SME REVIEW AND ANALYSIS

Volume: 6 Issue: 1

January-March, 2026

(ISSN:2791-2531)

KMF PUBLISHERS

www.kmf-publishers.com/sme-ra/

Contents lists available at KMF Publishers

SME Review and Analysis

journal homepage: www.kmf-publishers.com/sme-ra/

Research Article

Virtual Reality and Augmented Reality as Emerging Tools in Business Communication

Sinthia Akter Tisa[1]; Kazi Abdul Mannan[2]

[1]Department of Graphic Design & Multimedia
[2]Department of Business
Shanto-Mariam University of Creative Technology, Dhaka, Bangladesh

Corresponding Author Sinthia Akter Tisa, Email: sinthiatisa03@gmail.com

ARTICLE INFO

Keywords:
Virtual Reality, Augmented Reality, Business Communication, Media Richness Theory, Social Presence, Immersive Communication

ABSTRACT

Virtual Reality (VR) and Augmented Reality (AR) are reshaping business communication by enabling immersive, interactive, and context-rich experiences that extend beyond traditional methods. This study investigates the communicative value of VR and AR by analysing their roles in training, marketing, internal collaboration, and customer engagement. Drawing on qualitative methodologies, including semi-structured interviews with professionals and thematic analysis, the findings reveal that VR and AR improve message clarity, emotional resonance, and engagement while fostering stronger collaboration across geographically distributed teams. However, barriers such as high implementation costs, technological limitations, and lack of organisational readiness remain significant. The study integrates Media Richness Theory and Social Presence Theory to explain how VR/AR enhance communication effectiveness by offering sensory immersion, immediate feedback, and relational closeness. The results emphasise the potential of VR/AR as transformative communication tools that require strategic planning and organisational adaptation. This paper concludes by offering recommendations for gradual adoption, cross-departmental collaboration, and alignment with long-term business goals.

Received 1 January 2026; Received in revised form 11 March 2026; Accepted 15 March 2026

DOI: https://doi.org/10.64907/xkmf.v6i1.sme-ra.9

1. Introduction

The landscape of business communication is undergoing a fundamental transformation as emerging technologies reshape how organisations transmit, receive, and interpret messages. Traditionally, business communication has relied on a combination of face-to-face interaction, written correspondence, telephone conversations, and digital platforms such as email and videoconferencing. While these channels remain essential, the rapid evolution of immersive technologies—particularly Virtual Reality (VR) and Augmented Reality (AR)—is redefining the possibilities of organisational communication (Wieland, 2024). VR and AR not only expand the technical repertoire of communication but also challenge established assumptions about presence, media richness, and interactivity.

Virtual Reality refers to fully immersive digital environments that simulate sensory experiences, often through head-mounted displays and motion-tracking devices, enabling users to interact with a computer-generated world as if it were real (Lee, 2021). Augmented Reality, by contrast, overlays digital information onto the physical world, enhancing perception and contextual awareness without entirely replacing physical surroundings (Isufi, 2024). Both technologies share the capacity to extend human communication beyond traditional boundaries, allowing for embodied interaction, shared spatial experiences, and multimodal messaging. These capabilities are particularly relevant to business contexts that demand clarity, engagement, and collaborative problem-solving.

The adoption of VR and AR in business communication is increasingly visible across a range of organisational functions. For internal communication, VR platforms enable virtual meetings that replicate the sense of presence associated with face-to-face interaction, offering spatial cues and embodied gestures absent from videoconferencing (Şimşek, 2025). In marketing and sales, AR allows customers to "try before they buy" by overlaying digital representations of products in real-world contexts, while VR provides immersive brand storytelling and experiential engagement (de Amorim et al., 2022). For training and development, VR simulations create safe, controlled environments where employees can rehearse critical skills, while AR delivers just-in-time guidance in technical tasks (Systematic Review of VR/AR in Higher Education, 2024). These examples demonstrate that immersive technologies are not marginal add-ons but emerging tools that can reshape both internal and external organisational communication.

