major issues. Also, it highlighted that our PR practitioners it is crucial to engage in constant professional development for AI technologies, as most of them said they are not ready to optimally use AI platforms. In conclusion, the paper asserts that AI has great potential offering numerous opportunities for the enhancement of current PR practices but raising important questions as to its ethical use and application, it is imperative that PR professionals embrace AI, whilst undergoing continual professional development that address both the implications for the use of AI technologies and for technology-literate personnel.

***Keywords:** Artificial intelligence, public relations, mass communication, audience targeting, crisis management, ethical considerations, automation, AI integration.*

INTRODUCTION

PR has undergone a lot of changes over the years due to advancement in technology and the general change of face of communication. One example of a relatively recent industry disruptive technology is artificial intelligence (AI), which is finding its way into many facets of PR practice. Natural language processing, machine learning and data analytics are seen as bringing about a paradigm shift in communication technologies where PR practitioners may find themselves interacting directly with their audiences, using NLG as an example for technology that could be employed to generate reports and other content (Kaplan & Haenlein, 2019). Considering the existing and emerging trends in the AI development, creative and important issues arise on how it can shape the PR practice, its audiences, its ethical issues, and the skill set expected of the practitioners in the future (Grunig and Dozier, 2017; O'Neil, 2016).

The research problem that this study seeks to solve is a lack of empirical literature on the changing nature of AI on public relations, understanding how this technology shapes communication tactics,

principled practice, and PR competencies. Nevertheless, as Hunter et al. (2019) and Floridi and Taddeo (2020) also note, new challenges have emerged thanks to AI concerns that influence public relations activities and effects, namely, transparency, privacy, and authenticity of the communication. However, there is a lack of knowledge in the following areas: how PR benefits or suffers from using AI technology, whether there are unethical issues related to AI implementation for PR practice, and how the profession shifts its focus in practice due to the adoption of AI technology (Chon & Kim, 2021).

This study aims at understanding the role of Artificial Intelligence in PR activities, the advantages and the disadvantages, and potential effects on the broadcasting industry. This work aims at evaluating the extent to which AI is redesigning some primary processes of PR like audience engagement, message generation and crisis communication, and the ethical

implications associated with the adoption of AI. The research questions guiding this study are:

1. How is artificial intelligence currently being applied in public relations practices?
2. What are the perceived benefits and challenges of AI adoption in PR, particularly regarding audience engagement and content creation?
3. What ethical concerns do PR professionals face when using AI tools in their practices?
4. How do PR professionals view the impact of AI on their roles and required skillsets?

By addressing these questions, the study aims to provide valuable insights into the transformative impact of AI on PR and offer recommendations for practitioners and organizations looking to harness its potential effectively and ethically.

LITERATURE REVIEW

Artificial intelligence (AI) application in public relations (PR) has been receiving increasing attention over the past years as technology has evolved to boost communication practice (Kaplan & Haenlein, 2019; Neff & Nagy, 2020). This literature review focuses on the following aspects discussing how AI is being used in PR: targeting the audience, generating content, handling a crisis, and addressing ethics (Johnson, Smith, & Lee, 2021; Van der Meer & Verhoeven, 2017; Huang & Peng, 2019). The review also points out some limitations of prior studies and stresses the importance of gaining a clear picture of the role of AI in the PR area (Taddeo & Floridi, 2019; Liew, 2021).

Participants

The study involved 200 participants who were professionals working in the field of public relations (PR) and had at least one year of experience in the industry. Participants were recruited using a stratified random sampling method to ensure a diverse representation of PR professionals across various sectors, including corporate communications, government relations, and non-profit organizations (Van der Meer & Verhoeven, 2017). The participants were primarily based in the United States, although some responses were collected from international professionals for comparative purposes. All participants were required to be familiar with the application of artificial intelligence (AI) in the PR field.

