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Research Article

Utilizing Artificial Intelligence in Government Communication: Adoption and Implementation

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ABSTRACT

This study aims to assess the Adoption and Implementation of artificial intelligence in governmental communication entities in United Arab Emirates, with a focus on the emerging skills that communication practitioners must acquire to effectively adapt to the rapidly evolving technological landscape. A descriptive research design was employed, utilizing a survey conducted with government communication practitioners. Additionally, the study seeks to explore the challenges and opportunities associated with AI adoption in government communication. It also examines practitioners' readiness to integrate AI applications into government communication. Furthermore, the research investigates the impact of AI on communication efficiency, particularly in areas such as content automation, sentiment analysis, and audience engagement. The study concludes that while government communication employees are ready to adopt AI, successful implementation requires more than willingness. Key challenges include limited training, institutional capacity, and public hesitancy due to privacy and accessibility concerns. Resistance from practitioners and budget constraints further hinder progress, emphasizing the need for investment in skill development and financial support. Ethical guidelines and professional frameworks are crucial to ensuring responsible AI use. As AI reliance grows, transparency and accountability will be essential for building trust. A structured approach that balances technological advancements with training, ethical considerations, and public engagement is vital for successful AI integration.

Keywords: Government Communication, AI technology , AI Adoption, AI Implementation, and AI Skills Development

INTRODUCTION:

It is undeniable that media communication has always been a vital function of government, ensuring transparency, public engagement, and policy dissemination. Traditionally, government communications have been conducted through press releases, public speeches, media briefings, and public relations campaigns. However, these activities have been drastically transformed by advancements in digital technology (Zhang & Chen, 2024). The rise of social media, data analytics, and automation has reshaped how governments engage with their citizens, requiring communication practitioners to adapt to new approaches. Among the most significant driving forces of this transformation is artificial intelligence (AI), which presents new opportunities for enhancing efficiency, responsiveness, and engagement in government communication. The integration of AI technologies—such as machine learning, natural language processing (NLP), chatbots, and predictive analytics—has become increasingly important for maximizing the potential benefits of automation. These technologies enable governments to automate responses, personalize communication, analyze public sentiment, and improve decision-making (Dahabreh, 2023). For example, many governments have implemented AI-powered contact centers to handle public inquiries, detect misinformation, and optimize communication strategies (Almarashda, Baba, Ramli, & Memon, 2022). AI-driven chatbots can provide instantaneous responses to citizens, reducing the workload on communication teams while ensuring the timely and accurate dissemination of information. However, the integration of AI into government communication is not without challenges. Ethical concerns, data privacy considerations, and the need for increased

digital literacy are key issues that government communication practitioners must address as they navigate emerging technologies. This study aims to explore the current state of AI adoption in government communications while identifying existing challenges and providing recommendations to empower government communicators with the necessary skills to navigate the evolving digital landscape.

LITERATURE REVIEW:

