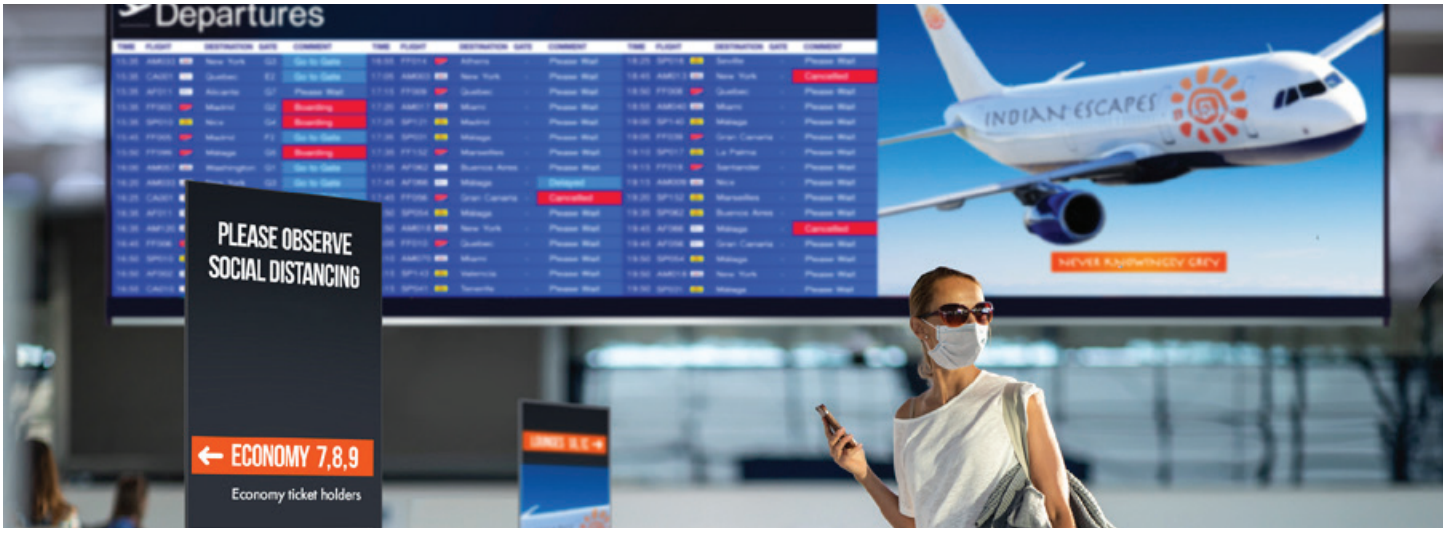
Whitepaper

SHARP / NEC

Transforming Technology for the New Normal



Society has faced massive changes in 2020. From our transportation hubs to emergency operation centers, from offices to schools, we worry about social distancing, seamless video conferencing, and the ability to send video feeds and images from one location to another quickly and easily.

"Whenever you're responding to an emergency situation, if it's weather-related or related to the pandemic, you want to get correct information to the right people quickly and be able to make a decision that is appropriate in a timely manner. That's what saves lives," says Sharp NEC product manager Chris Feldman.

For example, the Colorado State Emergency Operations Center uses two NEC video walls in its emergency operations center and smaller policy room to receive real-time satellite feeds for monitoring emergencies such as fires. The ability to display more information at the same time from a variety of sources helps SEOC workers analyze situations and make decisions faster, which is invaluable during a pandemic.

The San Diego/Imperial Counties Chapter (SDICC) of the American Red Cross also adopted NEC solutions to streamline its emergency response processes. It used to take four to six hours to prepare for a larger operation, and now, the organization can respond to a crisis within one hour.

Today, the ability to respond quickly to any situation can help organizations like the American Red Cross, as well as corporations and command-and-control centers, fulfill their missions faster, even with limited personnel on site.

"There was always an academic debate of whether or not people could be productive from home. The pandemic gave us a real-world test," Feldman says. "The vast majority of people across different professional sectors proved that with technology as a cornerstone, such as video conferencing and presentation tools, you can still be very effective even if you're not in an office."

Further, as states move through re-opening phases on various timelines, display technology that can be transformed for remote workspaces, social distancing signage, or seamless emergency operations could make the difference between offices and public spaces opening safely or facing the consequences of a second wave.