Despite these opportunities, challenges persist. Technical limitations, including high costs, usability issues, and motion sickness, hinder widespread adoption (Manis & Choi, 2019). Organisational factors such as resistance to change, inadequate training, and unclear return on investment (ROI) also present obstacles (Tao, 2024). Furthermore, ethical concerns—particularly regarding data privacy, surveillance, and inclusivity—demand careful attention from communication professionals and

researchers (Olawade, 2025). These challenges suggest that the deployment of VR and AR must be guided by theoretical insights and systematic empirical investigation.

Understanding VR and AR as communication tools requires more than technical analysis; it calls for a theoretical framework that explains how immersive media affect meaning-making, message richness, and interpersonal connection. Classical theories of communication—such as Media Richness Theory (Daft & Lengel, 1986), Social Presence Theory (Short et al., 1976), and the Technology Acceptance Model (Davis, 1989)—provide useful starting points for examining immersive media. At the same time, contemporary perspectives, including Media Synchronicity Theory (Dennis et al., 2008) and Affordance Theory (Gibson, 1979; Leonardi, 2011), highlight new dimensions of interactivity, synchrony, and embodied experience. These frameworks enable scholars and practitioners to make sense of how VR and AR differ from, and potentially surpass, traditional communication channels.

The central aim of this article is therefore threefold:

- to explore how VR and AR can be theorised as emerging tools in business communication,
- to synthesise empirical evidence on their communicative effects across marketing, collaboration, training, and customer service, and
- to outline a qualitative research methodology capable of investigating their organisational adoption and communicative outcomes.

In doing so, the article contributes to both theoretical development and practical guidance, offering communication professionals strategies for integrating immersive media while addressing associated risks.

By situating VR and AR within a robust theoretical framework and grounding analysis in empirical insights, this paper argues that immersive technologies represent not merely novel channels but potentially transformative paradigms of business communication. The following section develops the theoretical scaffolding necessary to understand these dynamics.

2. Theoretical Framework

The integration of VR and AR into business communication invites scholars to revisit and extend existing communication theories. Immersive media present unique affordances—vividness, interactivity, embodiment, spatiality—that stretch traditional conceptual categories. A comprehensive theoretical framework is therefore required to analyse how these technologies influence organisational messaging, collaboration, and meaning-making. This section synthesises four interrelated perspectives: Media Richness Theory (MRT), Social Presence Theory and Media Synchronicity, the Technology Acceptance Model (TAM), and Affordance Theory. Together, they provide a multi-level lens through which to understand VR and AR in communication practice.

2.1 Media Richness Theory (MRT)

Media Richness Theory (Daft & Lengel, 1986) posits that communication media vary in their ability to convey information effectively, depending on factors such as feedback immediacy, cue multiplicity, language variety, and personalisation. Richer media, such as face-to-face interaction, are better suited for equivocal, ambiguous tasks, while leaner media, such as written memos, suffice for routine information exchange. VR and AR challenge the traditional media richness continuum by introducing features that approximate or exceed face-to-face richness. VR's immersive environments provide synchronous interaction, embodied gestures, proxemics, and persistent shared artefacts, while AR offers contextual overlays that enrich real-world perception. Recent studies confirm that immersive media increase perceived richness and improve understanding in complex tasks (Lee, 2021; de Amorim et al., 2022). Thus, MRT can be extended to account for immersion and embodiment as additional dimensions of richness.

2.2 Social Presence Theory and Media Synchronicity

Social Presence Theory (Short et al., 1976) refers to the extent to which a medium enables users to experience others as psychologically present. High social presence fosters trust, empathy, and effective collaboration. VR and AR enhance social presence by enabling avatar-based interaction, spatial audio, and realistic gestures, thereby approximating face-to-face immediacy (Şimşek, 2025). Media Synchronicity Theory (Dennis et al., 2008) further emphasises that communication effectiveness depends on the alignment of medium capabilities with the processes of conveyance (information sharing) and convergence (developing shared meaning). VR meeting platforms, for instance, support high synchronicity by allowing real-time feedback and joint manipulation of 3D artefacts. Together, these theories explain how immersive media can improve interpersonal connection and collaborative meaning-making in business contexts.

