

PUSHING DIGITAL DETECTION'S ROADMAP TO THE EDGE *by Bob Stockwell*

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Integrators continue to deploy many of same basic edge protection devices that have been used for decades. Field devices are installed to detect a change in condition within the customer's premises, and that information is forwarded to a host control point that will transmit the information to a central dispatcher for processing.

These edge devices have been designed and developed for specific applications by use case, including basic sensors, such as door status switches, motion detectors, heat and water sensors, as well as large-scale corporate deployments that employ thousands of devices over multiple enterprise applications and require active monitoring on a 24-hour basis. These devices have themselves become an industry, with vertical-specific development roadmaps for hardwired and wireless capability.

GREATER CONSISTENCY, ACCURACY ON HORIZON

The future for many of these once hardwired, labor-intensive alarm devices may be heading to the digital age in favor of video analytic solutions. As customers rapidly expand the use of surveillance cameras across all vertical markets, the CCTV manufacturers are expanding product offerings with a greater emphasis toward on-board services, including motion detection with digital masking, audio detection, thermal zoning and facial recognition to disarm a security system or verify someone's identity.

So, will this be as reliable as conventional, time-tested technology? The answer is definitely yes. Integrators and customers will save significant amounts of labor and material costs by using even the most basic video analytics to cover a larger area within a protected space. Because cameras can record images and report alarm events at the same time, this shift also eliminates the opportunity for tampering of contacts and motion detectors that may be accessible at the ground level. Oftentimes, customers find traditional devices to be a nuisance, for instance, if the alarm is triggered too frequently with no apparent cause. And indications that detectors may have been tampered with are oftentimes discovered after a loss has occurred with no signal to the monitoring center.

Digital detection systems will be more consistent and provide more accurate alarms. Currently, industry professionals service the basic perimeter devices more than any other com-

ponent, when door contacts are either damaged by a customer, or fall victim to weather-related issues such as water damage or lighting. These can cause additional false alarms and are expensive to repair or replace. In most cases, the responding service integrators discover a lack of preventive maintenance.

Digital detection ultimately helps lower the skyrocketing false alarm issues. Using video analytics for alarm detection rather than legacy solutions can greatly decrease the number of false alarms, while also enhancing the ability to verify the alarm in progress and provide the responding law enforcement agency with better intelligence upon arrival.

CUSTOMER SAVINGS ALSO A SWEET SPOT

In large-scale corporate deployments, where clients are more likely to have camera coverage throughout the facility, the options can be expanded to include people counting, heat mapping and tracking items left behind. It becomes critical to involve all parties from the customer's perspective in order to understand campus workflow and traffic patterns that are vital in selecting the proper solution. This does not preclude the use of external hardware inputs to the cameras directly where deemed appropriate.

Preventive maintenance will evolve to produce a lower total cost of ownership, becoming a more virtual inspection. With fewer traditional devices required, clients can simply review the metadata on a schedule to ensure that every area is protected. System operational compliance will be more readily achieved through advanced, remote diagnostics software, saving the need to send out trucks and personnel for every inspection. This will also lower end-user operating expenses for annual inspections, and create an archive of information that can be freely accessed when needed for the customer's regulatory compliance reporting.

This will be a long-term transition. With equipment manufacturers enhancing existing product offerings and introducing new hardware/software every day, it may take some time for security dealers and integrators to become comfortable using edge devices for primary alarm reporting. But as the industry approaches this digital transformation, integrators will have yet another potential suite of services to offer and ways to lower the total cost of ownership for their customers. ssi

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