Many studies have discussed the need for AI skill development among government communication practitioners. Graibeh, Khan, Al-Majeed, and Zhang (2024) explored the role of artificial intelligence in transforming government communications, emphasizing the necessity for practitioners to develop expertise in utilizing these technologies efficiently. This shift means that traditional communication skills alone are no longer sufficient; practitioners now require an integrated skill set that includes proficiency in AI-driven analytics, digital media strategies, and even cybersecurity (Raut, 2024). The adoption of AI in government communication offers significant advantages, but it also presents several challenges. Key obstacles include resistance to change, limited technical expertise, budget constraints, and ethical concerns related to AI decision-making. Additionally, government communication departments may struggle to fully integrate AI due to the absence of standardized policies and frameworks (Grech, 2023). Other studies have examined the challenges of AI adoption in government communication. İlişkiler (2022) asserted that, despite the conveniences and solutions AI presents, its implementation remains complex for government communication practitioners. One major issue is the disparity in technical skills among professionals, particularly those accustomed to traditional communication methods, leading to a misalignment in AI adoption efforts. There has been a notable shift in learning priorities, moving beyond traditional communication practices to encompass data analytics, AI ethics, and automation training. However, resistance remains a significant obstacle, as many practitioners fear AI adoption due to concerns over job displacement, loss of control over message dissemination, and the potential spread of misinformation (Wang, Zhao, Gangadhari, & Li, 2021). Furthermore, financial constraints hinder AI integration, as various government agencies lack sufficient investment in AI technologies, infrastructure, and training programs (Almarashda, Baba, Ramli, & Memon, 2022). Cybersecurity has also become a critical component of AI adoption in government communication. Given that government communication departments handle sensitive data, cyber threats pose a significant risk to operational efficiency. At present, many government communicators lack the necessary skills to navigate AI-driven tools effectively, creating a gap between technological advancements and workforce readiness (Alawaad, 2021). Additionally, ethical and legal concerns such as data privacy, biases in AI algorithms, and accountability in automated decision-making remain key challenges in the government's pursuit of effective AI-integrated communication strategies. Some researchers have emphasized the need for a strategic framework for AI implementation in government communication. Al-Ghamdi (2021) highlighted that, while AI holds great promise for transforming government communication, its implementation must align with a clearly defined strategic framework. The absence of policy guidelines and best practices for AI integration has created a gap in the ethical and effective application of AI by different government agencies. A well-structured AI adoption approach should include setting standards for AI usability, ensuring transparency in AI-driven decision-making, and evaluating AI's impact on communication outcomes (Radu, 2021). Furthermore, governments must establish regulatory frameworks to protect data privacy, ensure algorithmic accountability, and mitigate misinformation risks associated with AI-generated content. Developing a comprehensive AI strategy for government communication will help ensure that AI enhances—rather than undermines—the quality and credibility of public communication (İlişkiler, 2022). AI has emerged as a game-changer in government communication, leveraging new tools and capabilities to enhance information dissemination, citizen engagement, and decision-making processes (Graibeh, Khan, Al-Majeed, & Zhang, 2024). AI-driven innovations are transforming how governments interact with the public by enabling faster communication, more accurate information delivery, and data-driven approaches (Grech, 2023). One major concern surrounding AI adoption in government communication is its ethical implications, particularly in terms of transparency, accountability, and bias (Graibeh, Khan, Al-Majeed, & Zhang, 2024). For instance, algorithmic biases can heighten fears regarding misinformation and data privacy breaches, posing significant risks to public trust in government institutions (İlişkiler, 2022). While some governments have rapidly integrated AI into their communication strategies, others lag behind due to financial constraints, skill gaps, or inadequate infrastructure. These disparities create inconsistencies in communication methods across government departments, leading to fragmented public engagement (Dahabreh, 2023). Additionally,

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digital illiteracy remains a barrier to citizen participation in AI-powered communication platforms, particularly in regions where access to digital tools is limited (Lumisi, 2024).

Theoretical Framework: Technology Acceptance Model (TAM)

AI has the potential to significantly enhance public engagement with the audience, improving crisis response and policy dissemination. As AI tools like natural language processing (NLP), automatic content generation, and predictive analytics evolve rapidly, it becomes increasingly important for practitioners to understand both the structured process of technology adoption and the necessary skill adaptations. This study uses established theoretical models to explore the relationship between AI adoption and skill acquisition among government communication practitioners. The Technology Acceptance Model (TAM) is primarily employed to explain these changes within a comprehensive framework (Bastan, Zarei, & Tavakkoli-Moghaddam, 2022)."

