The Effectiveness of AI-powered Sentiment Analysis in Corporate Communication in Improving Stakeholder Engagement



Ioseb Gabelaia

Kauno kolegija Higher Education Institution, Lithuania iosebgabelaia@gmail.com

Migle Smaidziunaite

Kauno kolegija Higher Education Institution, Lithuania migle.smaidziunaite@go.kauko.lt

Purpose: There is limited research on Artificial intelligence and its distinctive and measurable impact on corporate communication and stakeholder engagement. Besides, existing and new research frequently lacks industry-specific insights, practical case studies, and cross-disciplinary insights. This article is the first of two articles on corporate communication and artificial intelligence developed by the authors. This article explores the effectiveness of integrating artificial intelligence into corporate communication to improve stakeholder engagement.

Study design/methodology/approach: The authors used a mixed methodology, quantitative surveys (n = 241), and qualitative interviews (n = 7) with corporate communication managers. Convenience and Snowball sampling was used.

Findings: AI-powered instruments significantly improve the capability to identify key sentiments, permitting organizations to respond proactively and maintain positive stakeholder relationships. Moreover, integrating AI in sentiment analysis improves feedback management processes, reducing response times and encouraging a more dynamic communication environment.

Originality/value: in the times of AI, this research contributes to the practical and theoretical characteristics of improving stakeholder engagement in corporate communication, and offers recommendation for actionable decisions.

Introduction

Corporate communication is evolving in the digital transformation era. Organizations today face the complex task of managing a regular influx of stakeholder feedback across various channels, from social media to internal communication systems. This sophisticated communication environment requires organizations to accurately listen and interpret sentiments for robust stakeholder communication. Due to rapid technological development, synchronization of information systems, and industrialization, corporate managers increasingly embrace AI in innovation (Bahoo et al., 2023).

Traditional feedback interpretation methods usually rely on manual or semi-automated processes, which are ineffective in managing the scale and velocity of modern corporate communication. According to Arora and Sharma (2023), the technology-driven environment is so pervasive today that we do not even recognize how fortunate AI has made our lives. Therefore, artificial intelligence (AI) is an innovative solution, primarily through sentiment analysis algorithms competent in processing extensive volumes of unstructured textual data in real time (Chen et al., 2022). Thus, by using AI, organizations can acquire in-depth insights into stakeholder attitudes, preferences, and concerns, allowing them to formulate more effective engagement processes (Buhmann & Gregory, 2023). However, significant gaps exist in understanding AI's practical application and impact on corporate communication practices (Weber-Lewerenz, 2021). Traditional communication frameworks often adopt a reactive approach, where organizations address stakeholder feedback only after issues have occurred. Such hesitance in response time can damage stakeholder trust and engagement, leading to reputational threats and skipped opportunities for relationship management.

While the existing literature emphasizes AI's potential in corporate communication, limited empirical studies focus specifically on sentiment analysis through industry-specific insights, practical case studies, and cross-disciplinary methods (Brockhaus et al., 2023). Consumers' experience and perception of AI applications in marketing communication are rarely examined (Chen et al., 2022). This research aims to explore the effectiveness of AI-powered sentiment analysis in corporate communication, focusing on its ability to improve stakeholder engagement. The authors aim to determine critical areas where sentiment analysis can add value to corporate communication strategies and provide actionable insights for practitioners. Additionally, the authors aim to reveal organizations' challenges and limitations when implementing AI-driven sentiment analysis tools.

This is the first of two articles on corporate communications and artificial intelligence. The first article demonstrates the basis of research based on surveys and interviews. The second article is an observation and case study on two SMEs who use sentiment analysis in corporate communication and stakeholder engagement.

Literature Review

Many organizations already recognize the importance of corporate communication for business success, invest in human resources, and strive not only to optimize communication processes but also to digitalize them (Prahl & Goh, 2021). According to DiSanza and Carr (2017), corporate communication is defined as a strategic process aimed at ensuring smooth internal and external communication within an organization and shaping a positive image by maintaining relationships with various stakeholders. Corporate communication and how organizations interact with stakeholders influence their reputation, regardless of the goods or services they offer (Ozan & Yolcu, 2022). Therefore, it is crucial for organizations to focus not only on the efficiency of production, sales, and other business processes but also on communication effectiveness with stakeholders (Brockhaus et al., 2023).

