BOMA NY: Unify your technology ecosystem & reimagine your approach to safety

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New York, NY BOMA NY's recent and timely monthly forum, presented by John Bos of Telecom Communications, Inc., and Mike Huzinec and Alexander Brasowski of Motorola Solutions, Inc. described how today's "technology ecosystem" can significantly improve the effectiveness of proven safety protocols for commercial buildings.

Bos opened the presentation by explaining that, compared to today's highly advanced information technology-based solutions, analog video surveillance cameras and officers using legacy two-way radios to communicate with a central dispatcher are obsolete methodologies.

Smart two-way radios with integrated digital video, and artificial intelligence (AI) applications outperform the traditional model for achieving safety goals. The presenters described how today's advanced technologies, deployed within an integrated "ecosystem," can combine instant, real-time voice, video, and on-file data to counteract potentially catastrophic events. Corrective measures happen instantaneously.

Huzinec said, "Traditionally, so much security happens after the fact." In the old model, incidents are analyzed, and measures are taken to prevent future occurrences. He said that today's safety officers need more than that. They need to know "how we can catch these events as they happen."

He cited the protocol of "Detect, Analyze, Communicate, Respond", based on the FEMA framework, and how this strategy can be enhanced with technology. For example, Huzinec said that in addition to knowing when a building's door has been opened, we can also employ an identity search function to instantly detect whether the person who opened the door is a threat.

Brasowski described how this capability goes far beyond access control cards that only record "swipes in and swipes out." Video identity search applications can provide persons' descriptions as well as facial recognition. This is important in situations where a person enters an area within a building, and whether he or she is authorized to be there, or even if any individual is loitering there too long.

Recognition applications can also be used in so-called "BOLO" or "Be On the Look Out" instances where security staff can be warned when a certain individual crosses a building's "virtual perimeter."

Brasowski also described how digital body cams worn by building staff are becoming commonplace in Europe, with growing interest in the U.S. He said that the cams, which can be integrated with an officer's two-way radio, provide vital information to a "virtual dispatcher" that, in turn, can direct help when needed.

Huzinec added that a unified safety system will instantly generate and display a "workflow" to counter potentially harmful events. For example, if a door is forced open, the system will alert the virtual dispatcher that will instantaneously notify the two-way radios that are assigned to that area—and in extreme situations, execute an automated lockdown environment for a building.

On the subject of investing in safety technology, Brasowski explained that over the past 10 to 20 years, building owners sought to purchase best-of-breed systems. He said, "This led to (different) systems that couldn't talk to each other." Fortunately, today's technology ecosystem is being built on the principle of being integrated and pro-active.

Brasowski said that state-of-the art technology is now focused on AI that can recognize objects and anomalies, and then automatically broadcast alerts to the proper officer. He described "smart sensors," such as those that can detect sources of body heat—useful in situations where cameras would be too invasive, such as restrooms.

These advances generate huge amounts of data. AI software is required to interpret it in real time and send actionable information to safety staff. This, he said, is known as "critical, instant, and reliable communication to ensure that the appropriate people get the correct information at the ideal time."

Regarding building access controls, a security mainstay, systems have advanced beyond "swipe in/swipe out." For example, a real time occupancy "snapshot" is vital in evacuation scenarios in which people who need to exit an area in an emergency must be immediately accounted for.

Control centers can be upgraded with smart maps of building spaces that display counts of people in different areas. Displays can even show spaces in which occupancy counts are coupled with real time alerts pertaining to those areas. For example, 85 persons in a manufacturing space could show as a normal situation, but five persons in a storeroom containing valuable goods on the same floor would show as an alert.

At the conclusion of the webinar, the presenters answered questions from the online attendees.

One attendee asked whether cell phone tracking can be used to track persons who have moved through and beyond a building's access controls. The presenters replied that the recommended solution would be to install swipe in/swipe out controls for designated interior rooms. But, yes, they replied, other Bluetooth-enabled systems can be used to track persons throughout the building using beacons.

All in, the presenter’s message was clear—the security of our buildings and safety of our tenants is paramount. Tech solutions are available to ensure best practices are met.