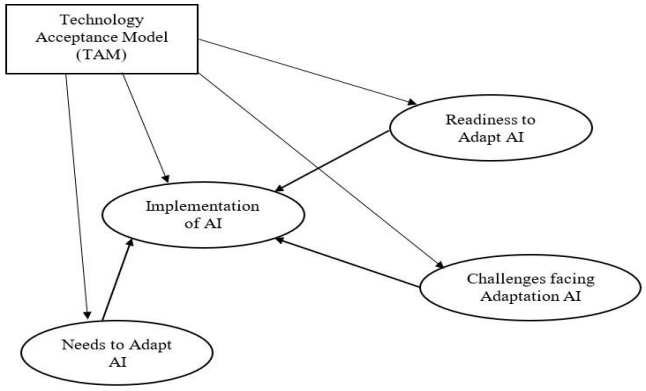

Figure 1: Theoretical Framework

The theoretical framework of this study is based on the Technology Acceptance Model (TAM), which examines key variables such as Readiness to Adopt AI, Challenges Facing AI Adoption, Implementation of AI, and Needs for AI Adaptation and analyzes their impact on government communication practitioners. Bastan, Zarei, and TavakkoliMoghaddam (2022) explored these variables to determine how factors such as Perceived Usefulness (PU) and Perceived Ease of Use (PEU) shape and influence government communicators' Attitudes Toward AI Adoption. These attitudes, in turn, impact the Behavioral Intention to Use AI, ultimately leading to Actual AI Adoption. Both Perceived Usefulness (PU) and Perceived Ease of Use (PEU) contribute positively to forming favorable attitudes toward AI adoption, encouraging individuals to embrace and utilize AI-driven technologies. AI enhances communication by fostering innovation adoption and observational learning, leading to the development of new competencies aligned with AI-driven transformations (Babashahi et al., 2024). This model provides a structured framework for understanding the factors influencing AI adoption and the skill sets required for future government communication professionals. TAM further explains the readiness, challenges, implementation, and needs associated with AI adoption in government communication. The model highlights two critical factors: Perceived Usefulness (PU) the belief that AI integration will enhance job performance—and Perceived Ease of Use (PEU) the extent to which AI adoption is perceived as effortless within government communication workflows (Hussain et al., 2025). These two factors jointly shape an individual's attitude toward AI adoption, influencing behavioral intention and ultimately determining the extent of actual AI implementation in communication workflows (Hameed et al., 2023). TAM provides insights into how government communication practitioners perceive AI technologies and how these perceptions shape their attitudes toward work. Effective AI adoption requires that practitioners not only understand AI tools but also perceive them as user-friendly and beneficial. AI-based tools in government communication, such as chatbots, sentiment analysis systems, and automated speech recognition software, are becoming integral to operations. Consequently, professionals must develop AI-based competencies in data analytics, ethical AI governance, and strategic digital communication. Within the TAM framework, government communication practitioners are expected to acquire key skill areas that support AI adoption. The model assumes that the perceived usefulness of AI is directly linked to its efficiency in enhancing job performance. When practitioners feel confident

and competent in using AI technology, adoption becomes significantly easier. The Perceived Ease of Use (PEU) of AI for government communication professionals can be improved through training and knowledge acquisition. According to TAM theory, external factors significantly influence AI adoption, including organizational support, ethical-legal considerations, and technological infrastructure (Bastan, Zarei, & Tavakkoli-Moghaddam, 2022). Government communication practitioners are more likely to adopt AI when continuous upskilling programs and training initiatives—involving AI specialists and leadership support—are in place. Training programs should not only demonstrate the technical capabilities of AI but also emphasize its strategic application in effective communication. Additionally, ethical and legal concerns are pivotal in AI adoption. Government communication professionals must navigate bias in AI decision-making, data protection, and regulatory compliance when integrating AI into their workflows (Onnen, 2024). Addressing these concerns ensures that AI adoption aligns with ethical standards and strengthens public trust in government communication practices.

Questions:

RQ1: To what extent is the readiness and preparedness level to adopt AI applications in Government Communication departments?

RQ2: What are the Challenges facing Government Communication practitioners in adopting artificial intelligence technologies?

RQ3: What procedures are taken for employing AI applications in government communication departments?

RQ4: What is the needed knowledge and skills to employ artificial intelligence in government communication practices?

METHODOLOGY:

To achieve the research objectives, the study opted for a descriptive research design. The descriptive approach systematically allows the information to be gathered on AI readiness, challenges, and implementation strategies. This aims to assess the extent of current AI adoption and where potential barriers exist as well as assess what the current practitioners' opinions of AI applications are in government communication. The authors developed four measurements to assess the practitioners' opinions on Readiness, Challenges, Implementation, and Needs for artificial intelligence in government communication. This was based on previous studies, where the validity of the four measurements was assessed by three experts in government communication working at the Media Office of the Government of Sharjah in the United Arab Emirates. The survey was distributed online by sending a link to a total of 100 government communication practitioners working on government entities such as ministries, federal authorities, and local authorities. The authors received 50 completed responses. The research employs the Technology Acceptance Model (TAM) as its theoretical foundation, widely recognized for its relevance in assessing AI integration, particularly in government communication. TAM is based on two core constructs: perceived usefulness and perceived ease of use. Perceived usefulness refers to the extent to which AI applications enhance the efficiency and effectiveness of communication tasks. Perceived ease of use evaluates how easily government communication employees can integrate AI into their daily activities. Through TAM, this study aims to determine whether government communication practitioners find AI both worthwhile and user-friendly, with the goal of understanding the factors that influence their willingness to adopt AI-based solutions. An informed consent form is provided to all participants, outlining the details of the study and explaining their right to confidentiality.