In corporate communication, stakeholders are categorized as internal and external (Rane et al., 2024). These include customers, employees, investors, and organizations from the public, private, and non-governmental sectors (Cornelissen, 2017). Depending on the organization's activities, there may be other stakeholders – for example, the university's internal stakeholders could include students, while external stakeholders might consist of social partners, sponsors, and others. A strategically managed communication process is one of the key factors that give organizations an advantage in the eyes of stakeholders (Ozan & Yolcu, 2022; DiSanza & Carr, 2017)). This means that a stakeholder may choose to collaborate with an organization solely due to its more assertive communication, even if another organization offers identical or even higher-quality goods or services (Brockhaus et al., 2023). Moreover, effective corporate communication not only helps establish and maintain long-term relationships with stakeholders but also enables organizations to achieve their goals, ensuring their continuity and sustainability (Men et al., 2023). Therefore, effective communication with stakeholders has a direct impact on the success of the entire corporation (Rane et al., 2024; Cornelissen, 2017).

An increasing number of organizations are incorporating artificial intelligence tools into corporate communication to enhance stakeholders' engagement (Illia et al., 2022). AI is a technology that enables machines to simulate various complex human abilities (Sheikh, 2023; Sundar & Lee, 2022).

The literature highlights both the advantages and disadvantages of using AI in communication. AI use in communication raises ethical problems, such as social injustice, individual needs,

environmental impact, and cultural identity (Stahl & Eke, 2024). Additionally, AI can pose risks related to disinformation and mass manipulation (Illia et al., 2022). On the other hand, AI is recognized for its ability to overcome communication barriers (Ali et al., 2024) and facilitate faster and more efficient communication (Hohenstein, 2023). Furthermore, by analyzing large volumes of data, AI can provide valuable insights that help develop more effective communication strategies (Dolunay, 2024). After considering these advantages and disadvantages, AI can be highly beneficial in corporate communication (Stahl & Eke, 2024; Illia et al., 2022). However, to maximize its effectiveness and fully leverage its potential, this technology should be integrated responsibly after doing a thorough assessment of potential risks (Sundar & Lee, 2022).

Furthermore, AI tools are used for both internal and external communication (Sundar & Lee, 2022). AI assists communication professionals in performing daily tasks such as creating and automating visual and written content, developing strategies, and improving other communication processes (Iaia et al., 2023). AI can also be applied to analyze the impact of communication through monitoring tools, aiding in content creation, management, and evaluation (Illia et al., 2022). However, its integration depends on employees' technological competence (Rohrbach & Makhortykh, 2025).

The focus on artificial intelligence (AI) has significantly increased (Iaia et al., 2023; Belkassi et al., 2022). A mid-2023 survey of communication professionals revealed that 60% of them use AI tools at least occasionally in their work (Dahlhoff, 2023). This suggests that communication specialists who have tried AI tools recognize their benefits in simplifying daily communication-related tasks. However, improving technological literacy skills is essential to ensure the purposeful use of AI tools in corporate communication (Sundar & Lee, 2022; Iaia et al., 2023).

While some communication professionals are already familiar with and using AI tools, the literature identifies several specific barriers that hinder their full implementation in the communication field (Brockhaus et al., 2023). These include a lack of qualified personnel and financial resources, employee resistance to change and new technologies, limited understanding of AI, data privacy concerns, and the need for educational initiatives (Telebenieva, 2024; Rane et al., 2024). Therefore, when implementing AI in communication, organizations face not only financial and technological challenges but also resistance from employees unwilling to embrace innovation (Nkembuh, 2024). Many lack the necessary skills and knowledge, meaning that to unlock AI's full potential in corporate communication, organizations must invest not only in technology but also in the training and education of communication professionals (Belkassi et al., 2022; Colleoni et al., 2023).

Further, AI tools, such as sentiment analysis, help organizations communicate more effectively with stakeholders, assess the effectiveness of strategies, and optimize processes (Kelm & Johann, 2025). In the literature, sentiment analysis is defined as the systematic identification, extraction, quantification, and study of affective states and subjective information using natural language processing, text analysis, computational linguistics, and biometrics ((Belkassi et al., 2022; Önden, 2024). Moreover, sentiment analysis utilizes dictionary-based and machine-learning methods to determine a text's sentiment, enabling it to detect irony and capture emotions (Bernardus, 2024). Thus, sentiment analysis can not only identify the positive, negative, or neutral meanings of individual words but also assess the overall tone of an entire text (Colleoni et al., 2023). This indicates that the technology has advanced enough to be effectively utilized in corporate communication to enhance stakeholder engagement (Ajayi & Mmutle, 2021).