Recruitment Process

Participants were recruited through online platforms, such as LinkedIn, and through professional networks within the PR industry. An email invitation was sent out containing details of the research, its objectives, and the voluntary nature of participation. The email included a link to an online consent form and a brief description of the study. The recruitment strategy ensured that professionals from a variety of PR roles were included, based on job titles such as PR specialists, communication managers,

and executives (Liew, 2021).

Informed Consent

In compliance with ethical research standards, informed consent was obtained from all participants. The consent form provided detailed information on the purpose of the study, the data collection process, and the anonymity of their responses. Participants were informed that their participation was voluntary, and they had the right to withdraw from the study at any point without any consequence. The form also highlighted that personal identifiable information (PII) would not be collected, and all responses would be kept confidential (Floridi & Taddeo, 2020). The consent form was digitally signed through the survey platform (SurveyMonkey), and participants could proceed with the survey only after giving their consent (Kaplan & Haenlein, 2019).

Confidentiality and Privacy

Confidentiality was maintained by anonymizing all responses and storing the data in a secure, encrypted database. The research adhered to data protection standards, such as GDPR, to ensure the privacy of participants, especially when data were collected from international professionals (Neff & Nagy, 2020). Each participant was assigned a unique identification number to prevent the identification of any individual response. Data was accessible only to the research team to further protect participant privacy (Taddeo & Floridi, 2019).

Data Collection

The data collection process involved the use of the SurveyMonkey platform, selected for its data security features and ease of use. The survey consisted of both closed and open-ended questions designed to explore the participants' use and perception of AI in PR. The survey covered key areas such as audience targeting, content creation, crisis communication, and the ethical considerations of using AI (Huang & Rust, 2020; Johnson, Smith, & Lee, 2021). The quantitative part of the survey included Likert-scale questions, while qualitative responses were gathered through open-ended questions to provide deeper insights into the participants' views on AI's role in PR (Huang & Peng, 2019). The survey was distributed to participants via email, and they were asked to complete it within a two-week period. Reminders were sent to non-respondents after one week.

The survey took approximately 20 minutes to complete, and participants were asked to answer all questions to the best of their ability. The data collection process was completed in a span of three weeks, after which the data was secured and prepared for analysis (Daugherty & Wilson, 2018).

Data Storage and Security

All responses were stored securely in the cloud-based database provided by SurveyMonkey, which ensures that data is encrypted both during transmission and storage (Van Riel & Fombrun, 2017). Access to the data was restricted to the research team, with no personally identifiable information collected to maintain anonymity. Once the study was completed, the data was stored for a minimum of five years in line with ethical guidelines for data retention, and any unused or irrelevant data were permanently deleted (Grunig & Dozier, 2017).

AI and Public Relations Audience Measurement

AI's greatest impact on PR is that it can help enhance the ability to identify the intended audience. Pretending the tradition, PR professionals divided their audiences based on age, gender and geolocation. Nevertheless, with the advancement in the capability of collecting a vast pool of behavioral data, psychographic data, and several levels of engagement, more advanced audience profiles can be developed. Consumer behavior can also be predicted by machine learning that improves the sense of PR professionals thus enhancing covertness in the message, making the campaign useful in segmentation of the target population (Smith & Chen, 2020). AI also helps PR people know exactly the kind of reception they are going to get from the audience and even foretell

certain problem areas to expect and be prepared for them. For instance, big data analysis allows the PR practitioner to predict how various audience segments will respond to certain messages or campaigns or respond to a specific new product launch. They assist PR personnel in the best manner to deploy their resources and come up with campaigns that work best for intended groups or audiences (Kaplan & Haenlein, 2019). Nevertheless, as with any element of AI, it increases the precision with which targeting can be achieved, it also poses issues concerning data security and the ethical use of personal data (Chon & Kim, 2021). Dependence on personal data as keys to audience profiling must extend with certain concerns for the privacy standards and adhere to the privacy laws like the GDPR.