Table 1 sample

Demographic Sampling	Options	F.	%
Gender	Male	21	42%
	Female	29	58%
Designations	Director of the Government Communication	15	30%

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	An employee in the Government Communication	16	32%
	Media Practitioner in the Government Communication	4	8%
	Media expert in the Government Communications	15	30%
Age	Less than 25 years old	1	2%
	25- 40 years old	26	52%
	40-50 years old	21	42%
	Over 50 years old	2	4%
	Over 55 years old	0	0%
Academic qualifications	High school	2	4%
	Higher Diploma/Bachelor's Degree	33	66%
	Masters - Ph.D.	15	30%
Academic specializations	Media and mass communication	31	62%
	Information technology	3	6%
	Artificial intelligence	1	2%
	Other specialties	15	30%
Duration of work in Government Communication	Less than a year	3	6%
	1-3 Years	4	8%
	3-5 Years	6	12%
	5-10 Years	13	26%
	More than 10 Years	23	46%

Results:

1-Readiness to adopt AI applications in government communication departments

Table 2: Media Readiness and preparedness to adopt AI

Statement	Mean
1-Employees in the Government Communications Department have the readiness and desire to employ and use AI applications in performing their work.	4.08
2-The Institutions can innovate AI platforms and applications that suit the nature of their work.	3.84
3-The government communication department in which I work is distinguished by its media readiness and preparedness to employ AI applications in government communication practices.	3.6
4-Government institutions' customers have the ability to use AI applications when communicating with the institution.	3.36
5-Employees in the Government Communication Department have the appropriate qualifications and training to use AI applications.	3.30

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The table refers that employees in government communication departments are highly willing and ready to adopt AI applications (Mean: 4.08), indicating a strong foundation for AI integration. However, institutional capacity for AI innovation (Mean: 3.84) and media readiness for AI implementation (Mean: 3.6), while relatively positive, suggest that further development is needed to fully optimize AI's potential in government communication. The lower score for customer ability to engage with AI applications (Mean: 3.36) highlights a gap in digital literacy or accessibility, which could hinder public interaction with AI-driven services. The biggest challenge appears to be the lack of employee training and qualifications (Mean: 3.30), signaling a need for targeted AI training programs to enhance proficiency. Overall, while readiness and institutional innovation are promising, the successful implementation of AI in government communication requires greater investment in training, infrastructure, and public engagement strategies to ensure a seamless transition.

2-Challenges of adopting artificial intelligence applications in government communication departments

Table 1: Challenges of adopting artificial intelligence applications

Statement	Mean
1-Customers prefer to communicate with Institutions through the easier means that they are accustomed to as opposed to AI	3.82
2- Customers are afraid to use AI applications due to privacy and data security issues	3.52
3-Using AI applications requires the availability of special tools and devices that are not available to the majority of customers	3.42
4-There is a lack of experts with sufficient knowledge and skills to employ AI in the field of government communication	3.24
5- Opposition from government communication practitioners is hindering the adoption of AI technologies in their Institutions	3.20
6-Adopting AI applications requires costly studies and software that cannot be easily provided in an organization's budget.	2.94
7-Government communication practitioners are afraid to replace human resources with AI applications	2.66

The table indicates that customers prefer traditional communication methods over AI (Mean: 3.82), suggesting a reluctance to shift towards AI-driven interactions. Privacy and data security concerns (Mean: 3.52) further contribute to customers' hesitation, while the requirement for specialized tools (Mean: 3.42) creates additional accessibility barriers. A shortage of AI experts (Mean: 3.24) and resistance from government communication practitioners (Mean: 3.20) further hinder AI adoption, highlighting the need for skill development and mindset shifts among professionals. Budget constraints (Mean: 2.94) also pose a challenge, as AI adoption requires significant financial investment. Interestingly, fear of AI replacing human resources (Mean: 2.66) scores the lowest, suggesting that while concerns about job security exist, they are not the primary obstacle. Overall, customer hesitation, technical and financial barriers, and a lack of AI expertise are key challenges that must be addressed to facilitate AI integration in government communication.

