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Coronavirus, the Cloud, and SMPTE

It's been nearly a year since we first heard the term "coronavirus." It took us a few weeks to fully understand what this was and then a few more weeks to figure out how best to navigate the world under the cloak of this pandemic. My last trip was to India in early March 2020, to attend the SMPTE Standards Block meetings at Whistling Woods International, Mumbai. I recall that we weren't wearing masks or maintaining social distancing, but we took great care to wash our hands and use sanitizers. Thinking about it today, it just seems outrageous to me. When I arrived home on March 10, we immediately went into lockdown. While restrictions seem to have relaxed a bit in the meanwhile, life hasn't been normal ever since.

How has the media tech industry been affected by the onset of coronavirus? The industry has been shifting to the cloud for years. As new facilities were built to be "future proof," we would hear how Internet Protocol (IP) networks would be the backbone. I recall my visit to the brand new Bloomberg Television facility in London in 2018. This state-of-the-art facility, built on the backbone of an

end-to-end video-over-IP solution, opened in 2017. Another example was the WarnerMedia center built in New York City at the gleaming new Hudson Yards complex. The developers of this facility wanted to ensure they were forward-looking and not obsolete from day one. The team also relied on the video-over-IP backbone. These are only two of the recent projects based on strong cloud-based initiatives.

These projects were well underway, indeed completed, by the time the pandemic gripped the world. With a cloud-based facility and workflows in place, these organizations were able to shift to remote production more quickly than others. Like many things, the coronavirus also accelerated the move toward cloud-based solutions. In the early stages of the pandemic, almost everything stopped as we tried to figure out how to safely run productions, both scripted content as well as the news. Over the past six months, we've learned to live more comfortably with the virus while coming back online with productions. All parts of the global media industry want and must get back to work, and the cloud makes this all much more possible. From writers to editors, productions, post, and distribution, being ready to work in the cloud is crucial for our industry.

Coronavirus is helping us explore and deploy new techniques to propel the industry forward. I suppose that's one silver lining.

Where does SMPTE figure in this discussion? Well, to start with, our most relevant standard suite, SMPTE ST 2110, plays an integral role in the effort to move facilities to a video-over-IP model. The suite continues to evolve as more and more providers employ its use in products, but as a baseline, SMPTE ST 2110 supports this industry to move onto the cloud. Both Bloomberg and WarnerMedia built their facilities based on this particular standard suite.

I would expect that in the future, as media technology becomes naturally cloud-based, we'll see a bigger (and faster) need for new tools and workflows. Standards will be critical to ensuring that interoperability remains at the forefront, allowing flexibility for media companies and manufacturers working in the cloud.

In the end, as we've navigated this special year, the cloud is quickly becoming an essential platform for the global media tech industry. The coronavirus pushed us faster than we may have planned. I look forward to seeing the roles SMPTE will play in the cloud, starting with the key papers presented in this issue of the *Journal*.