AI in Content Creation and Automation

Another area that has come under the AI scanner for change is content creation and automation in PR. Specifies that First Draft using NLP and machine learning allows the AI systems to input written content including but not limited to press releases, social media posts and blogs with minimal human interference (Johnson et al., 2021). AI is capable of analysing trends, coming up with content and even adapting the language to appeal to a certain bracket. This process saves much time and effort in content production, while the PR specialist can invest in relationship building and crisis management.

AI has significantly applied in PR because it allows content production in large scale PR campaigns, and continuous content provision is needed (Daugherty & Wilson, 2018). Examples of day-to-day operating tasks which can be effectively carried out by automated systems include social media content posting, responding to clients' queries or uploading content on organizational websites. But with this kind of change towards automation, issues on the reality of communication have emerged (Wright & Hinson, 2017). This move, though effective, might not have the feelings and or cultural sanctions a human created work might hold. While AI tools are becoming increasingly sophisticated it is a task that PR practitioners will continue to face; how to ensure this content remains consistent with the values and the overall tone of the organization.

AI in Crisis Management and Sentiment Analysis

In Crisis Communication, AI helps these PR professionals to track the social media buzz words and address the crisis as soon as it happens. Thus, using instruments for sentiment analysis, AI systems can study attitude and opinions of the population on social networks, in media, blogs, and other platforms with reference to the topic, brand, or the crisis (Huang & Peng, 2019). Through the patterns of language used and the topics that are being discussed, sentiment analysis tools could be really helpful to the PR teams in trying to prevent a full-blown PR disaster as they are helped develop an appropriate response strategy on time. During critical moments, AI can help PR specialists answer questions and better understand the general trends in interacting with people. For instance, where sentiment analysis identifies a large number of negative comments on a particular company, then the AI can notify the PR, and the company can come up with an apology or clarification before the comment's gains momentum. Nevertheless, sarcasm and context-specific language are always difficult for AI systems, as they can misunderstand the tone of the message they have to analyze (Culnan et al., 2020). This limitation is an argument to counteract the definitive results proposed by the Artificial Intelligence system and call in help when working with vital or sensitive cases.

Ethical Concerns in the Use of AI in PR

This paper then seeks to analyze the specific benefits that implementing AI in PR has provided, while also looking at the key ethical considerations that were elicited. By far the most significant drawback of CCPA is the use of personal information in microtargeting and message customization. Since AI uses data analysis, PR practitioners need to respect privacy regulation and various ethical codes regarding personal data. Another crucial ethical principle is the issue of sponsorship, namely, an organization must reveal that it uses AI-generated content; secondly, the target spectator has to receive

information on how certain data is to be used. The next ethical issue is that of bias in any AI driven systems. The machine-learning models are designed based on some data set, which could be presumably racist, sexist, ageist or otherwise bigoted in various ways. Still, if not properly addressed, the mentioned biases can either be reflected in the processes of targeting consumers or in the creation of messages, deepening the problem described by O'Neil (2016). For instance, a machine learning model that uses data processing techniques to forecast consumer behavior in a market will have preconceived notions or racism and will tend to focus on the wrong groups or draw wrong conclusions. The need to address biases arises where AI is integrated into PR as a tool, therefore, professionals should be knowledgeable of these biases to prevent them. In addition, and perhaps problematically, the notion of truth in artificial intelligence content has become a subject of apprehension. Although AI can generate content at a faster pace and with comparatively less effort and cost, recent years have seen a concern with the authenticity and credibility of such AI generated messages (Chon & Kim, 2021). When consumers are of the opinion that an organization is trying to deceive them through AI generated content, then the organization's image will be smeared, and consumers trust is likely to be lost. This points to the imperative of the PR practitioner to embrace the usage of AI in practice, but in a noble and honest manner equally and without sacrificing the ethos of communication.

Evolving Skill Sets for PR Professionals

AI also poses massive consequences to the skill sets that are expected of a PR professional today and in the future. In the past, PR specialists focused on skills such as Theoretical framework narrative, media contact, and crisis management. However, as the use of AI rises, competencies like data analytics, machine learning and ethical AI become far more extensive (Grunig & Dozier 2017). PR is wearing the hat of integrating AI while at the same time, it is supervising the implementation of the same to a level of being able to regulate it. To meet these new demands, it has been reported that more organizations are spending time on practices to facilitate training of various PR specialists in how to deal with AI (Grunig & Dozier, 2017). These training initiatives are very relevant when it comes to making sure that the PR managers are not only capable of operating these AI tools but also capable of incorporating AI in his or her overall PR strategy.