3- Procedures are taken for employing AI applications in government communication departments

Table 2: Implementation for employing AI applications

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Statement	Mean
1-AI can be used to improve the efficiency of producing videos, photos, and visual content.	4.30
2-AI applications can integrate with other means of communication used by the Government Communications Department	4.24
3-AI can be used to improve the content effectiveness of social media posts	4.20
4-AI applications help disseminate organization information and news easily and quickly	4.06
5-AI technologies contribute to enhancing communication strategies with the public during crises	4
6-AI applications can be used to write and edit news and press reports issued by the Government Communications Department	3.76
7-AI applications help enhance effective communication with customers and boost institutional reputation	3.74

The table highlights a strong consensus on the need for AI training and structured guidelines for government communication professionals, as evidenced by the high mean scores for training (4.48) and professional guides (4.48). Additionally, the need for ethical standards in AI use (4.62) is the highest-rated factor, indicating that practitioners recognize the importance of ensuring responsible and transparent AI adoption in government communication. The anticipated increase in reliance on AI over face-to-face communication (4.32) further reinforces the urgency of AI integration efforts. Moreover, the use of AI as a benchmark for evaluating communication efficiency (4.08) suggests that AI-driven processes are seen as valuable performance indicators. Overall, the findings emphasize that while AI is expected to play an increasingly significant role in government communication, its successful adoption requires structured training, clear ethical guidelines, and professional frameworks to ensure responsible and effective implementation.

4-Needs to adopt AI applications in government communication departments

Table 3: The need to adopt AI applications

Statement	Mean
1-There is a need to establish professional ethical standards for the use of AI technologies in government communication practices	4.62
2-There is a need to develop professional guides that show government communications professionals how to use AI applications	4.48
3-There is a need to train government communications employees to use AI applications in performing their work	4.48

4-In the future, reliance on AI applications will increase compared to direct face-to-face communication	4.32
5-The use of AI can be relied upon as one of the standards for evaluating the efficiency of communication work in government institutions	4.08

The table underscores a strong consensus on the necessity of ethical guidelines and structured training for AI adoption in government communication, with the highest-rated need being the establishment of professional ethical standards (Mean: 4.62). This highlights concerns regarding transparency, accountability, and responsible AI use in governmental communication. Similarly, the call for professional guides (Mean: 4.48) and AI training programs (Mean: 4.48) reflects the recognition that practitioners require clear frameworks and skill development to effectively integrate AI into their work. The expectation that AI reliance will increase over face-to-face communication (Mean: 4.32) indicates a shift toward automation and digital engagement, emphasizing the need for structured adaptation. Lastly, the use of AI as a benchmark for evaluating communication efficiency (Mean: 4.08) suggests that AI is perceived as a performance-enhancing tool. The findings suggest that while AI adoption is inevitable, its success depends on ethical governance, comprehensive training, and professional guidelines to ensure effective and responsible implementation.

Correlations

The correlation test results suggest moderate positive relationships between key factors influencing AI adoption in government communication. First, the moderate correlation between Readiness to Adapt AI and Implementation of AI ($r = 0.425$, $p = 0.002$) indicates that employees' readiness and willingness to embrace AI moderately impact its actual implementation. This suggests that while being open to AI adoption is important, it is not the sole determining factor for successful implementation. Other influences, such as organizational policies, resources, and leadership support, likely play significant roles in AI integration. Second, the moderate correlation between Implementation of AI and Needs to Adapt AI ($r = 0.558$, $p = 0.000$) implies that as AI implementation progresses, the demand for adaptation grows. This reflects the evolving nature of AI integration, where institutions realize the necessity of continuous improvements, additional training, and infrastructure upgrades to keep pace with AI advancements. The findings highlight that while readiness and adaptation are essential for AI adoption, successful implementation requires more than just willingness—it necessitates proper training, institutional support, and ongoing adaptation strategies. These moderate correlations suggest that addressing AI adoption challenges requires a structured approach that includes workforce training, clear implementation strategies, and continuous refinement of AI applications to meet the evolving needs of government communication.