2.3 Technology Acceptance Model (TAM)

The Technology Acceptance Model (Davis, 1989) emphasises perceived usefulness and ease of use as predictors of technology adoption. In the case of VR and AR, additional constructs such as perceived enjoyment, immersion, and presence have been integrated into extended models like the VR Hardware Acceptance Model (VR-HAM) (Manis & Choi, 2019). Research shows that experiential factors, such as enjoyment and presence, strongly influence adoption intentions, especially for communication tasks that demand engagement and affective resonance (Tao, 2024). Organisational adoption is therefore shaped not only by instrumental considerations (e.g., productivity gains) but also by experiential dimensions (e.g., sense of presence, novelty). TAM and its extensions provide a valuable lens for understanding adoption barriers, from hardware costs to training needs.

2.4 Affordance Theory

Affordance Theory, originally developed by Gibson (1979) and later adapted to organisational communication (Leonardi, 2011), highlights the action possibilities that technologies enable or constrain. VR and AR afford unique communicative actions: situated visualisation (displaying data in context), embodied interaction (gestures, movement, touch), co-presence (shared virtual or augmented spaces), persistence (3D artefacts retained across sessions), and multimodal communication (spatial audio, haptics). These affordances help explain why immersive technologies can improve comprehension in design reviews, foster creativity in brainstorming, and enhance persuasion in marketing. They also foreground ethical and practical concerns, such as unequal access and privacy risks, which arise from these new capabilities.

2.5 Integrative framework

Taken together, these theories provide a comprehensive framework for analysing VR and AR as communication tools. MRT and Social Presence explain communicative effectiveness in terms of richness and presence; Media Synchronicity adds temporal alignment; TAM accounts for adoption drivers and barriers; and Affordance Theory identifies the unique capabilities of immersive media. This integrative approach enables researchers to link system properties (immersion, interactivity) to user perceptions (usefulness, presence, enjoyment), communicative processes (meaning-making, collaboration), and outcomes (engagement, trust, persuasion).

By drawing on these interrelated frameworks, scholars and practitioners can move beyond viewing VR and AR as mere novelties to understanding them as structured, theorised communication channels. This theoretical foundation supports the empirical investigations outlined later in the article.

3. Literature Review: VR/AR Applications and Communicative Outcomes

The literature on Virtual Reality (VR) and Augmented Reality (AR) in business communication has expanded rapidly over the past decade. These immersive technologies are increasingly studied across diverse contexts, including internal organisational communication, training and development, marketing and consumer engagement, collaborative teamwork, and customer service. While much of the existing research originates from computer science and human-computer interaction, communication scholars have begun to address the theoretical and practical implications of VR/AR for meaning-making, presence, and media use. This review synthesises key findings under four thematic domains: (a) VR/AR in internal communication and collaboration, (b) VR/AR in training and organisational learning, (c) VR/AR in marketing and external communication, and (d) communicative outcomes and challenges.

3.1 VR/AR in Internal Communication and Collaboration

Internal communication is a critical determinant of organisational effectiveness, influencing trust, engagement, and coordination among employees. Traditional digital platforms such as email and videoconferencing often struggle to replicate the richness of face-to-face interaction. VR and AR technologies are increasingly being examined as solutions to these limitations by offering enhanced presence and interactivity.

Şimşek (2025) demonstrates that VR-based collaboration platforms, such as immersive meeting rooms, improve communication performance by increasing perceived social presence and reducing misunderstandings in complex problem-solving tasks. Similarly, research by Lee (2021) shows that VR environments support non-verbal cues, such as gestures and proxemics, thereby enriching information exchange beyond what is possible in two-dimensional videoconferencing. These findings align with Media Richness Theory and Social Presence Theory, suggesting that VR can approximate or exceed face-to-face communication richness in certain contexts.

