Enable social distancing in healthy spaces

Introduction

Now more than ever, people are expecting safe and open indoor spaces where they can move forward to live, work, and play. Siemens Smart Infrastructure helps you transform the everyday by creating places that students, patients, and occupants can enjoy with confidence. And you can do it all while enabling future resiliency for your organization.

In this paper, we present one of our strategies to help organizations create safer, healthier buildings: enable social distancing. While no single solution will provide a comprehensive answer, a nonsite approach includes implementing technologies and approaches:

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<th>Objective</th>
<th>Approach</th>
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<td>Screen occupants for evidence of elevated skin temperature</td>
<td>FDA-cleared temperature screening kiosks</td>
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<td>Control occupancy in buildings by counting people coming in and out of a building</td>
<td>Video analytics and / or access control readers with “read in – read out” capability</td>
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<td>Create targeted sanitization and surface disinfection strategies</td>
<td>IoT sensors and building analytics</td>
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<tr>
<td>Monitor office occupancy for density and safe distancing</td>
<td>IoT sensors and building analytics</td>
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Reduce the spread of airborne and surface contaminants
Improve air quality
Optimize energy performance
Enable social distancing in healthy environments
Provide real-time updates
Sustain healthy & safe environments
Defer capital budgets
Having a fever is often an indication of COVID-19 and other infections that can make people sick. Preventing people who are sick from coming to work, visiting your space, and so on remains an objective for many organizations—thus the CDC recommendation to perform health checks. Placing contact-free temperature screening kiosks, which should be cleared by the U.S. Food and Drug Administration (FDA), near building entrances to detect elevated skin temperature (which can indicate fever and, by extension, potential illness) can help screen occupants and limit access to only healthy people. Placement is critical and organizations should consult with their provider to ensure that kiosks will be unaffected by outdoor environments and HVAC vents.

To maintain a safe level of occupancy in a building, organizations can deploy “people counting” technologies: video analytics and / or access control readers. With video analytics added to the video management system – part of building security operations – intelligence can calculate the number of people in the building at any time. A cloud-based platform offers further advantages, including the latest in artificial intelligence and machine learning technology, remote accessibility, and automatic updates.

Likewise, access control readers at every building entrance can be installed with read in / read out capability to count how many people are in a designated area at any time.

Both options can be effective solutions to controlling occupancy to achieve safe social distancing objectives.
Typical schedules for cleaning buildings may no longer be sufficient, but building-wide sanitization may not be possible or cost effective. The Comfy Workplace Application can provide building owners insights into which areas of the building are most often frequented, so they can prioritize sanitization and disinfection protocols in these areas while adapting janitorial practices accordingly. Comfy can also be configured to enable employees to request cleaning or supply needs via work requests or QR code.

Just as organizations should enable people counting to manage occupancy, it’s important to monitor this occupancy for density and safe distancing. Both Enlighted Building IoT and the Comfy Workplace Application offer organizations opportunities to achieve this goal. For example, Enlighted heat maps can illustrate where more frequent contact between employees occurs and motion trails can identify bottlenecks in office traffic patterns; with this information, organizations can reconfigure spaces to promote social distancing. Comfy accommodates social distancing through:

- Configurable meeting schedules that can prevent back-to-back meetings, so rooms can be cleaned properly between sessions
- Optimized desk booking, which may mean blocking access to certain spaces to promote proper spacing
- Insights that can help determine whether to open or close specific floors or rooms

Ready to learn more about how healthy buildings can create places for a safer, healthier, and more confident everyday?

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