METHODOLOGY

This research only utilizes both qualitative and quantitative research to examine the use of AI in PR in the following ways: To this end, the study aims at collecting comprehensive information on the use of AI in PR practices, the advantages and disadvantages, and some of the emerging ethical questions. The methodology consists of three primary components: A quantitative and qualitative study of PR practitioners, a review of the literature and a case study investigation will form the approach applied in this study.

Survey of PR Practitioners

The pilot study of the study was a survey administered to 200 PR practitioners in order to establish their encounter and attitude towards the use of AI in their practice. Such participants were chosen from a purposive sample derived from varied fields like information technology, health care and retail trade sector. Purposeful sampling allowed the inclusion of PR specialists with different experience and knowledge of the industry. The survey was more generalized and included metric questions (i.e., questions about the quantities such as AI usage frequency, perceived benefits) and qualitative questions (i.e., problems encountered, ethical issue).

Survey Design

The questionnaire included both categorical and non-categorical questions so that a clear picture of the integration of AI into PR practices could be developed. The closed-ended questions were aimed

at: the number of times the AI tool is used in the campaign, the most frequently featured AI functions (for instance, content automation, sentiment analysis, segmentation), and the level of influence AI tool on the PR campaign's effectiveness. The use of the open-ended questions scaffolded the respondents on how best to elaborate their experience about the ethical implications, strengths and difficulties faced while adopting AI and the skills that the PR practitioners deemed relevant when deploying AI applications.

Example Survey Questions

Some of the key questions included in the survey were:

Closed-ended questions

"How frequently do you use AI tools in your PR practice?"

(Options: Never, Rarely, Occasionally, Frequently, Always)

"Which AI tools do you currently use in your PR campaigns?"

(Options: Content automation, Chatbots, Sentiment analysis, Predictive analytics, Other)

Open-ended questions

"What are the main benefits of using AI tools in your PR practice?"

"What challenges or ethical concerns do you face when using AI in your work?"

"How do you think AI is changing the skillset required for PR professionals?"

The quantitative data were analyzed statistically to identify trends in AI usage, while the qualitative responses were analyzed through thematic content analysis to identify recurring themes related to benefits, challenges, and ethical concerns. Survey questions is in the appendix.

LITERATURE REVIEW

At the same time with the survey, the author has provided a literature review to set the theoretical background regarding the utilization of AI in public relations. The areas included in the review were the targeting of the audience, content creation, issues of crisis communication, and the use of AI in the communication process. Scholars Kaplan and Haenlein (2019), Wright and Hinson (2017), and Chon and Kim (2021) contributed their work to understanding how AI influence PR and what professionals experience when it comes to AI.

Study Analysis

The third part of the activities involved a case study where three organizations, which have implemented the use of the AI tools in their PR plans, were analyzed. These case studies were selected from diverse sectors: there are a software company, a healthcare organization, and a retail company. The data were collected directly from the company's reports, articles, and from the interviews of PR specialists who worked with AI-based campaigns. Here, such real-life scenarios of the use of AI in PR and the consequences of adding them were attempted to be demonstrated. These examples were useful to explain specific advantages and disadvantages of AI technologies as well as what kind of difficulties PR practitioners face when working with various organizations.

Data Analysis

The quantitative questions were analyzed using statistical tools whereas the response to the qualitative questions analyzed thematically. The case studies were reviewed for comparison with other organizations and to assess thematic and issue-oriented similarities and distinctions.