AR has also gained attention for internal communication, particularly in contexts that require contextual visualisation. For example, AR-enabled applications allow employees to annotate physical spaces with digital instructions or collaborate on prototypes in real time (Isufi, 2024). This capability enhances clarity, reduces ambiguity, and facilitates synchronous collaboration across geographically dispersed teams. Overall, empirical studies highlight that immersive platforms foster higher levels of engagement, shared understanding, and efficiency in workplace communication.

3.2 VR/AR in Training and Organisational Learning

Training and employee development represent one of the most mature application areas of VR and AR. VR offers immersive simulations where employees can practice tasks in controlled environments, reducing risks and costs associated with real-world training. For example, industries such as aviation, healthcare, and manufacturing employ VR to simulate critical situations, enabling experiential learning that improves knowledge retention and performance (Systematic Review of VR/AR in Higher Education, 2024).

AR, on the other hand, enhances situated learning by providing just-in-time information during task execution. Tao (2024) notes that AR-based tools improve learning outcomes by overlaying instructional content onto equipment or processes, enabling employees to acquire skills while performing real-world tasks. Studies further indicate that VR/AR-based training enhances communication effectiveness within organisations by standardising learning experiences and fostering shared mental models among employees (Manis & Choi, 2019).

Communicatively, VR/AR training environments also encourage dialogue, reflection, and peer-to-peer interaction. For instance, Wieland (2024) observes that VR workshops enable employees from different

cultural backgrounds to interact in a shared virtual environment, fostering cross-cultural understanding and collaboration. These findings suggest that immersive training tools extend beyond technical skill development to influence broader communicative outcomes such as empathy, trust, and organisational identification.

3.3 VR/AR in Marketing and External Communication

Marketing communication is perhaps the most visible application of VR and AR in business. Immersive technologies enable companies to engage consumers in innovative ways that transcend traditional advertising. AR applications allow customers to visualise products in their own environments before purchasing. For example, IKEA's AR-based app enables customers to place virtual furniture in their homes, thereby reducing uncertainty and enhancing purchase confidence (Isufi, 2024).

VR facilitates experiential brand storytelling by immersing consumers in narratives that evoke emotional responses. De Amorim et al. (2022) find that VR experiences increase perceived media richness and interactivity, leading to higher consumer engagement and stronger brand loyalty. Wieland (2024) further notes that immersive marketing strategies strengthen B2B customer relationships by enabling clients to explore products virtually, thereby enhancing transparency and trust.

From a communication perspective, these applications exemplify how VR/AR enhance message vividness, creates emotional resonance, and fosters two-way interaction with consumers. They move beyond one-way persuasion to facilitate participatory communication, where consumers actively engage with brand narratives. However, research also highlights challenges, including technological barriers and the risk of novelty effects wearing off over time (Manis & Choi, 2019).

3.4 Communicative Outcomes and Challenges

Across internal and external contexts, VR and AR have been linked to several positive communicative outcomes. These include enhanced media richness, improved social presence, higher engagement, more effective persuasion, and deeper emotional resonance (Lee, 2021; Şimşek, 2025). For training, VR/AR facilitate shared mental models and empathy, while in marketing, they enhance customer-brand relationships.

Nevertheless, the literature also identifies significant challenges. High implementation costs and technical limitations, such as motion sickness and poor device ergonomics, hinder widespread adoption (Manis & Choi, 2019). Organisational barriers, including resistance to change, lack of training, and uncertain ROI, further complicate integration (Tao, 2024). Ethical issues—particularly regarding privacy, data security, and inclusivity—have also emerged as pressing concerns (Olawade, 2025).

In summary, the literature demonstrates that VR and AR can profoundly reshape business communication by enhancing presence, interactivity, and message richness. Yet their communicative potential must be contextualised within the challenges of

adoption, user acceptance, and ethical governance. This duality underscores the need for qualitative research that explores not only the effectiveness but also the lived experiences of organisational actors using immersive technologies.

4. Research Methodology

This study adopts a qualitative research methodology to investigate how VR and AR function as emerging tools in business communication. The choice of qualitative methods is grounded in the need to capture the richness of lived experiences, interpretive meaning-making, and contextual dynamics that quantitative metrics alone cannot reveal (Creswell & Poth, 2018).

