
Low Engagement As a Deliberate Practice of Remote Participants in Video Meetings

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Abstract

Video meeting research has long reported that technological constraints can lead to low engagement levels of remote participants. Under-reported, however, are the ways in which remote participants can choose their level of engagement, with the technology framing but not determining their social action. This paper presents preliminary research into the engagement practices of experienced video meeting users, which propose that the constraints of remote participation can be used to set personal and group expectations for engagement. Future video meeting systems should include a spectrum of engagement levels for remote meeting participants.

Author Keywords

attention; engagement; teleconferencing; video; meeting

CCS Concepts

•Human-centered computing → HCI theory, concepts and models; Collaborative and social computing;

Introduction

Video meeting researchers tend to assume that low engagement by remote participants is a problem to be solved [4, 7, 8, 18, 22, 21, 26]. Difficulties with getting and paying attention in video meetings often lead remote participants to feel disgruntled [20, 9], but engagement levels in

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CHI'20., April 25–30, 2020, Honolulu, HI, USA
ACM 978-1-4503-6819-3/20/04.
<https://doi.org/10.1145/3334480.XXXXXXX>

video meetings are also a social choice. People are not automatons or dopes [6] committed to a program of maximum engagement at all times. Users can actively choose their level of engagement, with the technology framing but not determining their social action [14, 19]. In this paper we report on the engagement practices of some experienced video meeting users who perceive that remote participation is technologically constrained, and associate these constraints with low engagement. However, they also propose that these constraints can be used to set personal and group expectations for engagement. We argue that future video meeting systems should include a spectrum of engagement levels for remote meeting participants.

Related Work

Video-mediated communication research is littered with systems developed to address the limitations of remote participation (e.g. [22, 23, 3, 27, 28, 16, 17, 5]). The implications of attention to the design of computational systems is also leading to its own new sub-field, Attentional User Interfaces (AUI), which focuses on opportunities for "enhancing computing and communications systems by treating human attention as a central construct and organizing principle" [11]. Developing our understanding of the key properties of attentive systems [24], a rapidly growing body of AUI research explores attention from the perspective of managing computational resources [12, 15], disruption of users [10], and as a source of information for predictive models on users' goals, intentions, and needs [13].

As always, though, there is a gap between advances in research and the reality of commonly adopted current technology. People develop their own social practices to adapt to technological limitations. These social practices, however, are rarely reported in the literature on their own terms as methodical, active, and reasonable treatments of tech-

nology. We argue that understanding such practices provides a valuable context for embedding the new solutions into the existing usage landscape.

Method

This paper reports preliminary results from a small qualitative exploratory study on attention of remote participants in work meetings. We conducted semi-structured interviews [25] with employees of a large Western technology company who had extensive experience in co-located, remote, and hybrid work meetings. We interviewed twelve full-time employees (age 21-50, 5F,7M) with tertiary degrees in diverse areas, including engineering, science and arts. Interviewees were asked to describe their experiences in various meeting configurations, their preferences and related motivations, strategies to understand meeting environment and social dynamics, strategies to recognize and support attention and engagement, and common obstacles related to social and attention dynamics. We transcribed all interviews and, aligned with recommended practices in qualitative data analysis [1], we performed thematic analysis across interviews using open and axial coding, seeking saturation.

Results

Our interviews revealed, to little surprise, that remote participation in work meetings is generally associated with lower motivation to engage both behaviorally and cognitively.

"The external people just participate much less. It's much more difficult to be a part of the conversation. Even if the chair is mindful about asking them. It's very hard for them to indicate that they want to say something, or to jump into a conversation." [P8]

"There are people who are very vocal when they are present. When this person is remote they become much quieter. Because even just interrupting people-

in person it is easier, remotely it is much more difficult". [P6]

"Somebody who is there in person, I've got the sense, is given more weight and the more positive reception in the meeting. I have an impression that everybody who is remote have to put in a lot more effort to actually get positive approval." [P7]

"If you are one of the few people calling in, it's very hard to be heard. Because people don't give you space." [P9]

The responses above show that an overall tendency to frame limitations on engagement as negative, but this is not the whole story. Even in these negative responses we see lower engagement by remote participants being formulated as an adopted pattern of interaction established as a socially produced response to the limitations of video meetings. When we asked further about these patterns, we saw that technology is commonly treated as a resource for explaining behaviour, which we group here into two themes: (1) Low engagement as a rationalization of constraints and (2) low engagement as a signal of interest.