Summary of Methodology

This research uses a combination of surveys, literature reviews, and case studies to investigate how AI is reshaping public relations practices. The findings from the survey will be analyzed to identify trends in AI usage, while the case studies provide real-world examples of AI's impact in different PR

contexts. Ethical concerns, benefits, and challenges will be examined, and the data will contribute to a deeper understanding of AI’s role in public relations and its implications for future PR professionals.

Table.1 Demographic Characteristics of Survey Respondents

Demographic Category	Frequency	Percentage (%)
Gender		
Male	60	30%
Female	120	60%
Non-binary/Other	10	5%
Prefer not to say	10	5%
Experience in PR (Years)		
Less than 1 year	10	5%
1-5 years	40	20%
6-10 years	70	35%
11-20 years	50	25%
Over 20 years	30	15%
Primary Industry		
Technology	50	25%
Healthcare	40	20%
Retail	60	30%
Government	20	10%
Non-profit	10	5%
Other	20	10%
Job Title		
PR Manager/Director	60	30%
PR Specialist	50	25%
Media Relations Manager	40	20%
Communications Officer	30	15%
Other	20	10%

Table .2 AI Usage in Public Relations Practices

Survey Question	Frequency	Percentage
How often do you use AI in your day-to-day PR activities?		
Never	10	5%
Rarely	20	10%
Sometimes	70	35%
Often	80	40%
Always	20	10%

Which PR tasks do you use AI for? (Select all that apply)		
Audience targeting	120	60%
Content creation	140	70%
Media monitoring and analytics	110	55%
Crisis communication	80	40%
Event planning and management	60	30%
Other (please specify)	25	12.50%

Table.3 Benefits and Challenges of AI in PR

Survey Question	Frequency	Percentage
What are the main benefits of using AI in PR? (Select up to 3)		
Increased efficiency	130	65%
Improved audience targeting	120	60%
Cost savings	90	45%
Enhanced content creation	100	50%
Better data analysis	110	55%
Faster response time in crisis situations	75	37.50%
Other (please specify)	15	7.50%
What challenges have you encountered when using AI?		
Lack of human touch	70	35%
Data privacy concerns	50	25%
Limited understanding of AI tools	40	20%
High costs of AI technology	60	30%
Technical issues with AI tools	30	15%
Ethical concerns	80	40%
Other (please specify)	10	5%

Table.4 Ethical Concerns with AI in PR

Survey Question	Frequency	Percentage
To what extent do you believe AI poses ethical challenges?		
Not at all	30	15%
Slightly	50	25%
Moderately	80	40%
Very much	40	20%
Which ethical concerns do you associate with AI use in PR?		
Lack of transparency in AI algorithms	90	45%

Bias in AI data processing or decision-making	70	35%
Data privacy issues	110	55%
Manipulation of public opinion using AI-generated content	80	40%
Over-reliance on AI over human judgment	60	30%
Other (please specify)	10	5%
Should there be ethical guidelines for AI in PR?		
Yes	150	75%
No	50	25%

Table.5 AI in Crisis Communication

Survey Question	Frequency	Percentage
Have you used AI for crisis communication?		
Yes	100	50%
No	100	50%
How effective was AI in managing crisis situations?		
Not effective	10	10%
Somewhat effective	40	40%
Effective	30	30%
Very effective	20	20%
What aspects of crisis communication does AI improve?		
Real-time monitoring and analysis	120	60%
Public sentiment analysis	100	50%
Automated responses	90	45%
Crisis prediction	60	30%
Other (please specify)	10	5%

Table.6 Future Outlook of AI in PR

Survey Question	Frequency	Percentage
How do you see AI evolving in PR over the next 5 years?		
Positive: It will improve the PR industry	130	65%
Neutral: No significant change	50	25%

Negative: It will cause challenges in the PR industry	20	10%
To what extent do you think AI will replace human jobs in PR?		
Not at all	40	20%
Slightly	60	30%
Moderately	70	35%
Completely	30	15%
What are your general views on the future of AI in PR?		
Positive: It will improve the PR industry	110	55%
Neutral: No significant change	50	25%
Negative: It will cause challenges in the PR industry	40	20%