Sentiment analysis helps companies understand consumer attitudes toward their products or services and leverage this data to differentiate themselves from competitors (Taherdoost & Madanchian, 2023). In corporate communication, these insights could be applied across various areas, directly contributing to the organization's success (Iaia et al., 2023; Bernardus, 2024). For instance, by analyzing the sentiments and feedback of external stakeholders, sentiment analysis could help businesses identify areas for improvement, such as the effectiveness of advertising or customer communication, and adjust and enhance these processes (Badham & Luoma-aho, 2023). Meanwhile, by analyzing the sentiments of internal stakeholders, companies could implement changes to improve working conditions, strengthen employer branding, attract top talent, and further solidify their position in the market (Colleoni et al., 2023; Telebenieva, 2024).

Another area where sentiment analysis could be valuable is crisis management (Badham & Luoma-aho, 2023; Iaia et al., 2023). This is particularly important because crisis management is one of the core functions of corporate communication. A 2024 study on the use of predictive analysis in strategic corporate communication revealed that sentiment analysis is a key component of predictive analysis, contributing to increased stakeholder engagement and crisis management. Predictive analysis is a data mining methodology that utilizes computational and statistical methods to extract insights from data, allowing organizations to forecast trends and behavioral patterns (Siegel, 2013). In the study, four corporations used sentiment analysis tools to monitor social media, news sources, and customer reviews. This enabled them to detect emerging issues early, reduce response time to negative sentiments, and prevent potential crises (Nkembuh, 2024; Belkassi et al., 2022). Hence, one of the ways sentiment analysis can enhance corporate communication and maintain stakeholder engagement is by predicting potential crises and preventing them from escalating (Brockhaus et al., 2023; Siegel, 2013).

To conclude, despite AI's multiple potentials for business communication, companies need help implementing AI in their internal communication processes (Iaia et al., 2023). This literature review suggests that sentiment analysis can be an effective tool in corporate communication for increasing stakeholder engagement and ensuring organizational success. It not only helps organizations better understand consumer perceptions of their products and services but also enables the early identification of potential crisis triggers, allowing timely intervention. This, in turn, safeguards the organization's reputation and maintains stakeholder trust.

Research Methodology

The authors used a mixed methodology to explore how AI-powered sentiment analysis can improve stakeholder engagement and enhance feedback interpretation in corporate communication. This method offers a statistical perspective and in-depth managerial insights into understanding the impact of AI on corporate communication strategies.

This research consists of a structured online survey distributed to corporate communication professionals across various technology, healthcare, and retail industries. The survey was designed to obtain insights into AI adoption in corporate communication practices. 27 questions were divided into five sections. The first section collected demographic data. The second section discussed the extent to which AI tools were being integrated into corporate communication, while the third section focused on the role of sentiment analysis in stakeholder engagement. The fourth section investigated how AI influenced feedback interpretation. Finally, the fifth section explored expectations for AI's future development in corporate communication.

The authors used a purposive sampling approach to target corporate communication, public relations, or stakeholder engagement professionals. The survey was administered using

Qualtrics. Furthermore, SPSS Statistics 29 was used for descriptive and inferential statistical analyses. Mean, standard deviation and frequency distributions were conducted to outline key trends. Inferential analyses, including t-tests and ANOVA, were performed to compare perceptions across different industries and levels of AI adoption. Correlation and regression analyses were also conducted to explore the relationship.

In parallel with the survey, seven in-depth interviews were conducted with corporate communication managers via Zoom. Each interview lasted between 40 and 60 minutes and used a semi-structured interview format. Interview profiles and questions are outlined in Tables 2 and 3.

Furthermore, the interviews were audio-recorded and transcribed using Zoom and Otter transcription tools. Thematic analysis was conducted using NVivo. Figures and tables were created using the Drawio tool. Moreover, before data collection, all participants provided informed consent. Confidentiality and anonymity were maintained throughout the study. The authors acknowledge several limitations, especially industry-specific bias, as specific industries may have been overrepresented in the sample.

Research Findings

Survey Results

In this research, identifying demographic, construct, and dependent variables is fundamental to understanding the dynamics of AI-powered sentiment analysis in corporate communication. These variables offer a structured framework for exploring the complexities of stakeholder engagement and feedback interpretation processes. The authors identified age, gender, ethnicity, income level, education level, experience, and leadership as important independent variables. Furthermore, construct variables were perceived as ease of use, communication effectiveness, trust in tech, AI readiness, and sentiment analysis reliability. Lastly, the dependent variables were stakeholder engagement and feedback interpretation effectiveness. By exploring demographics, the research grabs the diversity of respondent perspectives. Through construct variables, it explores the perceptions shaping AI readiness. Finally, the authors evaluate the outcomes of implementing AI-powered sentiment analysis by exploring dependent variables.