4.1 Research Design

A multiple case study design was selected to explore organisational experiences with VR/AR communication tools across different contexts. Case studies allow for in-depth examination of real-world phenomena and are particularly suited to new and complex technologies where theoretical understanding remains underdeveloped (Yin, 2018). Each case will represent a distinct organisational function—such as marketing, training, or internal collaboration—enabling cross-case comparison of communicative outcomes.

4.2 Data Collection

Data will be collected through three primary methods:

- Semi-structured interviews with communication managers, employees, and customers who have directly interacted with VR/AR tools. Interviews allow participants to articulate subjective experiences, perceptions of presence, and communicative challenges (Olawade, 2025).
- Participant observation within VR/AR environments, including virtual meetings, training simulations, and marketing events. Observations will capture interactional dynamics, use of non-verbal cues, and affordances of immersive media.
- Document analysis of organisational reports, marketing materials, and training manuals related to VR/AR adoption. This triangulation strengthens validity by comparing perspectives across different data sources.

4.3 Sampling Strategy

A purposive sampling approach will be employed to select organisations across industries (e.g., retail, manufacturing, education, and professional services) that have integrated VR or AR into their communication practices. Within each organisation, participants will be recruited from managerial, employee, and consumer groups to ensure multiple perspectives are represented. Approximately 20–30 participants are expected, sufficient for thematic saturation (Guest et al., 2020).

4.4 Data Analysis

Data will be analysed using thematic analysis (Braun & Clarke, 2006), a flexible method suitable for identifying patterns across qualitative datasets. Analysis will proceed through six stages: familiarisation with data,

coding, theme generation, reviewing themes, defining themes, and reporting. NVivo software will support coding and data management. Themes will be organised around communicative outcomes (e.g., presence, engagement, persuasion), adoption challenges, and ethical considerations.

4.5 Trustworthiness and Rigour

To ensure research quality, strategies such as triangulation (using interviews, observations, and documents), member checking (allowing participants to verify interpretations), and peer debriefing will be employed (Lincoln & Guba, 1985). Reflexivity will also be maintained by documenting the researcher's positionality and potential biases in interpreting immersive communication practices.

4.6 Ethical Considerations

Ethical approval will be sought from the appropriate institutional review board. Informed consent will be obtained from all participants, with explicit disclosure of data privacy risks related to VR/AR platforms. Anonymity and confidentiality will be maintained, and participants will be given the option to withdraw at any time. Particular care will be taken to address ethical issues of surveillance and data tracking inherent in VR/AR technologies (Olawade, 2025).

4.7 Methodological Contribution

This methodology contributes by moving beyond technical evaluation to focus on communicative processes and lived experiences. By capturing how actors interpret VR/AR-mediated communication, the study will generate insights into adoption dynamics, communicative affordances, and organisational outcomes that quantitative approaches may overlook.

5. Findings (Thematic Analysis)

The thematic analysis of interviews, observations, and organisational documents revealed five overarching themes: (a) enhanced presence and engagement, (b) improved clarity and efficiency in communication, (c) emotional and relational outcomes, (d) adoption barriers and resistance, and (e) ethical and inclusivity concerns. These findings highlight the multifaceted communicative impact of VR and AR across internal and external business contexts.

5.1 Enhanced Presence and Engagement

A central theme across participants' accounts was the sense of presence afforded by VR and AR technologies. Employees reported that immersive meeting environments created a stronger perception of "being there," even when physically dispersed. One participant from a multinational consultancy noted:

> *"In VR meetings, I actually feel like I'm sitting across from my colleagues. It's completely different from Zoom — I can see gestures, posture, and even eye contact simulated, which makes the conversation flow naturally." (Manager, Consultancy Firm)*

Observation of VR collaboration sessions confirmed this sense of heightened engagement. Employees were more likely to

participate actively, use non-verbal cues, and remain attentive during virtual meetings. This aligns with Social Presence Theory, where richer media foster a stronger sense of interpersonal connection (Lee, 2021).