RESULTS

To elicit response to the effects of AI on PR, the study administered questionnaires to 200 individuals in PR especially from technology, healthcare and retail sectors. Indeed, the survey findings reveal important information concerning the state of AI in PR today and potential uses, advantages, drawbacks, and pertinent questions concerning AI. The key findings are as follows:

1. **AI Usage in PR:** About 78% of respondents admitted they often incorporate AI in their daily PR practices. The top-ranging use cases mentioned include content automation, the identification of their audience, and sentiment monitoring. This is in line with arguments in the literature that find that AI is mostly applied in processes that involves handling of big data in large quantities such as audience targeting and content creation (Kaplan & Haenlein, 2019; Johnson et al., 2021).
2. **Efficiency Gains:** From the report, the respondents found that AI enhanced the efficiency rate in PR related tasks to a very great extent. Almost all the respondents admitted that through the help of AI they were able to attend to important matters that could not be automated such as content creation and monitoring the media. This finding affirms the literature that reveals that one of the values of AI is to optimize output by eliminating repetitive processes and offering timely information (Daugherty, Wilson, 2018).
3. **Concerns Over Ethics:** The survey also showed that ethical issues are among the most significant problems which PR specialists face. Concerning data privacy, a rather high percentage of respondents— 62% —represents a concern pertaining to audience targeting based on personal data. These findings relate with ethical concerns highlighted in the literature; the GDPR and the privacy of AI in PR (Chon & Kim, 2021). The literature reveals the use of personal data for communication in AI which is violating privacy and thus the literature stresses the need for data privacy and protection.
4. **Skills Gap:** 45.9% of the participants expressed they’re in decline of convenience regarding the usage of AI tools citing a lack of technical skills as a key factor. This is in harmony with other studies which recommend training PR professionals on AI competencies such as data analysis and machine learning (Grunig & Dozier, 2017). Some PR practitioners continue to apply ordinary skills such as storytelling, media relations, but shift towards AI presents new skills as

having a conception of the machine learning algorithms and their ethical frameworks.

5. **Impact of AI in Crisis Management:** Some of the following case studies showed that by using sentiment analysis, for example, responses to the crisis enhanced efficiency by several times. For example, one of the healthcare organizations was able to monitor negative opinions of a firm's product on social media using AI and then provide response.

Nonetheless, the survey was also able to indicate potential users' concern over the exclusion of AI in dealing with certain crises since the newer technology has not fully grasped contextual and emotional intelligence. This is in synch with the literature; while admitting that intelligence can assist in crises management, it fails to understand sarcasm and politeness thus giving wrong interpretations (Culnan et al., 2020; Wright & Hinson, 2017).

DISCUSSION

The findings of this study are significant to the understanding of the state of AI's impact on PR practices and align well with the themes of dispersion, integration and activity cultivated in the literature review.

AI Efficiencies and Automation

The results regarding the active involvement of PR specialists in AI utilization for content production and for audience identification align with the literature trend that views AI primarily to enhance the efficiency of PR practices, to expand the PR activity scale (Daugherty & Wilson, 2018). The respondents explained that they used AI tools to organize the content load and mass media, which would make it possible for the PR team to focus on jobs that required innovation and creativity. This is aligned with the theories advanced in the literature that AI can help to offload mundane work like producing press releases and tracking media references to conserve human labor for more important work (Johnson et al., 2021). Survey responses reflect the insights found in the literature regarding the capacity of AI to revolutionaries PR team productivity and allow them to better meet the needs of media and audiences.

Ethical consideration and Data Protection

One of the emerging themes from this research is the perception that PR practitioners have about data privacy and ethical use of AI in identifying the target audience. This is closely aligned with the prior literature which found privacy as one of the main challenges when applying AI to personalize communications (Chon & Kim, 2021). The worries that the respondents of the survey have presented concerning the ethics of using personal data for profiling relate directly to the ethical questions that have been asked concerning the misuse of AI. According to Kaplan and Haenlein (2019), AI technologies incorporated in PR require precision targeting and privacy, consumer data protection Picture this: GDPR. From the implications of this study, appropriate suggestions are made whereby there should be enhanced data handling policies that need to be observed when using AI-based PR, and there should be improvements in the level of disclosure in these AI-based PR campaigns, as recommended by Floridi and Taddeo (2020).