Low Engagement as a Rationalization of Constraints

The potential for distraction and multitasking resulting from the general condition of remoteness was commonly appealed to as a reason for low engagement:

"In remote meetings it's easier to get distracted... to check out mentally even if you don't want to." [P10]
"Even when I should be directing all my attention to something, if I'm remote, I'm more likely to multitask." [P11].

But it was video itself - the primary definer of the medium - which was appealed to as resource for low engagement rationalizations.

Having video of remote participant turned on was proposed as an obligation to participate:

"Like when you are on Skype, even... well, you have video and you can see the video, then you can notice when somebody is not paying attention... and you feel like people are watching you, so you can't stop paying attention." [P9]

"I'm more likely to multitask if it's just audio. Because with video you can see that my eyes are flickering around. So I prefer to turn video on." [P11]

To some extent, those responses point to a simple engagement fix: insist that everyone has video turned on at all times and engagement should rise. Such a fix could be designed in to a system as a default or socially imposed (even self-imposed, as the latter respondent above reports). But this obligation is somewhat belied by responses about how easy it is to for local people to forget about remote people, even with video turned on:

"When some people are in person and some are remotely, sometimes you can forget about looking at the video unless that person is explicitly talking... it is very easy to forget there are people on the screen." [P10]

"If it's a group meeting and you are remote then it's really hard, even when I'm talking to someone else remotely, I tend to lose them. The people remote don't participate as much. And definitely when I'm the remote person... People tend to forget you are there... It's easy to forget that there are people behind the screen." [P11]

Similar appeals were made when video is turned off:

"I noticed that if the camera is not on, it's easier for

me to start doing other stuff. It is easy for me to fall asleep or do something else, like emails and so on." [P6].

"When I don't have 100% of my attention available, I'd prefer to not have my video on. In particular, when I'm mostly listening in." [P7]

The higher-level point here is that participants are expressing moral obligation to be seen when remote or a failing of that moral obligation by local participants when forgetting to look at remote participants. The appeal to the technology also implies that there are choices to be made about that technology - one can choose to be seen or not, and one can choose to attend to others or not. This is seen most clearly in the final quote that indicates a deliberate choice to not turn on the camera as a deliberate signal of low engagement.

Low Engagement as a Signal of Interest

When we explicitly asked participants about what motivated their preferences for joining meetings in person versus remotely, we found that the association between remote participation and low engagement was not simply of the form that technological limitations reduced motivation. It was also flipped around, so that remote participation could be treated as a deliberate social signal – to oneself and others – of low interest in or low importance of the meeting:

"If I'm interested, I go for in-person, if not, I go for remote so that I don't have to pay attention." [P5]
"Typically, I join in person if I think that I've got a good contribution to make to the meeting. When I do a Skype meeting it's often because either I'm remote and can't make it or because I don't think that my involvement in the meeting is as critical, but I want to be available." [P2]

"It feels similar to attending a talk in person or looking at a live stream. And when you are physically in a meeting room all your attention is there because all the contextual factors are cuing you 'you are in the meeting'." [P10]

"I want to be as invisible as possible and blend in with the crowd. So I don't want them to focus on me, I want them to have their own discussion." [P3].

Remote participation, then, was formulated as a preferred mode for joining a meeting specifically to limit their engagement and the likelihood that they would be engaged by others. For whatever reasons these participants did not want to be absent, but clearly the motivation for engagement is low and technological limitations of remote participation are being treated as a convenient buffer.

Multitasking while joined remotely to a meeting often co-occurred with low interest in the content. Regardless of any evaluation of acceptability, multitasking was treated as a common and viable choice that merited low engagement:

"If it's a big meeting that I'm perhaps not that interested in, and I have other stuff I need to have done, I can still absorb some of it, some important parts, while having other stuff done." [P11]

"Sometimes if it's not super interesting, I would just do my stuff in the office and keep it on the background." [P6]

"You can do whatever other work while you are listening. And you are not required to engage." [P1]

Expectations of reduced motivation to engage and related contextual interpretations were systematically expressed both from the perspective of a remote participant and of other meeting participants. Participants joining remotely

demonstrated a predisposition to a low importance of their role in the meeting, deliberately choosing a secondary role:

"The conversation that is happening in a physical space is way more important than my opinion if I'm remote. Like 'I'm not important to this meeting'. So my biggest priority is to just listen-in, to get all the information, unless I have something really important to say. But I've just noticed that even if it's not me, the other person, whoever is listening in, they just say a lot less vs. how much they would say if they would be in person." [P3]

"I'm probably not going to interact much so it's kind of okay. When you are remote you have like a back seat." [P5]

