



Living Through a Crisis: How COVID-19 Has Transformed the Way We Work, Live, and Research

John Tang^{*1}, Kori Inkpen¹, Paul Luff², Geraldine Fitzpatrick³,
Naomi Yamashita⁴ & Juho Kim⁵

^{*1}Microsoft Research, 1 Microsoft Way, Redmond, WA 98052, USA (E-mail: johntang@microsoft.com); ²King's Business School, King's College London, Bush House, 30 Aldwych, London WC2B 4PH, UK; ³Institute for Visual Computing & Human Centered Technology (HCI Group), TU Wien, Argentinierstrasse 8, 193-5, 1040 Vienna, Austria; ⁴NTT Research Labs / Kyoto University, 2-4 Hikaridai, Keihanna, Kyoto 6190237, Japan; ⁵KAIST, 291 Daehak-ro Yuseong-gu, Daejeon 34141, Republic of Korea

The COVID-19 pandemic abruptly changed all aspects of our lives, including the way we worked, how we socialized with friends and family, and how communities functioned. As many were instructed to stay physically separated at home, businesses, educational institutions, and other social institutions had to adapt to this new reality, often turning to video calling applications and other online collaboration technologies. Unlike previous crises, the global scope of the pandemic meant that nearly every country was affected and enacted policies that changed the way the entire population lived and worked. Many people lost their job due to shutdowns to prevent the spread of the pandemic. Many of those who continued to work had to figure out how to do their job working remotely from home. People in essential services also had to learn to work in new ways, avoiding physical contact or being close to others, aspects that are typically considered critical for the accomplishment of everyday activities.

This abrupt change in the landscape of work prompted fundamental changes in our entire lives. People had to quickly re-negotiate new ways of being together at home, which now served as an office, a classroom, a family space, and an extended social gathering place. Changes prompted by the crisis in the way we live, work, and stay socially connected, will undoubtedly affect how we will do so in the future, even after the pandemic subsides. Understanding these changes, learning from them, and exploring new directions is critically important. This special issue collects together empirical work, methodological exemplars, and conceptual insights provoked by this unprecedented event.

For decades, CSCW researchers have considered the use of various technologies to support distributed work, from shared file folders to share information with a team to video-mediated systems to support synchronous activities over distance. These studies frequently raised concerns about the limitations of these technologies, not only related to general concerns like privacy, but also with regard to how they seemed to constrain the most mundane aspects of collaborative work, such as how people establish mutual awareness, and how they are able to communicate and coordinate effectively. However, within weeks people who may never have used these systems before had to undertake their day-to-day activities through these systems. This reaction was simultaneously a sudden adoption of technology, an adaptation of work and life practices to what the technology supported, and an opportunity to explore novel ways of staying connected while being required to stay physically remote. This special issue drew from a diverse range of research along those dimensions.

For example, although prior to the pandemic the number of people who had used, Skype and other video-mediated systems like Google Hangouts, were growing steadily, the crisis meant that for some this kind of technology, principally Teams and Zoom became a core feature of their work, with every meeting held in this way. Alongside the use of video for formal activities, many organisations sought to draw on the technology to also support informal interaction and maintain sociability. Researchers in CSCW have long considered the nature, advantages and disadvantages of video-mediated technologies and identified a tension in trying to design systems that support both formal and informal activities. The pandemic provides a resource, albeit an unwelcome one, to observe and analyse these tensions in practice.

The use of these technologies have also had an impact on other more specialised work activities, particularly ones that rely not just on talk and a head and shoulders image of colleagues, for example those where touch and embodied action is critical. These domains and new uses of the technology have the potential to shine new light on our understanding of collaboration, interaction and practice whether these are within general settings like meetings or for more specialised activities.

This issue therefore covers different domains. For example, social welfare services experienced a sudden increase in the number of people who needed those services, while at the same time navigating how to provide those services within the constraints of public health guidelines that limited physical contact. With the sudden shift to video calling for connecting over distance, there was also an opportunity to explore sharing other signals over distance to stay closely connected. As another domain, software development companies and software engineers, whose work is tightly coupled and interdependent, also needed to find new ways to re-establish common ground and collaborate at a distance, often through trial and error despite their technical affinity.

Furthermore, the research included in this special issue was situated in different geographic regions, including Europe, Middle East, Africa, Asia, Australasia and North, South and Central America, providing an international view of how companies, individuals and teams re-negotiated work and life in response to the crisis.

CSCW researchers themselves were also affected by the crisis. Studies with human participants were limited and constrained, prompting data collection to be undertaken in particular ways. The papers in this special issue reflect these research challenges as they describe the methods and approaches that were utilised during this crisis, including online surveys, iterative short polls, participant diaries, and online interviews.

Even the process of pulling this special issue together was affected by the pandemic response. Our original call for participation expected the due date (December 2020) to be after the crisis resolved and we all had a chance to reflect back on what happened. That timeline seems absurd as we continue to operate under the lingering effects of the pandemic as of this writing in summer 2022. We especially want to thank the authors for continuing to do research under pandemic circumstances, to all the reviewers, who found time in their disrupted schedules to give feedback, and the Journal for guiding us through an unexpectedly long and complicated process. We hope this collection of articles helps the community reflect on what we learned from a CSCW perspective through research on the COVID-19 pandemic response and shares how we as a research community are responding to its ongoing effects.