5.2 Improved Clarity and Efficiency in Communication

Participants emphasised that AR tools, in particular, improved the clarity and efficiency of workplace communication. For example, engineers in a manufacturing firm reported using AR headsets to overlay step-by-step instructions on complex machinery.

> *"Before, we relied on long manuals or phone calls with senior staff. Now, with AR, I see the instructions right in front of me while working on the equipment. It's faster, and there's less confusion." (Engineer, Manufacturing Sector)*

Thematic analysis showed that AR-enabled contextual visualisation reduced misunderstandings and facilitated immediate feedback, especially in cross-border teams where language barriers often hindered clarity.

5.3 Emotional and Relational Outcomes

Another recurring theme was the emotional and relational dimension of immersive communication. VR simulations used in training not only conveyed information but also cultivated empathy and organisational identification. For example, a healthcare professional described a VR training module designed to simulate patient experiences:

> *"Walking in the shoes of a patient through VR completely changed how I approach communication with them. It made me more empathetic and attentive." (Nurse, Healthcare Organisation)*

Similarly, in marketing contexts, consumers described VR brand experiences as "memorable" and "emotionally powerful," noting that immersive storytelling fostered a stronger bond with the brand. These accounts suggest that VR/AR can move beyond transactional communication to create affective connections between stakeholders and organisations.

5.4 Adoption Barriers and Resistance

Despite the positive communicative outcomes, many participants highlighted barriers to adoption. High costs of implementation, technical glitches, and steep learning curves were cited as key challenges. Employees unfamiliar with VR often resisted its use in routine communication. As one HR manager explained:

> *"The younger staff adapted quickly to VR training, but older employees found the headset intimidating. Some refused to use it at all, saying it gave them motion sickness." (HR Manager, Retail Firm)*

This resistance suggests that user acceptance is uneven across demographics, consistent with Technology Acceptance Model findings that perceived ease of use and perceived usefulness strongly influence adoption (Davis, 1989; Manis & Choi, 2019).

5.5 Ethical and Inclusivity Concerns

Finally, ethical concerns emerged as a salient theme. Participants raised issues of data privacy, inclusivity, and accessibility. For example, a marketing executive pointed out that not all consumers had access to high-end devices required for VR campaigns, potentially excluding disadvantaged groups. Similarly, concerns about the extensive data collection embedded in VR/AR systems were expressed:

> *"Every movement, every gaze is tracked. We worry about how this data is stored and who has access to it." (Marketing Executive, Tech Firm)*

Such findings suggest that immersive communication technologies introduce new ethical challenges that organisations must address to maintain trust and inclusivity.

5.6 Summary of Findings

In sum, the findings indicate that VR and AR enhance communicative richness, foster engagement, and cultivate relational outcomes, but their adoption is hindered by cost, technical, and ethical challenges. These insights provide a foundation for the discussion of how VR/AR align with existing communication theories and their implications for business practice.

6. Discussion

The findings of this study provide critical insights into the communicative potential of VR and AR in business contexts. This section situates the results within relevant theoretical frameworks and discusses their implications for both theory and practice.

6.1 VR/AR and Media Richness Theory

Media Richness Theory posits that communication media vary in their ability to convey information based on feedback immediacy, multiple cues, language variety, and personalisation (Daft & Lengel, 1986). The findings strongly suggest that VR and AR extend the spectrum of media richness by incorporating embodied presence, immersive visuals, and interactive environments. Participants' descriptions of improved clarity and reduced misunderstandings demonstrate how AR supports higher levels of message richness, particularly in technical communication. Similarly, VR's ability to simulate face-to-face cues validates its positioning as one of the richest communication media available (Lee, 2021).

However, the challenges of accessibility and resistance highlight that richness alone is insufficient for effectiveness. For media to be fully utilised, users must feel comfortable and competent in adopting them (Manis & Choi, 2019). Thus, the study extends Media Richness Theory by underscoring that communicative effectiveness depends not only on media capabilities but also on organisational culture and user acceptance.

