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# Editorial: Emerging technologies and organizational communication: envisioning the future of work

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### Editorial on the Research Topic

Emerging technologies and organizational communication: envisioning the future of work

New technologies such as blockchain, augmented reality, virtual reality, mixed reality, and artificial intelligence (AI) are continuously transforming the nature of communication and work. Both personally and professionally, these technologies impact how we interact, communicate, and work together. Their impact is significant and pertinent in an organizational setting.

Employee resistance to going back to in-person meetings and offices is growing. These technologies solve problems caused by time and distance between companies and their customers. However, on a negative note, these technologies can also result in issues of authenticity, trust, and transparency. This editorial aims to highlight the latest research and build a complete picture of the new environment by expanding on the possibilities and challenges presented by emerging technology.

The rise of personal communication technology, such as messaging, video calling, and meetings, has brought more transparency to communication within organizations and with clients. With the rise of AI, companies are increasingly using intelligent voice assistants (IVAs) for internal and external communications. IVAs are becoming increasingly present in smartphones, smart speakers, and smartwatches. IVAs act as personal assistants and assist knowledge workers in sectors like Information Technology (IT), communications, and consulting with their personal communications and professional workflows (Yin and Wu). The study by Yin and Wu investigated and supported the role of IVAs in improving perceived supervisor support, psychological capital, and employee wellbeing among knowledge workers. IVAs assist employees with tasks such as providing feedback to supervisors, thus offering functional assistance and emotional support to employees where needed. Personalized IVAs can assist in internal communication, psychological counseling, and emotional support. Adopting IVAs in specific information communication technology (ICT) facilitates coordination and

communication, leading to more efficient decision-making and supporting employee skill-building and knowledge-sharing. Further use of AR technologies can help remote guidance by directly overlaying 3D information onto the real world (Le Chénéchal et al., 2019).

Newman and Gopalkrishnan explored the rapid evolution of AI, which facilitates the creation of digital humans who can deliver corporate announcements and engage users through interactive communication. However, the study results indicate a preference for traditional methods such as email and live communication, as they are more effective than digital humans. A few participants preferred digital humans as communication can vary according to preferred learning styles. There is a need to strategically assess the role of AI in making communication more readily available, efficient, and consistent. It is also important to consider user perceptions and assess the relevance of new technologies when replacing established communication practices or processes.

Organizations had to quickly modify their communication strategies in response to the significant shift toward teleworking during the COVID-19 pandemic. Watanabe et al. discussed how workers at a large Japanese construction company responded to this change by improvising informal communication. The study identified four important informal communication strategies: face-to-face opportunity-seeking, implicit communication, casual technology, and structured informality. Without in-person interactions, the staff members took the initiative to maintain relationships and information flow. Informal communication was found to be critical to employee performance, corporate operations, and wellbeing. Although ICT technologies are necessary for remote communication, relying too much on them can be harmful. In times of crisis, a hybrid strategy that blends online and in-person interactions is crucial, and equilibrium must be re-established. Effective operations necessitate adequate communication resources, including ICT technologies.

In the digital age, electronic negotiation is vital to organizational communication. Lipp and Mohnen discussed how communication media affect negotiation behaviors and results in electronic negotiations, with a focus on the individual-medium fit. It is counterintuitive that individual elements such as gender and personality appear to have little influence on e-negotiations. The authors discovered that, depending on the medium, various parameters had varying effects when comparing chat and video conferencing systems. Electronic negotiations are very complex, and it has been discovered that elements other than personal characteristics significantly influence results. Although there is still disagreement, this new research contributes to the discussion of how various media affect negotiation procedures and results.

Vargas et al. evaluated novel approaches to evaluating personality traits pertinent to work environments. The study looked at the feasibility of evaluating personality traits using machine learning (ML) and virtual reality (VR). Their study found encouraging outcomes in identifying personality factors by examining eye-gaze patterns and behaviors during immersive virtual reality encounters. Machine learning models demonstrated a notable degree of accuracy in predicting characteristics such as conscientiousness, agreeableness, openness, extraversion, and neuroticism. Interestingly, behavioral indicators were not as effective as eye-tracking measures. The study raises the possibility of using behavioral metrics in virtual reality to create more ecologically sound personality tests. It is critical to comprehend how distinct personalities may interact with various organizational settings and communication technology.

In conclusion, emerging technologies are causing a significant shift in the organizational communication landscape. Organizations face both opportunities and challenges due to the integration of intelligent voice assistants, the investigation of digital humans, the nuances of electronic negotiation, the creative evaluation of personality through virtual reality, and the adaptive strategies for informal communication in remote work. Introducing new modalities, such as digital humans, necessitates careful consideration of user perception and effectiveness compared to existing approaches, although technology such as IVAs holds promise for improving communication, wellbeing, and perceived assistance. The shift to teleworking has highlighted the importance of informal communication and the requirement for flexible approaches backed by the right ICT tools.

Furthermore, for digital contacts to be efficient, it is essential to comprehend the dynamics of electronic negotiations and the possible limitations of individual characteristics in affecting outcomes. Finally, novel methods for evaluating personal characteristics using VR and ML could provide fresh perspectives on how people engage with communication tools and in organizational contexts. Organizations that want to prosper in this exciting new period need to have a sophisticated grasp of how these technologies positively and negatively affect communication as they continue to develop. To successfully navigate the changing landscape of organizational communication and ethically and effectively harness the potential of innovation, it is imperative that these themes be explored further.

## Author contributions

KK: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. AU: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing.

# **Conflict of interest**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## **Generative AI statement**

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