DISCUSSION

The results indicate that government communication practitioners in the UAE possess a moderate level of readiness for AI adoption. While institutions express an intention to integrate AI into their communication strategies, a gap remains in terms of actual employee preparedness. Most practitioners recognize the value of AI in enhancing communication efficiency, particularly in areas like automated content creation, sentiment analysis, and customer engagement. However, inadequate training and a lack of technical expertise hinder them from fully utilizing the available AI tools (Alawaad, 2021). The study also found that while government institutions have invested in AI infrastructure, employee awareness of its applications varies. The correlation analysis suggests that experienced staff are more likely to be ready for AI adoption, in contrast to their less experienced counterparts. Strategic exposure and the resolution of practical challenges are seen as key factors influencing decision-making regarding AI adoption (Almarashda, Baba, Ramli, & Memon, 2022). To bridge this gap, targeted training programs, workshops, and continuous professional development initiatives should be implemented, ensuring that communication practitioners are adequately equipped with AI-related skills.

While the integration of AI into communication offers numerous advantages, it also presents several challenges. A significant hurdle is the resistance to change among practitioners, particularly concerns over job security and losing

control over communication content. Yasser (Beni, J.A., Radwan, A.F. and Askar, N.A.R.,2025). The research indicates that while a small group of practitioners are strongly opposed to AI adoption, many others remain apprehensive or skeptical about its long-term implications. Additionally, AI adoption faces financial barriers, as it requires substantial investments in infrastructure, software, and specialized training (İlişkiler, 2022). The absence of standardized AI policies across various government communication departments exacerbates these challenges, leading to inconsistent reports of AI adoption. Ethical concerns, such as data privacy, algorithmic biases, and the risks of misinformation, contribute further to practitioners' hesitancy. Furthermore, customers' reluctance to engage with AI-driven communication channels, largely due to trust and privacy issues, complicates AI adoption. To address these challenges, comprehensive solutions are necessary, including structured policy guidelines, dedicated funding for AI initiatives, and the establishment of an ethical governance framework to ensure the responsible and effective implementation of AI.

The findings indicate that AI has already been integrated into various communication functions within government institutions. AI applications such as automated press release generation, AI-assisted customer service through chatbots, and AI-driven sentiment analysis are increasingly gaining traction. These technologies play a critical role in streamlining social media engagement and enhancing content creation efficiency (Graibeh, Khan, Al-Majeed, & Zhang, 2024). However, a hybrid AI-human approach is essential when handling crises or sensitive public information. In these situations, human oversight ensures credibility and authenticity, which are vital for maintaining public trust (Al-Ghamdi, 2021). The research highlights the importance of AI integration rather than replacement, emphasizing that AI should complement and optimize existing communication methods. Furthermore, fostering collaboration between government communication departments and AI experts can significantly accelerate the adoption and successful implementation of AI technologies (Artificial Intelligence Office, 2024). To build a robust strategic adoption framework for AI, it is crucial to focus on clear performance evaluation metrics, AI literacy training, and the development of AI tools that align with the core objectives of government communication professionals.