The authors conducted a correlation analysis using SPSS 29. Table 1 shows a correlation matrix showing the relationships between various variables such as demographic factors (age, gender, ethnicity, income level), individual traits (education level, experience, leadership), technology-related factors (perceived ease of use, AI readiness, sentiment analysis reliability), and organizational outcomes (communication effectiveness, trust in technology, stakeholder engagement, and feedback interpretation effectiveness). Significant correlations (p < 0.0005) are marked with asterisks, and the Bonferroni adjustment has been applied to minimize the chances of a Type 1 error.

Table 1 shows several significant correlations for this research. First, Income level positively correlates with education level (r = 0.25**), stressing the general trend that higher education often leads to better income opportunities. Furthermore, experience is positively correlated with age (r = 0.43**), which is an expected outcome as experience naturally accumulates over time. Moreover, leadership reveals significant positive correlations with education level (r = 0.20**), experience (r = 0.51**), and income level (r = 0.34**), indicating that these factors collectively contribute to leadership qualities.

Furthermore, Table 1 shows that perceived ease of use has a strong positive correlation with communication effectiveness (r = 0.43**), meaning that when individuals find a system or

technology easy to use, they improve their ability to communicate effectively. Moreover, AI readiness is highly correlated with sentiment analysis reliability (r = 0.66**), trust in technology (r = 0.78**), and communication effectiveness (r = 0.44**). This result highlights the interconnectedness of trust, readiness for AI, and effective communication in using technology for organizational goals. Further, sentiment analysis reliability strongly correlates with stakeholder engagement (r = 0.49**), highlighting its role in understanding and engaging stakeholders effectively. Finally, trust in technology has significant correlations with communication effectiveness (r = 0.55**), AI readiness (r = 0.78**), and stakeholder engagement (r = 0.52**). This suggests that trust in technology serves as a foundational component for organizational success, especially in promoting effective communication and stakeholder relationships.

Next, table 1 demonstrates that stakeholder engagement correlates significantly with perceived ease of use (r = 0.53**), communication effectiveness (r = 0.47**), and AI readiness (r = 0.49**). These correlations emphasize the importance of usability and technological readiness in constructing meaningful stakeholder interactions. Moreover, feedback interpretation effectiveness has moderate positive correlations with leadership (r = 0.22**), AI readiness (r = 0.24**), and sentiment analysis reliability (r = 0.17**). This suggests that interpreting feedback effectively is connected to individual capabilities (leadership) and technological support (AI tools).

Table 1. Correlation Matrix (n = 241)

		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Age	27.0												
2	Gender	04												
3	Ethnicity	.05	07											
4	Income Level	.13*	.53	.24**										
5	Education Level	.09	01	.25**	.23**									
6	Experience	.07	.00	.43**	.25**	.25**								
7	Leadership	.01	.03	.34**	.20**	.23**	.51**							
8	Perceived Ease of	.09	08	00	.03	.18**	12	.04						
	Use													
9	Communication	.03	03	03	.07	.05	04	.04	.43**					
	Effectiveness													
10	Trust in Tech	04	.00	08	03	.03	11	.03	.37**	.55**				
11	AI Readiness	01	01	05	10	.05	12	.02	.34**	.44**	.78**			
12	Sentiment Analysis	.04	10	.01	.01	.07	04	.04	.35**	.44**	.66**	.65**		
	Reliability													
13	Stakeholder	02	15	06	.01	.02	07	.03	.47**	.53**	.52**	.49**	.47**	
	Engagement													
14	Feedback	.04	05	.09	.08	.11	.00	.07	.22**	.12	.25**	.24**	.17**	.08
	Interpretation													
	Effectiveness													

Note: * p < .0005 Bonferroni adjustment for multiple correlations to minimize chances of a Type 1 error.

Interview Results

The authors conducted interview analysis based on semi-structured interviews with corporate communication managers from 3 different industries. Overall, 27 questions were asked. Interviews were conducted on Zoom. Besides, recordings were transcribed using Zoom transcription and then validated by Otter software. Furthermore, Nvivo Software helped to create patterns and themes. Drawio was used to create figures and tables.

Table 2 shows the interviewee's profile, emphasizing their experience and competencies for the purposeful selections. The interviewees represent various industries (technology, healthcare, and retail) and have corporate communication expertise, with experience ranging from 5 to 18 years. This diversity underlines a wide range of skills tailored to industry-specific communication needs.

