LEVERAGING VMS FOR ACTIONABLE INTELLIGENCE IN RETAIL

Keith Aubele, CPP, LPP, Chief Security Officer at Salient Systems analyzes the benefits of a future-proof, data-rich security platform

There is a confluence of trends happening in the video surveillance space. AI, analytics, machine learning, video compression technology and bandwidth management are just a few technologies that have recently had a profound impact on the capabilities of the traditional video surveillance system.

Due to this, surveillance systems today are now smarter, faster and multi-dimensional when compared with systems from just a few short years ago. It's safe to say that video surveillance has shifted from being an after-the-fact tool supportive of investigative purposes, such as to identify a bank robber, to a transformative, dynamic solution that enables real-time information and decision making.

Known as actionable video intelligence, this ability to gather data and then use that information to make decisions in real-time is changing the way surveillance systems are being used. For retailers, this information is beneficial because it can have a significant impact on business operations, enabling retailers to quickly pivot to address a problem or improve performance.

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This is particularly important as retailers face the modern-day challenges of labor shortages, rising costs of goods, organized crime and increased violence within stores, which are forcing retailers to go beyond traditional uses of video surveillance to ensure the protection of employees, shoppers and merchandise as well as improve store performance. Using an open architecture video management platform provides the foundation for retailers to tap into a number of different analytics that support enhanced loss prevention initiatives and assist in gathering operational data about the store.

Access to critical, real-time alerts

As organized crime and incidents of active shooter events increase, retailers need to be able to quickly respond to a problem as it unfolds with critical, real-time alerts. It's no longer enough to have a surveillance system in place that can be used to positively identify a shoplifter.

Today, retailers need to deploy action-ready technologies that can easily integrate into a video management system (VMS). This could include gunshot detection technology, which can "hear" when a person fires a gun and enable specific security measures to immediately be initiated, or facial detection technology that can identify a known shoplifter and then alert a specific surveillance camera to closely monitor that individual.

Analyzing historical data for patterns

Surveillance systems gather analytical information that can help loss prevention professionals identify issues that may be larger than initially thought. For example, analytical data tied to a point-of-sales (POS) system could indicate that a specific cashier's drawer is short on a regular basis. That information could then be used to tell the surveillance system to follow that employee throughout the store to identify other potential problems, such as whether that employee could be tied to other instances of missing ▸

merchandise or even to an organized crime ring.

Using video analytics, retailers can be aware of which merchandise displays perform better by monitoring customer movement or using dwell time technology to identify locations where customers spend the most time. Store managers can use this data when deciding to change a display or to relocate a product to a different part of the store, all of which are actionable tasks that could improve the bottom line.

Importance of open platforms for integrations

An open platform VMS is also crucial when considering the range of specialty integrations available to retailers that enable them to solve the unique pain points of retail stores. These integrations can be easily adopted by retailers using the open application programming interfaces (APIs) of an open platform VMS and can range from solutions for self-checkout theft to extending the surveillance system to the farthest reaches of the parking lot.

Theft deterrent technologies

As more big box retailers and grocery stores move to self-checkout, it has become increasingly difficult for a retail associate to monitor every transaction and know if a customer has paid for the items in their shopping cart. Using AI technology, retailers can easily detect if a customer failed to scan an item in the self-checkout line by identifying individual items being purchased, such as a package of bubble gum, where the visual frame of the product or recorded weight does not match the item's POS data. Analytic solutions like this can have a big impact on shrink, whether that

shrink is caused by error, through shoplifting or employee theft.

A new but growing problem is pushouts, when a person fills up a shopping cart with goods and tries to push the cart out the door without paying. New solutions that integrate with a VMS can identify when a shopping cart has not gone through the proper procedures, such as a self-checkout line and then send a signal to a smart grocery cart to lock the wheels on the cart. The system then directs cameras located in the parking lot to continue to monitor the individual.

Intruder alert and suspect tracking capabilities

Being able to quickly identify a known shoplifter has become a priority for loss prevention professionals. Organized retail crime is at an all-time high, with 70% of retailers reporting an increase in crime. To address this, retailers are turning to facial recognition technology which uses AI technology and can alert loss prevention staff when a person with a prior shoplifting history enters the premises. Using access control integrations into a video surveillance system, retailers can tell a camera to track and record a person as they travel throughout the store after attempting to enter a secure area.

Actionable video intelligence has quickly become a priority for retailers who need to make informed decisions about whether to increase security and safety, reduce shrink or improve the bottom line. Having the ability to build a future-proof, data-rich security platform requires a VMS that is not only robust but is designed to be completely open to connect innovative and targeted loss prevention tools resulting in decreased risk, improvements in customer and employee safety and a reduction in loss. ∎

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