The study highlights key skill areas that government communication practitioners must develop to effectively integrate AI into their workflows. Essential competencies include data analytics, AI ethics awareness, cybersecurity knowledge, and digital content creation skills. According to the Technology Acceptance Model (TAM), practitioners' acceptance and adoption of AI are significantly influenced by the perceived usefulness and ease of use of the technology (Dahabreh, 2023). The findings further reveal that professionals with more than ten years of experience are more likely to implement AI, suggesting a stronger connection between the perceived necessity of AI and its practical application. In contrast, younger professionals—despite being more digitally native—show a weaker correlation between AI readiness and implementation. This may be due to lower institutional capacity and insufficient training opportunities (Graibeh, Khan, Al-Majeed, & Zhang, 2024). To address these challenges, continuous AI capacity-building initiatives, mentorship programs, and collaborations between the Academic / Technology sectors and the government should be established to help practitioners acquire essential new skills. Furthermore, the development of professional ethical standards and clear guidelines on AI applications will foster confidence in AI's use, ensuring transparency and accountability in government communication. The findings align with the Technology Acceptance Model (TAM), which emphasizes Perceived Usefulness (PU) and Perceived Ease of Use (PEU) as key drivers of technology adoption. While government communication employees exhibit high readiness, actual AI implementation is hindered by training gaps, institutional limitations, and public concerns, affecting PEU. Similarly, PU is evident, as AI is seen as a valuable tool, yet challenges like budget constraints and ethical considerations slow adoption. The study suggests that beyond TAM's behavioral intention model, institutional support, infrastructure, and continuous adaptation are crucial for effective AI integration in government communication.

Future Expectation

Based on the findings of this research, several future expectations can be identified in the realm of government communication, particularly concerning the utilization and implementation of Artificial Intelligence (AI) by media practitioners. It is anticipated that further exploration of this topic will lead to deeper insights and a more nuanced understanding of the variables involved in the implementation. As new technologies, methodologies, and theoretical frameworks emerge, they are expected to enhance the precision and applicability of future studies in this area.

Additionally, the results of this research may lay the groundwork for practical applications, guiding policy-making processes, and informing the development of ethical guidelines, all of which could shape future practices in the field of government communication. Future studies are expected to build upon these findings, validating and extending them across diverse contexts and populations, and further exploring the impact of AI in different governmental and media settings.

CONCLUSION

The findings reveal that while there is strong readiness among government communication employees to adopt AI, successful implementation requires more than just willingness. Institutional capacity, training, and public engagement remain critical factors in ensuring the effective integration of AI in government communication. The lack of employee training and qualifications is one of the most significant barriers, highlighting the urgent need for structured training programs. Additionally, customers still prefer traditional communication methods, with concerns over privacy, data security, and accessibility creating hesitation in AI adoption. Resistance from government communication practitioners and budget constraints further hinders progress, demonstrating the need for investment in skill development and financial support for AI implementation. The results also emphasize the necessity of ethical guidelines and professional frameworks to guide AI use responsibly. As reliance on AI in communication is expected to increase, ensuring transparency, accountability, and efficiency will be essential in building trust and optimizing AI-driven engagement. The correlation analysis indicates that while readiness influences AI adoption, factors such as institutional support, infrastructure, and continuous adaptation play a significant role. The successful integration of AI in government communication depends on a well-structured approach that balances technological advancements with ethical considerations, professional training, and public accessibility.

LIMITATIONS:

This study offers many insights about AI adoption in government communication practitioners; however, there are still limitations to the research. Practitioners could tend to exaggerate or understate their readiness in AI, skills, or challenges they perceived in organizational expectations or pressures. More objective and better-structured data collection methods should include actual metrics in AI use or case studies for a more precise analysis of levels of AI adoption. Another limitation is the focus on the Technology Acceptance Model. TAM provides a comprehensive theoretical ground for AI adoption understanding. Its greatest strength lies in the perceived usefulness and ease of use of AI technologies. Nevertheless, the adoption of AI in government communication would go through other broader factors organizational culture, policy regulations, ethical considerations, and perceived value of these technologies by the external public, which are not covered by TAM alone. Future studies would probably integrate the consideration of other frameworks that would allow for further analysis such as institutional theory or innovation diffusion models.

REFERENCES

[1] Alawaad, H. A. (2021). The role of artificial intelligence (AI) in public relations and product marketing in modern organizations. *Turkish Journal of Computer and Mathematics Education (*, 3180-3187. https://doi.org/10.17762/turcomat.v12i14.10888

[2] Al-Ghamdi, L. (2021). *Towards adopting AI techniques for monitoring social media activities*. https://doi.org/10.37868/sei.v3i1.121

[3] Almarashda, H. A., Baba, I. B., Ramli, A. A., & Memon, A. H. (2022). User Expectation and Benefits of Implementing Artificial Intelligence in the UAE Energy Sector. *Journal of Applied Engineering Sciences, .*, 12(1). https://doi.org/10.2478/jaes-2022-0001

[4] ArtificialIntelligenceOffice. (2024). *Artificial Intelligence Office, UAE.* Retrieved from https://ai.gov.ae/strategy/.

