Digitalization as a Lever for Sustainability

WG1: Video Conference and VR to Replace Business Travel + WG2: Long-Distance Socializing over Digital Channels

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How do you make / sustain connections via digital means? What are the challenges?

We humans are social beings relying on communication to interact with others. Computer-mediated communication tools such as video-conferencing, instant messaging or social virtual reality allow us to communicate with others over physical distances, participate at conferences or business meetings, and reduce CO_2 emissions by mitigating the need for physical travel. At the same time, manifold challenges persist in utilizing these tools both for private and professional activities.

Making new connections and socializing might be harder using exclusively digital communication technologies, but is still possible. If the moderation and facilitation of introducing new people is done properly in a digital event (e.g., setting up dyads, who are assigned a joint task), making new friends might still be possible. Even though technology might limit socializing, the right handling and facilitation of technology might make up for it. For example how to offer a shared immersed atmosphere even in virtual environments (sound, light, space…) beyond small webcam images in video-conferencing?

Also current self-representations in social VR platforms can have limited options for customizations, which in turn, can make it hard to identify other people around. Especially non-verbal communication cues are missing. If a person is known before, missing cues might be filled in by memories of prior observed behavior of that person. But that's not the case with strangers, and might lead to problems in building trust.

Hybrid events can be even more challenging, requiring the effort of organizing a physical event, a digital one as well as synchronizing both events. Having the right technology (e.g. large screens, telepresence robots) might help, but does not scale easily to many participants, i..e. working from home with family around might work for productivity tasks. However it seems more challenging, when it comes to socializing via digital communication tools while family is nearby.

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What do we have to think of when choosing a platform?

When choosing a platform we have to consider the task, the purpose, the context and the users. Here decisions are to be made regarding the simplicity of the technology, as there is a trade-off between simplicity (e.g. Zoom) and interactivity (e.g. Mozilla Hubs). Some more interactive technologies may be hard to use for some groups, users that are not tech-savvy may be occupied with operating the system (e.g. setting up a VR-Headset) rather than taking part in the conversation, others may not be able to access the technology at all. Here, four factors are relevant. First, the accessibility, for example a blind person may at this stage of VR-system may not experience the benefits of a social VR platform as they are mostly visual. Second, the costs play a big role here. Some users may not be able to afford a given technology or some organizations may not be able to afford a range of solutions, e.g. using zoom as an audio conferencing tool. Third, infrastructure may not enable people, e.g. in some developing countries, to use technology that has a high bandwidth. Fourth, the functionality of the tool has to fit or scale to the affordances of the social interaction that is to be mediated. Considering these points, the one-size-fits-all approach we currently use is unacceptable and puts a strain on the people that socialize over a distance and on the relationship we maintain with them.

Key takeaways

We have extracted key factors of socializing over a distance in private and business contexts.

1. **Simplicity** is key
2. Taking **norms and practices** into account
3. Taking **stakeholders** into account
4. Being mindful of **time and resources**
5. **Choose** the right tool for the given task
6. **Management** of the telecommunication system is key
7. Create **memorable experiences** that are anchored in space and time