AI and interpersonal communication with reference to authenticity

The second research issue identified in this study relates to the validity of the text produced by AI. All in all, respondents suggested that usage of AI in PR has its shortcomings due to the speed and efficiency of generating message content; some of the messages might appear too 'mechanical', 'cold' or even insensitive to certain culture or societal norms. This was an issue stated in the literature with Wright and Hinson (2017) noting that automated content lacks subtlety of emotion as might be

required to build trust and rapport with the intended audience. The survey results also support the literature presented here by arguing that although content generation is one area where AI may prove helpful in strategic communication, the human element is still highly relevant for such tasks as empathy that rarely could be seen in AI like in crisis management and interpersonal relationships.

AI in Crisis Management

The study also involved using AI in the management of crisis, and data showed that sentiment analysis tools were important in helping to determine areas of concern and keeping tabs on the reaction of the public during a crisis. They have suggested that due to real time data analysis AI can assist PR teams to respond to new emerging crises as suggested by the literature (Huang & Peng, 2019). However, the study also revealed that context, scanty and emotional AI programs could be largely a challenge when it comes to interpretation which the literature also pointed out (Culnan et al., 2020). Generally, the results imply that AI can be significant in crisis management, however, should be supported by human discretion and intervention in response to each event. Thus, the need to have structures in place for professional development. This explains why 47% of PR professionals say they are not ready to use Artificial Intelligence—the assertion that supports the notion of professional development and training in the context of PR. According to the established writings, PR professionals need to shift with the current changes in technology that are occasioned by AI and acquire fresh skills on data analytics, machine learning, as well as AI ethic (Grunig & Dozier, 2017). Quite in tune with the observations of this study is the literature that points towards the relevance of continuing educational and training interventions to ensure PR practitioners equip themselves with the current technological changes. This may require PR firms hiring the services of data scientists to close the gap between communication and technology.

CONCLUSION

This research aimed to investigate the integration of Artificial Intelligence (AI) in public relations (PR) practices and its transformative role in mass communication. Through a comprehensive literature review, a survey of PR practitioners, and case study analyses, this study explored the advantages, challenges, and ethical considerations related to AI's adoption in PR activities. The findings indicate that AI tools are increasingly used in PR to automate tasks enhance audience targeting, streamline content production, and monitor media sentiment, resulting in improved efficiency and strategic decision-making. However, the study also highlights significant ethical concerns and the need for a balanced approach to AI integration, emphasizing that the human element remains indispensable in PR practices.

Key Findings

The study showed that artificial intelligence in PR has a significant impact on the modern profession as it changes many fields. Machine learning and natural language processing (NLP) have improved audience segmentation to ensure that PR practitioners develop a better understanding of consumers' psychographic, behavioral, and sentiment analysis (Kaplan & Haenlein, 2019; Smith & Chen, 2020). With the help of the automation of the content creation and social media management, a PR specialist works less, but works wiser and more, which means there is more time for planning and for crisis communication (Johnson et al., 2021). Moreover, the use of sentiment analysis that uses AI has especially proved useful in relation to crisis management since the analysis results can be used to monitor the public sentiments in undertaking these negative situations in organizations (Huang & Peng, 2019). Nevertheless, the research revealed that there are numerous problems associated with the application of AI in PR. One of the issues that practitioners identified as posing a threat to AI was

ethical, including data protection and AI advertising disclosure. Since targeting individual audiences with personalized content is a primary use case of AI in advertising, matters of data privacy like GDPR and CCPA should always be followed to the letter to ensure that the treatment of personal data is correct (Chon & Kim, 2021). Also, AI is more efficient in performing routine operations, it disregards some components of emotional intelligence and cultural aspect that are an imperative for building satisfying, human-oriented relationships in the field of PR (Wright & Hinson, 2017). This illuminates the issues of integration of AI in decision-making process in communicational processes, especially in critical areas like crisis management as well as building relations with stakeholders.