Table 2. Interviewee Profiles

Interviewee Industry Exp (Years)		Position	Areas of Expertise		
Interviewee 1	Technology	12	Senior Corporate Comm Manager	Digital Media Strategy	
Interviewee 2	Healthcare	8	Corporate Comm Specialists	Crisis Communication	
Interviewee 3	Retail	15	Head of Corporate Communication	Stakeholder Communication	
Interviewee 4	Technology	10	Corporate Relations Officer	Internal Communication	
Interviewee 5	Healthcare	7	Public Relations Manager	Branding and PR campaigns	
Interviewee 6	Retail	18	Director of Communication	Consumer behavior analysis	
Interviewee 7 Technology 5		Communication Analyst	AI-power communication		

Furthermore, Table 3 shows the questions asked during the interview process. The interview focused on five fundamental areas of corporate communication. The interview began with understanding the interviewee's background information, including their role, responsibilities, and experience. It then explored challenges in communication, addressing barriers faced in daily tasks and industry-specific influences. The technology and tools section discussed the adoption of communication technologies and the impact of AI. Stakeholder engagement explored the strategies and practices, including examples of successful campaigns. Ultimately, the future trends section discussed predictions that are changing the communications field.

Table 3. Interview Questions

Section	Key Focus	Questions			
Background Roles and Responsibilities		Can you briefly describe your role in the organization?How long have you been working in corporate communication?			
Challenges in Communication	Obstacles and Barriers	What challenges do you face in day-to-day communication tasks?How long has your industry influenced these challenges?			
Technology	Adoption and usage of communication tools	- What tools or technology do you currently use? - How has AI impacted corporate communication in your organization?			
Stakeholder Engagement	Strategies and Practices	- What methods do you use to engage stakeholders effectively? - Can you share an example?			
Future Trends Predictions		- What trends do you see shaping corporate communication? - how do you plan to address these trends?			

Based on interviews, some key themes in corporate communication showed several patterns, highlighted in Table 4. Technology adoption emphasizes a growing dependence on AI tools, especially for sentiment analysis, as one interviewee noted, "AI tools have simplified monitoring audience reactions." Challenges in communication incorporate managing crossfunctional coordination and addressing cultural distinctions, expressed as "one of the toughest tasks." Stakeholder engagement highlights personalization as a necessary strategy, with tailored campaigns resonating strongly. Internal communication emphasizes clarity and transparency, as "internal alignment is crucial for successful messaging." Looking ahead, the future of communication reveals an improving integration of AI and data-driven insights, with the impression that "the future lies in leveraging data for real-time decisions."

Table 4. Themes and Patterns based on interviews

Theme	Patterns	Quotes
Technology Adoption	Increased reliance on AI tools for sentiment analysis	"AI tools have simplified monitoring audience reactions."

Challenges in Communication	Managing cross-functional communication, cultural differences	"Coordinating across teams is one of the toughest tasks."
Stakeholder Engagement	Personalization as a key strategy	"Tailored campaigns resonate better with stakeholders."
Internal Communication	Importance of clear and transparent communication	"Internal alignment is crucial for successful messaging."
Future of Communication	Increasing integration of AI and Datadriven insights	"The future lies in using data for real-time decisions."

Discussions

According to Freshworks data, AI is rapidly changing the workplace today. 85% of IT departments use AI at least once weekly, and 80% of senior employees are convinced that AI will prove its business impact within two years. Employees acknowledge AI's value; 72% trust it to improve work processes, and 70% are keen to develop AI skills to stay competitive in the job market. Besides, AI-driven automation significantly improves efficiency, freeing up 24 business days per year and allowing employees to concentrate on higher-value tasks.

Corporate communication as a strategic function shapes organizational reputation and achieves long-term business success (Prahl & Goh, 2021; DiSanza & Carr, 2017; Ozan & Yolcu, 2022; Brockhaus et al., 2023). Stakeholders respond to the effectiveness and power of its communication (Cornelissen, 2017; Rane et al., 2024). As organizations increasingly digitalize, many are using artificial intelligence to improve corporate communication, simplify content creation, enhance strategic planning, and engage stakeholders more efficiently (Illia et al., 2022; Sundar & Lee, 2022; Sheikh, 2023). Nevertheless, AI integration introduces challenges (Stahl & Eke, 2024; Telebenieva, 2024; Nkembuh, 2024). Organizations must commit to upskiling employees and developing digital competence (Belkassi et al., 2022; Colleoni et al., 2023).