Network operations centers, command and control facilities, and situational emergency operations centers all require ways of adapting technology to ever-changing needs while making that technology safer to use. Sharp NEC Display Solutions has seen clients adapt existing LCD screens like the UN series, as well as Hiperwall video display technology, to:

- Connect workers in remote facilities to make timelier decisions in emergency situations
- Share digital signage messaging about coronavirus safety measures and social distancing
- Embrace touch-free solutions for launching presentations or changing content via IR motion sensing technology
- Be easier to clean and disinfect

"There hasn't been much time for organizations to plan for new types of product installations, so it's really about utilizing the products-at-hand to show messaging about social distancing or advocating for PPE wear," says Ben Hardy, Sharp NEC senior product manager.

Adapting Presentation Screens for Digital Signage

Hardy points out that huddle spaces and conference rooms in offices may sit empty in this era of social distancing. Companies can use screens in these spaces to share reminders to keep six feet away from colleagues, wear a mask when you're not at your desk, and to wash hands frequently.

The easiest way to convey this, or any other, message? A simple USB media player inserted into the USB slot of the display – a feature available on 95% of NEC's large-format displays. Transportation centers, retail spaces, and other public buildings can also use the USB port to share messaging without investing in additional digital signage hardware.

OPS Technology Provides DIY Programming Possibilities

For organizations with more robust needs, the Open Pluggable Specification (OPS) available in most NEC screens allows scalability and flexibility. The Washington State Department of Transportation Traffic Management Center uses a massive video wall made up of 90 NEC P463 46-inch monitors and 12 X554UNS 55-inch monitors to view traffic conditions and maintenance projects on the state's freeways. Using OPS, the intel spec industry-wide digital signage standard, the ITS team at WSDOT programmed the monitors, giving them full licensing over the applications. The on-board computers connect via Cat-6 cable to a Cisco switch in a back room, but the OPS technology eliminates the need to house and cool multiple system units in a remote location.

Similarly, IntelSat, IntelSat, a global satellite services provider, uses NEC monitors with OPS capabilities to integrate the screens with Hiperwall software to combine four global operations centers into one NOC facility in Ellenwood, Georgia.

The Hiperwall software capabilities combined with the 0.88mm ultra-narrow bezels on the NEC X555UNV displays to create a 6.75-by-96-foot video wall that looks like a single pane of glass. The Hiperwall can display one large image or multiple images on different sections of the wall.

When the system was installed, a universal IR remote controlled the monitors – individually, in groups, or as a whole. But the combination of OPS and IR technology could also enable users to program the displays to turn on or off at specific times, adjust brightness due to ambient light, or change the video feed or source when people approach.

Low-Touch Environments Meet Display Technology

Minimizing the number of hands on remote controls or touchscreens can help reduce the spread of germs across a workspace, necessary in Command and Control environments with multiple people working in close proximity. Sharp NEC provides several affordable ways to control displays easily without a separate control system.

Sharp NEC offers an IR/proximity sensor that can easily be added to select NEC displays and can change sources, volume or brightness as someone approaches. From simple IR communication or by using NECs NaViSet Administrator 2 network-based control and asset management software, you can also use this in conjunction to "prioritizing" sources through NEC's Input Detect functionality as well.

For instance, in an airport or other public transportation setting, monitors or video walls can display COVID-related messaging but switch to flight information as a person approaches. In a corporate environment, presentation systems can be programmed to turn on and prioritize the presenter's laptop when someone enters a conference room.

NEC's ECO Mode™ can also be used to turn monitors off when not in use while limiting human contact with remote controls. The Red Cross implemented this technology to reduce the amount of heat released into the facility and lower overall power consumption. While, this technology promoting promotes sustainability and helps promote a low-touch work environment.

Keeping Displays Clean During a Pandemic

Of course, the practical considerations of keeping technology, especially sensitive touch screens, clean and disinfected weighs on the re-opening plans of many organizations.

Existing NEC displays can be outfitted with a Projected Capacitance (PCAP) touch overlay that can be wiped down and disinfected easily. "If a conference room, NOC, or Command and Control center has touchscreens and they're concerned about handling these in a safer manner, where they can be disinfected, this easy retrofit can help," Hardy points out.

A glass retention bezel on individual monitors can also create a safe surface that can be disinfected easily.

Returning to the New Normal

The combination of NEC displays and video wall technology has helped organizations from IntelSat to the Los Angeles Police Department step into the future with technology that enables better monitoring of emergency situations and expedites decision-making in mission critical moments.

Now, that same technology can help create safer, healthier workspaces through easy-clean surfaces, touch-free technology, and easy, affordable control methods.

For additional information about Sharp NEC Display Solutions of America products, call (866) NEC-MORE, or visit the website at https://starstudent.sharpnecdisplays.us/promotions/recycleprogram/. Follow us on our social media channels: Facebook, YouTube, Instagram, Twitter and LinkedIn.