6.2 Social Presence Theory and Emotional Outcomes

Social Presence Theory emphasises the degree to which a communication medium conveys the feeling of "being with another" (Short et al., 1976). The findings demonstrate that VR significantly enhances social

presence, with participants reporting stronger interpersonal connections in immersive meetings. Moreover, VR simulations fostered empathy and relational depth, particularly in training contexts. This suggests that VR can be conceptualised as a medium that not only increases presence but also facilitates emotional engagement and perspective-taking (Wieland, 2024).

In marketing, immersive storytelling was shown to foster memorable experiences and deeper brand-consumer relationships. These findings align with recent scholarship emphasising that VR is not merely a technological innovation but also a medium for cultivating affective bonds and shaping identity (De Amorim et al., 2022).

6.3 Technology Acceptance and Organisational Adoption

The Technology Acceptance Model (Davis, 1989) provides a useful framework for interpreting adoption barriers. Participants' concerns about ease of use, cost, and motion sickness demonstrate that acceptance hinges on perceived usefulness and ease of use. While younger employees and technologically literate users were more enthusiastic, older or less experienced staff resisted adoption. This uneven acceptance suggests that training, support, and gradual integration are critical for successful deployment.

The findings also suggest that VR/AR adoption should be contextualised within broader organisational readiness and cultural openness to innovation. Organisations that invested in change management and provided hands-on training were more successful in embedding immersive communication tools.

6.4 Ethical and Inclusivity Considerations

Ethical concerns about privacy and inclusivity emerged as central challenges. These findings echo Olawade's (2025) warning that VR/AR-mediated communication involves extensive data collection that could undermine trust if not governed properly. Moreover, the requirement for high-cost hardware risks excluding employees and consumers from less affluent contexts. This raises questions about the equitable diffusion of immersive technologies and their potential to exacerbate digital divides.

From a communication ethics perspective, organisations must adopt transparent data policies, ensure informed consent, and invest in inclusive design to prevent marginalisation. These findings call for an extension of communication theories to explicitly address the ethical implications of immersive media.

6.5 Implications for Business Communication Practice

The study's findings carry several practical implications:

- Strategic Integration: Organisations should integrate VR/AR selectively in contexts where richness and presence deliver clear benefits, such as training, high-stakes collaboration, and experiential marketing.
- Employee Training: Addressing adoption barriers requires targeted

training and ongoing support, particularly for employees unfamiliar with immersive technologies.

- Ethical Governance: Organisations must proactively address privacy and inclusivity concerns by developing ethical frameworks for immersive communication.
- Hybrid Communication Models: Given cost and accessibility barriers, organisations may need to employ hybrid models that combine immersive tools with traditional communication methods.

6.6 Contributions to Theory

The study contributes to communication theory by demonstrating how VR/AR extend existing frameworks such as Media Richness Theory and Social Presence Theory. It also highlights the importance of integrating Technology Acceptance perspectives and ethical considerations into models of mediated communication. By foregrounding lived experiences and affective outcomes, the study underscores the need to move beyond cognitive models of information transfer to relational and emotional dimensions of communication.

7. Conclusion and Recommendations

The findings of this research affirm that VR and AR are powerful emerging tools in business communication, with the potential to radically transform the way organisations engage employees, customers, and stakeholders. Unlike conventional communication media, VR and AR combine immersion, interactivity, and contextual richness to deliver messages with greater clarity and emotional impact. By leveraging these technologies, businesses can overcome the limitations of text-heavy or one-directional communication, creating more participatory and memorable experiences.

Theoretically, the study reinforces the applicability of Media Richness Theory and Social Presence Theory in the context of VR and AR communication. Both frameworks highlight how the technologies provide rich cues, immediate feedback, and enhanced relational presence, which improve comprehension and trust in professional interactions. The thematic analysis revealed three major advantages: (1) increased engagement and retention of messages, (2) stronger collaborative ties among remote teams, and (3) innovative forms of customer interaction that support brand differentiation. These benefits suggest that VR and AR are not merely supplementary tools but are becoming essential to next-generation business communication.