Furthermore, sentiment analysis is a vital AI tool to evaluate stakeholder emotions and attitudes (Önden, 2024; Bernardus, 2024). This tool encourages organizations to monitor feedback, improve customer and employee experiences, and modify communication strategies (Ajayi & Mmutle, 2021; Iaia et al., 2023). Applied effectively, sentiment analysis reinforces brand differentiation, improves crisis response through predictive analytics, and reinforces organizational resilience (Badham & Luoma-aho, 2023; Siegel, 2013; Nkembuh, 2024). However, results reveal that AI's full potential in communication is yet to be fully realized (Kelm & Johann, 2025; Illia et al., 2022; Sundar & Lee, 2022).

The correlation analysis offered valuable insights into the interplay between independent and dependent variables. The strong connections between AI readiness, trust in technology, and communication effectiveness suggest the critical role of technological adoption in modern organizational communication. Organizations aiming to improve and develop effective communication strategies should focus on building trust and readiness in technology among employees. Moreover, leadership was strongly connected to variables such as experience, education level, and feedback interpretation effectiveness. This indicates that boosting leadership skills through training and development can significantly improve organizational efficiency.

Furthermore, stakeholder engagement's relationship with sentiment analysis reliability indicates that understanding stakeholder sentiments through AI tools can lead to more informed and effective engagement strategies. Perceived ease of use was essential in improving communication and stakeholder engagement. This emphasizes the need for user-friendly systems and tools to encourage adoption and effectiveness.

Figure 1 shows a network graph that illustrates significant correlations among the variables. Each node represents a variable, and the edges (lines) reveal strong correlations, with the edge labels indicating the correlation values.

Clusters can be observed as first, technology and engagement. It shows strong connections between Trust in Tech, AI Readiness, Sentiment Analysis Reliability, and Stakeholder Engagement. Second, Education and Income. It shows a notable correlation between Income Level and Education Level. And lastly, experience and leadership. It shows a correlation between these two variables.

This visualization highlights how variables are interrelated, allowing for a more straightforward interpretation of the key relationships.

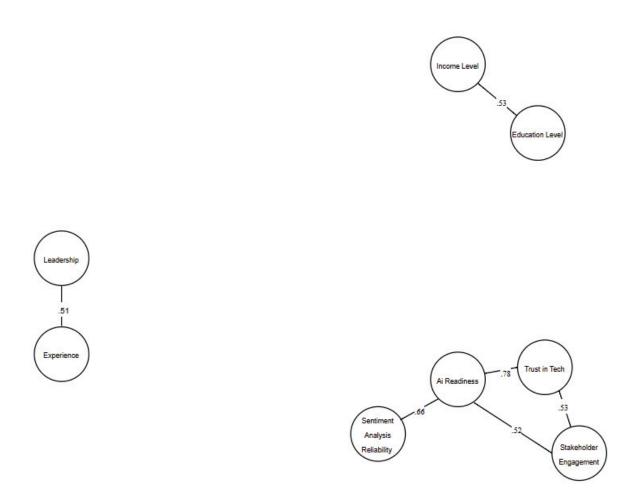


Figure 1: A network graph (Developed by the author)

The interviews demonstrated distinctive yet overlapping trends across technology, healthcare, and retail industries. Notably, Interviewee 1 from the technology sector stressed the transformative impact of AI-powered tools in streamlining sentiment analysis, a view reflected by Interviewee 7, who highlighted the efficiency of real-time data insights. Conversely, Interviewee 3 from retail suggested that while technology is beneficial, effective communication builds on understanding consumer behavior, aligning with Interviewee 6's emphasis on tailoring messages to distinct audience needs.

For instance, Interviewee 2 highlighted the criticality of crisis communication during public health emergencies, while Interviewee 5 examined branding efforts to rebuild trust during crises. Both highlighted the significance of maintaining transparency and a human touch, indicating that while technology aids efficiency, empathy remains irreplaceable. Similarly, transitions between internal and external communication strategies occurred as a recurring theme. While Interviewee 4 highlighted the role of internal alignment in providing consistent messaging, Interviewee 3 reported that stakeholder engagement succeeds in cohesive strategies originating from well-informed internal teams.

The dialogue on future trends indicated unanimous agreement on AI's expanding role. However, Interviewee 6 warned against over-reliance on technology, supporting a balanced practice incorporating data insights with human creativity. This sentiment was reflected in Interviewee 7's comment: "AI tools deliver insights, but it is our interpretation that drives meaningful actions.

Conclusion

The survey results demonstrated that many corporate communication professionals view AI-powered sentiment analysis tools as instrumental in improving feedback interpretation and stakeholder engagement. The interviews demonstrated that organizations using these tools have enhanced efficiency in managing massive volumes of data. Moreover, they adopt a proactive approach to stakeholder communication. Nevertheless, the results revealed challenges such as data privacy concerns, integration with existing systems, and the precision of sentiment analysis algorithms.