The desire to multitask also found its reflection in the perception that other remote participants are probably also multitasking:

"And [remote participants], in turn, I think are more likely to think that 'I'm mostly a spectator of this meeting, so I'll do something else at the same time'." [P8]

Choosing to participate remotely also tended to be perceived by other meeting participants as an indication that a meeting was of low importance, which was itself measured against the knowledge of whether others were also choosing to join remotely:

"If I know that some of my direct colleagues are joining remotely, then it is a between-the-lines indicator that it's not important enough. That would motivate me to maybe also dial in remotely... I'm realizing that I'm trying not to say it, but yes, effectively it is an indicator." So if nobody thinks it's important enough . . .

and they may want to have freedom to do something else while they are listening in." [P7]

In sum, these responses describe a motivational hierarchy and an attention spectrum from which to make an active choice to signal low interest.

Discussion

Low Engagement as a Social Practice

This preliminary data suggests that both remote and other meeting participants associate remote participation with the lower motivation to participate and lower meeting importance, as well as decreased levels of behavioural engagement, manifesting in multitasking and reduced direct contribution. Indeed, it is not merely an association but often a deliberate choice. The combination of observable-reportable behaviors and a persistent shared reasoning around them suggest that low engagement in remote meetings is a communication practice — a commonly engaged-in communication activity, meaningful in particular ways, among people familiar with a certain culture. [2]

Users' rationalization for their low engagement involved treating the technology as limiting (1) ability to contribute, (2) social inclusion, and (3) focus (or, to put it in their terms, increased susceptibility to distractions). We suggest that the interview responses reveal that these patterns are at least as much socially produced adaptations to the limitations of remote participation as they are deterministic technological constraints.

Limitations

This research clearly has its limitations. Despite the thematic consistency in our data, the size of our sample is small and, of course, from one company. Clearly a larger sample would provide a better sense of the proportion

and generalizability of practices, as well as diversity of behaviours and reasoning, some of which might turn out to be very relevant. Perhaps more interesting, though, is the fact that the sample was drawn from employees of one company. Company culture may well have a strong effect on meeting practices. There are many kinds and levels of culture that might be relevant: teams, group, company, region, country etc. Despite these limitations, however, we would hypothesize that the central point that low engagement can be a social choice - not just a reaction to limitations but an exploitable social resource on the basis of those limitations - is very likely to be true for some subset of any population. What is most interesting is that this choice is probably one that most meeting gurus and video meeting services would disapprove, but it has implications for design.

Implications for Technology Design

As we said above, our interviewees were not always constrained by the limitations of remote participation. In some cases remote participation enabled a choice of level of engagement and a signal about that choice to others. So our users were describing a combination of motivational hierarchy, engagement spectrum, and meeting roles from which to make an active choice to signal low interest through remote participation. Most commercially available video meeting services, however, do not provide many nuanced ways of making or demonstrating such choices. Typically engagement level is tacitly technologically driven by device capabilities, such as whether the user is joining on a computing device or dialling in on a telephone. Engagement level can also be indicated in some systems by meeting role - typically organizer, presenter, attendee etc., and these tend to assume technological engagement privileges specifically for remote participants. For example, an organizer can mute all remote attendees or selectively mute/unmute.

However, there is scope for considering whether meeting roles might be more nuanced. Imagine, for example, that remote participants could choose to set themselves as "Monitoring" or "Listening in". This might apply some technological defaults such as turning the camera off, but also confer some social rights and obligations viz a viz expectations on answering questions, multitasking etc. This presumes, of course, that live monitoring a meeting is a valuable use of time. With advances in AI a monitoring mode would not necessarily even have to involve the user's live presence. If a speech-to-tech or computer-vision system could be set to recognise meeting content that is relevant to a user, and notify that user during or after the meeting, then multitasking might be reduced.

There are many possibilities for varied low engagement roles beyond "monitoring". "Oversight" might be another, in which a high-level manager, subject matter expert, or admin role is available for whatever reason via a signalling mechanism should a question warrant it. It might also be interesting to consider meeting status such as "uncertain" or meeting relevance to topic or people in a "degrees of separation" model, where the larger the degree of separation the less engagement is expected.

Conclusion

This paper presents the results of a short exploratory study to provoke a new reading of low engagement by remote participants in video meetings. It is not always the case that remote participants have a high motivation to engage that is being thwarted by technological constraints. Rather, low engagement has become an established social practice, an adaptation to the limitations that also exploits those limitations. Heeding such adoption practices could well solve more practical problems in video meeting technologies.

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