Open-source software overcomes the limitations of videoconferences by supporting impromptu conversations

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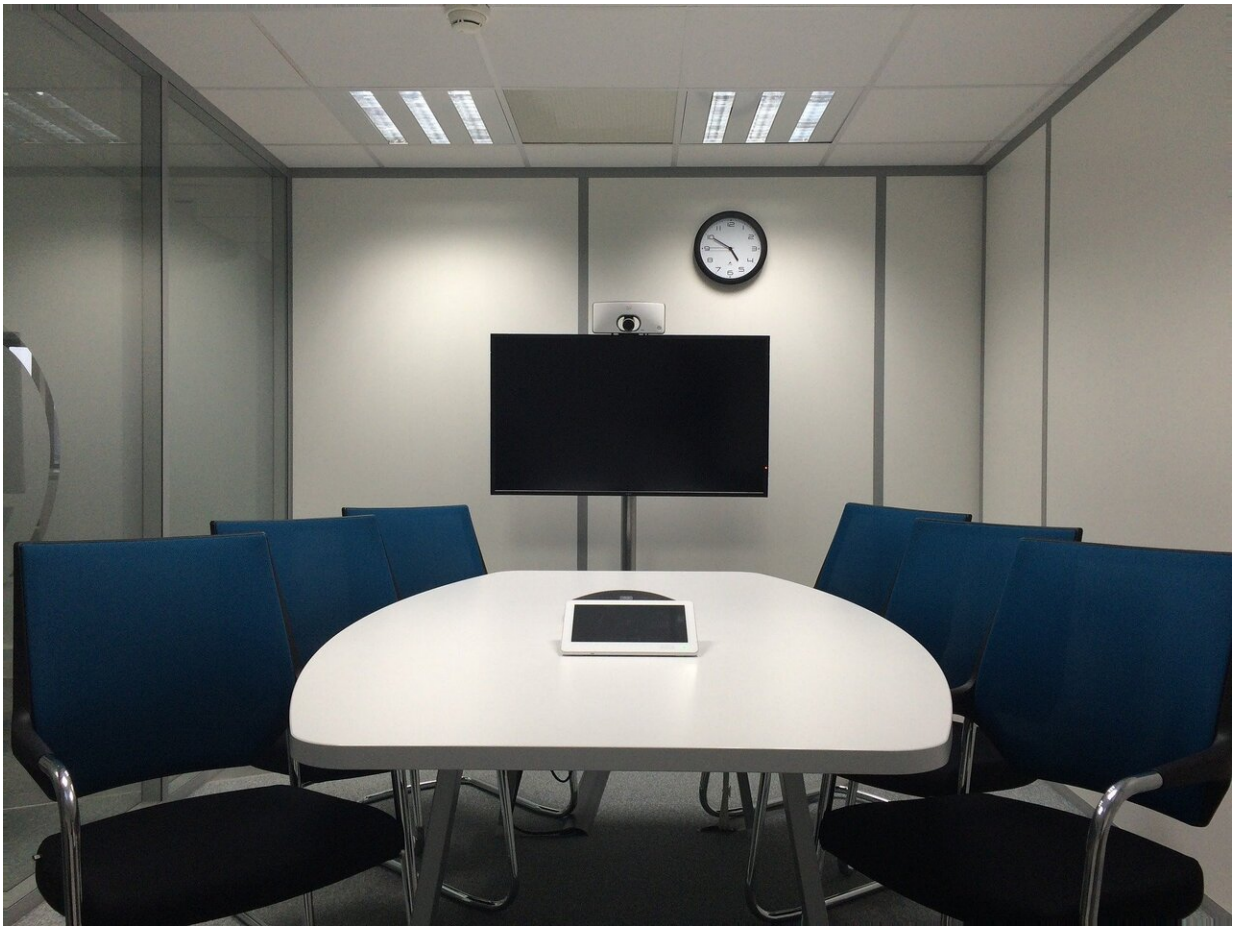

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During the coronavirus pandemic, Zoom, Skype, and other videoconferencing systems have become our lifelines for workplace communication. But while those platforms work well for many kinds of virtual meetings and conferences, their capacity to replicate the kinds of spontaneous, informal interactions that take place when people are together in person is limited.

Enter Minglr, a new software platform developed by researchers at the MIT Sloan School of Management. Minglr is designed to support the kinds of impromptu, private conversations that individuals have before and after meetings, in the lobby during breaks of conferences, and around the office coffee machine. By making these interactions possible online, systems like Minglr can further boost the desirability and feasibility of remote work, learning, and professional networking.

"I think ad-hoc interactions—those 'hallway conversations'—are among the most important things that people miss in today's work-from-home environment," says Thomas W. Malone, the Patrick J. McGovern (1959) Professor of Management at MIT Sloan and the founding director of the MIT Center for Collective Intelligence, who led the Minglr research team. "From a collective intelligence standpoint, lots of research suggests that those random encounters are key to creative innovations in cities, research labs, companies, and elsewhere. And we know from our own personal experiences that they are also critical to making new professional connections, forming social bonds, and building camaraderie in a group. But most people don't realize how straightforward it is to create videoconferencing software that supports these ad-hoc interactions."

"We want to demonstrate what is possible, and we hope that all major videoconferencing systems will implement functionality like that in Minglr."

To create Minglr, Prof. Malone teamed up with Jaeyoon Song, an incoming MIT Sloan Ph.D. student, and Chris Riedl, associate professor for Information Systems and Network Science at the D'Amore-McKim School of Business at Northeastern University. Together, they developed a prototype of the software, building on an open source videoconferencing system called jitsi.

The team plans to make Minglr available as open source software to anyone who is interested in using the tool, including developers who would like to contribute to it.

It works like this: At a virtual meeting or conference, participants and attendees log on to Minglr and see a list of people who are available to talk. The system lets them select the ones they want to speak with. They can also see the people who want to talk to them. And if they select one of those people, then both parties enter into a private video room where they can chat for as long or as short a time as they wish.

A working paper the team just released describes a pilot test of Minglr at the June MIT Collective Intelligence 2020 meeting, which was held online as a virtual conference. In one survey reported in the working paper, conference attendees indicated that conversations in hallways, lobbies, and at social events were the most important part of attending an academic conference. And in another survey, 86% of participants who used the Minglr system successfully said that they thought future online conferences should employ something like it.

"The positive feedback we received on Minglr has helped us see new pathways for its functionality," says Song. "We knew that the system could be valuable at virtual business meetings and professional conferences, but now we see potential uses in virtual classes, parties, and other kinds of social engagements. Minglr allows you to meet new people, chat with folks you already know, and spark different kinds of

conversations. With Minglr, we see a future that involves much richer and deeper online interaction."

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