This research offers practical and theoretical value for corporate communication professionals and scholars. The authors demonstrated that existing research lacked industry-specific insights on how AI-driven communication can facilitate authentic stakeholder relationships to achieve organizational objectives.

Furthermore, surveys and interviews offered practical and theoretical insights. From a practical perspective, the results delivered actionable insights for incorporating AI-powered sentiment analysis into daily corporate communication strategies. The results emphasized the significance of a strategic process to AI implementation, supporting strong collaboration between communication teams and data analysts. These tools can develop effective communication strategies by improving stakeholder engagement and interpretation of feedback.

Moreover, this research demonstrates the AI's transformative role in corporate communication. Expanding upon current literature presents a new dimension to the discourse on sentiment analysis. It underscores its significance as a key element in modern business practices, showing a more in-depth understanding of how AI tools can optimize communication effectiveness in strategic decision-making.

The future research recommendation is to conduct a case study analysis on organizations that use AI tools in corporate communication. The interview sample should also be expanded, and case studies from different industries should be incorporated.

References

- Ajayi, O. A., & Mmutle, T. (2021). Corporate reputation through strategic communication of corporate social responsibility. *Corporate Communications: An International Journal*, 26(5), 1-15.https://doi.org/10.1108/CCIJ-02-2020-0047
- Arora, M., & Sharma, R. L. (2023). Artificial intelligence and big data: ontological and communicative perspectives in multi-sectoral scenarios of modern businesses. foresight, 25(1), 126-143. https://doi.org/10.1108/FS-10-2021-0216
- Badham, M., & Luoma-aho, V. (2023). Introduction to the handbook on digital corporate communication. In *Handbook on digital corporate communication* (pp. 1-16). Edward Elgar Publishing. https://doi.org/10.4337/9781802201963.00009
- Bahoo, S., Cucculelli, M., & Qamar, D. (2023). Artificial intelligence and corporate innovation: A review and research agenda. Technological Forecasting and Social Change, 188, 122264. https://doi.org/10.1016/j.techfore.2022.122264
- Belkassi, K., Ouchene, D., & Zaaf, K. (2022). The usage of AI applications in corporate communication of Algerian Public Institutions: The Directorate-General of Algeria Telecommunication as case of study. *Aleph*, 9(4), 185-201.
- Bernardus B. Budisusetyo, Wenceslaus A. Dhitya, Ady Nugroho, Gusti Pangestu, Sentiment analysis methods recommendation: A review of ai-based techniques on social media analysis,
- Brockhaus, J., Buhmann, A., & Zerfass, A. (2023). Digitalization in corporate communications: understanding the emergence and consequences of CommTech and digital infrastructure. Corporate Communications: An International Journal, 28(2), 274-292. https://doi.org/10.1108/CCIJ-03-2022-0035
- Buhmann, A., & Gregory, A. (2023). Digital corporate communication and artificial intelligence and future roles. In Handbook on Digital Corporate Communication (pp. 281-296). Edward Elgar Publishing. DOI: https://doi.org/10.4337/9781802201963.00031
- Chen, H., Chan-Olmsted, S., Kim, J., & Mayor Sanabria, I. (2022). Consumers' perception on artificial intelligence applications in marketing communication. Qualitative Market Research: An International Journal, 25(1), 125-142. https://doi.org/10.1108/QMR-03-2021-0040
- Colleoni, E., Romenti, S., & Murtarelli, G. (2023). Digital corporate communication and corporate reputation. In *Handbook on Digital Corporate Communication* (pp. 64-77). Edward Elgar Publishing. https://doi.org/10.4337/9781802201963.00014
- Cornelissen, J. (2017). Corporate Communication: A Guide to Theory & Practice (5th ed.). London, UK: Sage. Procedia Computer Science, Volume 245, 2024. https://doi.org/10.1016/j.procs.2024.10.341
- Dahlhof, D. AI in Marketing & Communications: Boosting Productivity—and Creativity, Too?. *The Conference Board* (2023). https://www.conferenceboard.org/pdfdownload.cfm?masterProductID=48778
- DiSanza, J., & Carr, D. (2017). Corporate communication. In The sage encyclopedia of communication research methods (Vol. 4, pp. 264-266). SAGE Publications, Inc, https://doi.org/10.4135/9781483381411
- Dolunay, A. (2024). The use of artificial intelligence in the field of communication: A research on the perspectives of communication academics. *Journal of Autonomous Intelligence*, 7(5), 1610. doi:http://dx.doi.org/10.32629/jai.v7i5.1610
- Hohenstein, J., Kizilcec, R.F., DiFranzo, D. *et al.* Artificial intelligence in communication impacts language and social relationships. *Sci Rep* **13**, 5487 (2023). https://doi.org/10.1038/s41598-023-30938-9
- Iaia, L., Nespoli, C., Vicentini, F., Pironti, M., & Genovino, C. (2023). Supporting the implementation of AI in business communication: the role of knowledge management. *Journal of Knowledge Management*, 28(1), 85-95. https://doi.org/10.1108/JKM-12-2022-0944
- Illia, Laura; Colleoni, Elanor & Zyglidopoulos, Stelios (2022). Ethical implications of text generation in the age of artificial intelligence. Business Ethics, the Environment and Responsibility 32 (1):201-210.
- Kelm, K. and Johann, M. (2025), "Artificial intelligence in corporate communications: determinants of acceptance and transformative processes", *Corporate Communications: An International Journal*, Vol. 30 No. 1, pp. 124-138. https://doi.org/10.1108/CCIJ-04-2024-0051
- Men, Linjuan & Vielledent, Marc & Yue, C. April & Zhou, Alvin. (2023). Digital corporate communication and stakeholder relationship management. 10.4337/9781802201963.00017.
- Nkembuh, N. (2024) Leveraging Predictive Analytics for Strategic Corporate Communications: Enhancing Stakeholder Engagement and Crisis Management. *Journal of Computer and Communications*, **12**, 51-61. doi: 10.4236/jcc.2024.1210005.