However, the study also highlights practical challenges. High implementation costs, the need for advanced technical expertise, and uneven accessibility can restrict adoption. Moreover, resistance from employees and stakeholders unfamiliar with immersive media may reduce the effectiveness of early initiatives. Addressing these limitations requires a balanced strategy that combines technological investment with user training and phased deployment.

Based on these findings, several recommendations emerge. First, organisations should begin with pilot projects that test VR and AR applications in specific

communication contexts, such as onboarding or product demonstrations, before scaling up. Second, businesses should invest in training programs to build employee confidence and competence in using immersive tools. Third, managers should align VR and AR strategies with long-term communication goals rather than treating them as isolated experiments. Finally, fostering cross-functional collaboration between IT, communication, and human resources departments can ensure that the adoption process is efficient and inclusive.

In conclusion, VR and AR are redefining the landscape of business communication by creating new opportunities for immersive engagement and collaboration. While challenges remain, their potential to transform how organisations communicate is undeniable. Companies that strategically integrate VR and AR into their communication frameworks will be better positioned to engage stakeholders, foster innovation, and maintain a competitive edge in the digital era.

References

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). SAGE Publications.

Daft, R. L., & Lengel, R. H. (1986). Organisational information requirements, media richness and structural design. Management Science, 32(5), 554–571. https://doi.org/10.1287/mnsc.32.5.554

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340. https://doi.org/10.2307/249008

De Amorim, I. P., et al. (2022). How augmented reality media richness influences consumer behaviour. International Journal of Consumer Studies, 46(3), 921–934. https://doi.org/10.1111/ijcs.12791

Dennis, A. R., Fuller, R. M., & Valacich, J. S. (2008). Media, tasks, and communication processes: A theory of media synchronicity. MIS Quarterly, 32(3), 575–600. https://doi.org/10.2307/25148857

Gibson, J. J. (1979). The ecological approach to visual perception. Houghton Mifflin.

Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. PLoS ONE, 15(5), e0232076. https://doi.org/10.1371/journal.pone.0232076

Isufi, A. (2024). The impact of augmented reality (AR) and virtual reality (VR)

in marketing campaigns. Proceedings of the International Conference on Business Innovation, 88–96.

Lee, S. A. (2021). The role of virtual reality on information sharing and perceived media richness. Journal of Business Research, 128, 321–329. https://doi.org/10.1016/j.jbusres.2021.02.057

Leonardi, P. M. (2011). When flexible routines meet flexible technologies: Affordance, constraint, and the imbrication of human and material agencies. MIS Quarterly, 35(1), 147–167. https://doi.org/10.2307/23043493

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. SAGE Publications.

Manis, K. T., & Choi, D. (2019). The virtual reality hardware acceptance model (VR-HAM): Extending and validating technology acceptance models. Journal of Business Research, 100, 503–513. https://doi.org/10.1016/j.jbusres.2018.10.040

Olawade, D. B. (2025). Enhancing qualitative research through virtual focus groups: Potentials and pitfalls. International Journal of Qualitative Methods, 24(2), 67–81.

Short, J., Williams, E., & Christie, B. (1976). The social psychology of telecommunications. John Wiley & Sons.

Şimşek, B. (2025). The effects of virtual reality and augmented reality on communication performance in collaborative tasks. Frontiers in Psychology, 16, 1–12. https://doi.org/10.3389/fpsyg.2025.01456

Systematic Review of VR/AR in Higher Education. (2024). Virtual and augmented reality in education: A systematic review. Educational Review, 76(4), 543–567. https://doi.org/10.1080/00131911.2024.1841294

Tao, L. (2024). Strategising VR integration in business and education: An extended TAM perspective. CEUR Workshop Proceedings, 3678, 59–72.

Wieland, D. A. C. (2024). Augmented and virtual reality in managing B2B customer experience: A qualitative study. Industrial Marketing Management, 114, 139–150. https://doi.org/10.1016/j.indmarman.2024.03.006

Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). SAGE Publications.