[5] Babashahi, L., Barbosa, C. E., Lima, Y., Lyra, A., Salazar, H., Argôlo, M., & Souza, J. M. (2024). AI in the workplace: A systematic review of skill transformation in the industry. *Administrative Sciences, 14(6), 127.* https://doi.org/10.3390/admsci14060127

[6] Bastan, M., Zarei, M., & Tavakkoli-Moghaddam, R. (2022). A new technology acceptance model: a mixed-method of grounded theory and system dynamics. *Kybernetes, 51(1), 1-30*. DOI:10.1108/K-03-2020-0127

[7] Dahabreh, F. M. (2023). *The continued usage of artificial intelligence in the United Arab Emirates public sector organisations: An extended information system success model*. DOI:10.11591/ijai.v13.i3.pp2472-2481

[8] Graibeh, A., Khan, S., Al-Majeed, S., & Zhang, S. (2024). *Capability Assessment Framework for Artificial Intelligence and Blockchain Adoption in Public Sector of United Arab Emirates (UAE)*. DOI: 10.14569/IJACSA.2024.0150607

[9] Grech, A. (2023). Digital transformation of TVET and skills development systems in Africa. *Guidelines for countries to undertake a strategic planning framework*. DOI:10.13140/RG.2.2.22191.92325

[10] Hameed, B. Z., Naik, N., Ibrahim, S., Tatkar, N. S., Shah, M. J., Prasad, D., & Somani, B. K. (2023). Breaking barriers: Unveiling factors influencing the adoption of artificial intelligence by healthcare providers. *Big Data and Cognitive Computing, 7(2), 105*. https://doi.org/10.3390/bdcc7020105

[11] Hussain, A., Zhiqiang, M., Li, M., Jameel, A., Kanwel, S., Ahmad, S., & Ge, B. (2025). The mediating effects of perceived usefulness and perceived ease of use on nurses' intentions to adopt advanced technology. *BMC nursing, 24(1), 33*. https://doi.org/10.1186/s12912-024-02648-8

[12] İlişkiler, H. (2022). *The Future of Public Relations, Advertising and Journalism:How Artificial Intelligence May Transform the Communication*. Retrieved from https://doi.org/10.17829/turcom.1050491

[13] Lumisi, M. (2024). An assessment of the adoption of artificial intelligence (AI) in the South African construction industry. orcid.org/0000-0003-3064-3624

[14] Onnen, A. (2024). AI-Specific Skills for Integration Into Existing Competency Frameworks. *e-Journal VFU, ISSN, 1313-7514*. http://dx.doi.org/10.2139/ssrn.5072947

[15] Radu, R. (2021). Steering the governance of artificial intelligence: national strategies in perspective. *Policy and society,*. 40(2), 178-193. https://doi.org/10.1080/14494035.2021.1929728

[16] Raut, B. B. (2024). Exploring Effective Strategies for Fostering Economic Growth in Developing Nations. *International Research Journal of MMC,*, 5(5), 79-87. Retrieved from https://doi.org/10.3126/irjmmc.v5i5.73588

[17] Wang, K., Zhao, Y., Gangadhari, R. K., & Li, Z. (2021). Analyzing the adoption challenges of the Internet of things (Iot) and artificial intelligence (ai) for smart cities in china. *Sustainability,*. 13(19), 10983. Retrieved from https://doi.org/10.3390/su131910983

[18] Yasser Beni, J.A., Radwan, A.F. and Askar, N.A.R. (2025) 'The role of Artificial Intelligence in transforming public relations practices: Insights from the UAE', Journal of Information Systems Engineering and Management, 10(14s), pp. 309–320. doi:10.52783/jisem.v10i14s.2240.

[19] Zhang, J., & Chen, Z. (2024). Exploring human resource management digital transformation in the digital age. *Journal of the Knowledge Economy,*, 15(1), 1482-1498. Retrieved from https://doi.org/10.1007/s13132-02301214-y