- Ozan, Mehmet Seyda & Yolcu, Faruk Selahattin. (2022). AN ASSESSMENT ON THE RELATIONSHIP OF CORPORATE COMMUNICATION AND CORPORATE REPUTATION. International Journal of Disciplines In Economics and Administrative Sciences Studies (IDEAstudies). 8. 863-871. 10.29228 /ideas.66995.
- Önden, A., Alnour, M., Simic, V., & Pamucar, D. (2024). The Evolution of Sentiment Analysis Across Various Scientific Disciplines: A Comprehensive Review Based on the Bibliometric Technique. *Decision Making Advances*, 2(1), 222–237. https://doi.org/10.31181/dma21202441
- Prahl, A., & Goh, W. W. P. (2021). "Rogue machines" and crisis communication: When AI fails, how do companies publicly respond? *Public Relations Review*, 47(4), 102077. https://doi.org/10.1016/j.pubrev.2021.102077
- Rane, N. L., Choudhary, S. P., & Rane, J. (2024). Artificial Intelligence-driven corporate finance: enhancing efficiency and decision-making through machine learning, natural language processing, and robotic process automation in corporate governance and sustainability. *Studies in economics and business relations*, *5*(2), 1-22. https://doi.org/10.48185/sebr.v5i2.1050
- Rohrbach, T. and Makhortykh, M. (2025), "A matter of mindset? Features and processes of newsroom-based corporate communication in times of artificial intelligence", *Corporate Communications: An International Journal*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/CCIJ-07-2024-0118
- Sheikh, H., Prins, C., Schrijvers, E. (2023). Artificial Intelligence: Definition and Background. In: Mission AI. Research for Policy. Springer, Cham. https://doi.org/10.1007/978-3-031-21448-6 2
- Siegel, E. (2013). Predictive analytics: The power to predict who will click, buy, lie, or die. Hoboken: Wiley.
- Stahl, B.C., Eke, D., 2024. The ethics of ChatGPT–exploring the ethical issues of an emerging technology. International Journal of Information Management 74, 102700. Stevenson, C., Smal. https://www.sciencedirect.com/science/article/pii/S0268401223000816
- Sundar, S. S., & Lee, E. J. (2022). Rethinking communication in the era of artificial intelligence. *Human Communication Research*, 48(3), 379-385. https://doi.org/10.1093/hcr/hqac014
- Taherdoost, H., & Madanchian, M. (2023). Artificial Intelligence and Sentiment Analysis: A Review in Competitive Research. *Computers*, 12(2), 37. https://doi.org/10.3390/computers12020037
- Telebenieva, Y. (2024). Development perspectives and innovative areas of artificial intelligence application in marketing and pr. *Economics & Education*, 9(2), 26–31. https://doi.org/10.30525/2500-946x/2024-2-4
- Weber-Lewerenz, B. (2021). Corporate digital responsibility (CDR) in construction engineering—ethical guidelines for the application of digital transformation and artificial intelligence (AI) in user practice. SN Applied Sciences, 3, 1-25. https://doi.org/10.1007/s42452-021-04776-1