

## The Challenge of Virtual Collaboration

By David Horos, P.E., S.E., LEED AP



When I was a kid in the 70s, there was a children's TV show called Zoom. I wouldn't say I liked it too much, and it didn't last too long. It was reintroduced in the 90s and, again, didn't stick. For understandable reasons, I suppose, this past year has had me thinking about that show and how little I suspected the word zoom would reenter my life in such a big way. A series of new software to install, learn, and make sure they are compatible with my hardware. The need to run many programs (Zoom, Hangout, Teams, Webex, Goto, Bluejeans, Connect) interchangeably depending on hosts. And a series of terms introduced into our vocabulary (zoom fatigue, zoom etiquette, virtual background, etc.). And now common phrases, "Can you see my screen," "Can you make me the cohost," and "Can you turn on your cameras so we can see you?" The current question in my mind is, where will this lead us moving forward?

Interestingly, Zoom was formed as a company in 2011 and was worth \$1 billion by 2017, well before its most recent growth. Some savvy folks anticipated changes in the world and how we do business before the pandemic. Were we all destined to evolve to our current arrangement, and the adoption of Zoom was just accelerated? Or was this a technology that would never have



*“The requirement to go virtual... has been met with new opportunities for participation, with a larger audience pool not defined by geography.”*

developed without the pandemic? We may never know, and it may not matter. Zoom and its cousins are indispensable now. A bigger question might be whether it, unlike the TV show, remains for the long term.

It is great that collaboration technology already existed when we needed it. But how do we adapt to make the best use of the technology when it is no longer necessary? Collaboration technology opens opportunities in the way we practice and team up professionally. Less business travel. More working from home without the commuting time. Less need for office space, meaning less overhead? Less face-to-face interaction? We worry about extensive screen time for our kids and a resulting lack of social skills. Will our technical communication skills and ability to collaborate suffer over time? What will we prefer, phones or digital meeting spaces; does it matter? How about sharing messages live with large groups of people from far-distant regions, an ability that was not readily known or used regularly.

And for those who design buildings, how will it affect our business prospects and projects? Will we be coordinating new "zoom rooms" in offices and residences? Will the need for more flexible living and working spaces require changes to our designs? Will there be a need for more rehab/retrofit work? And will the ability to work from home result in decreased demand for new office buildings and other project types?

Sooooo many questions to consider, and I certainly will not venture to offer many answers. I will suggest that while there were initial concerns, our profession showed we could survive and arguably thrive in a fully remote environment. We were able to adapt and are now

looking toward the post-pandemic world, which will likely include a new, hybrid model that consists of the best (and hopefully not the worst) of both the in-person and at-home worlds.

We all recognize some benefits of this new digital environment. Some of us have participated in virtual site visits, which, while not as good as in-person, are likely better than no visit at all and certainly more accessible with limited travel budgets. The requirement to go virtual with conferences, dinner meetings, and seminars has been met with new opportunities for participation, with a larger audience pool not defined by geography. And our ability to attract speakers from afar was made easier with virtual events.

On the other hand, we work in a very collaborative profession. Our designs are improved by interactions with our colleagues. And while we are still collaborative virtually, we may be losing something by missing out on spontaneous face-to-face interactions. Are the online tools available for collaboration sufficient to replace tried and true approaches like sitting around a table with our colleagues to review designs? Or to collectively review drawings pinned up on conference room walls? Engineers value networking at conferences, which is not fully replicated in the virtual environment.

How do we best take advantage of the medium? More professional setups – better cameras, lighting, and micro-

phones. We are all in show business now, hopefully with less makeup! We have better electronic collaboration tools like surveys, virtual whiteboards, and more, all of which will require learning and becoming comfortable. We must learn to provide virtual access to in-person meetings while ensuring that those attending virtually have the same opportunity to see, hear, and participate.

The challenge will be to blend these new approaches with prior practices once we are past the pandemic while also mitigating the potential downsides to remoteness. What is the right amount of time to be in an office compared to working remotely? That answer will depend on circumstances, and it will take time to strike the right balance for different circumstances.

As we approach both the one-year anniversary of the first lockdowns and the widespread availability of a COVID-19 vaccine, let us take the time to reflect on our ability as a profession to react and adapt to quickly changing circumstances. And to commit to taking the best of those adaptations forward with us in our practices and our work serving the profession.

I am very excited about the possibilities moving forward. Technology has helped us advance throughout history, and this abrupt crash course in virtual business has accelerated the current cycle of innovation even more. Harnessing that technology will be key. Zoom on!▪



*David Horos is a Director in the Structural Engineering Studio at Skidmore, Owings & Merrill and a member of the NCSEA Board of Directors.*