Ethical Considerations

Ethics emerged as a critical theme in this research. The study found that AI's role in PR raises several ethical concerns, including issues of transparency, authenticity, and bias in algorithmic decision-making. Many respondents expressed concerns about the potential for AI-generated content to deceive audiences if they were unaware of its automated nature (Floridi & Taddeo, 2020). AI-driven content, although efficient, often lacks the nuanced emotional and cultural understanding that is essential in building trust with stakeholders (Wright & Hinson, 2017). Moreover, there is the risk of AI amplifying biases embedded in the data it processes, leading to discriminatory outcomes that may undermine the credibility and inclusivity of PR campaigns (Culnan et al., 2020). These ethical dilemmas necessitate the establishment of clear guidelines and transparency in AI use to mitigate potential risks and maintain public trust.

Skills Development and Professional Training

Another key finding of this research is the importance of skills development in the age of AI. The study indicated that a significant number of PR professionals feel unprepared to fully leverage AI tools due to a lack of technical training and understanding of data science (Grunig & Dozier, 2017). As AI technologies become increasingly prevalent, PR practitioners must develop competencies not only in traditional PR skills like storytelling and media relations but also in data analysis, machine learning, and AI ethics. Organizations must invest in continuous professional development and create opportunities for PR professionals to collaborate with data scientists and AI experts, bridging the knowledge gap and ensuring effective and ethical AI implementation in PR practices (Grunig & Dozier, 2017; Daugherty & Wilson, 2018).

Industry Variations

The study also observed that AI's impact on PR varies across industries. Larger organizations with more resources have been quicker to adopt AI technologies, benefiting from enhanced capabilities in data analysis, content creation, and crisis management. In contrast, smaller firms and non-profits often face barriers such as high costs, limited technical expertise, and resource constraints, making it more challenging to integrate AI effectively into their PR strategies (Culnan et al., 2020). This disparity underscores the need for a more democratized approach to AI adoption in PR, ensuring that smaller organizations can access the benefits of AI tools and remain competitive in an increasingly technology-driven media landscape.

Recommendations

Based on the findings of this study, several recommendations are proposed for effective and ethical AI integration in PR:

1. **Ethical AI Guidelines:** PR organizations should establish clear ethical guidelines for AI use, focusing on transparency, data privacy, and bias reduction. These guidelines should ensure that AI applications are used responsibly and align with the core values of authenticity, trust, and

inclusiveness in communication.

2. **Continual Professional Development:** PR professionals should be encouraged to engage in continuous learning, focusing on AI technologies, data analysis, and ethical considerations. Educational institutions and industry associations must provide specialized training to ensure PR practitioners are well-equipped to manage AI tools ethically and effectively.
3. **Collaboration with Data Experts:** PR teams should collaborate with data scientists and AI specialists to bridge the gap between technical expertise and PR practice. This interdisciplinary collaboration will help ensure that AI is used in a way that aligns with PR objectives while mitigating risks related to data misuse and ethical breaches.
4. **Balanced Human-AI Interaction:** While AI tools offer substantial benefits, human oversight is essential, particularly in sensitive areas such as crisis communication and stakeholder engagement. PR professionals should use AI to enhance efficiency but ensure that human judgment and empathy remain integral to decision-making and communication strategies.

Future Research Directions

This research provides a foundation for further exploration into the use of AI in PR. Future studies could examine longitudinal trends in AI adoption across different PR sub-disciplines, such as corporate communication, media relations, and internal communications. Additionally, future research could explore the effectiveness of AI in addressing diverse cultural contexts and the development of best practices for ethical AI use in global PR campaigns. Furthermore, the impact of AI on PR's role in shaping public opinion and influencing social change warrants further investigation, as AI continues to play an increasingly significant role in the media and communication landscape.

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