

Multichannel Merchant

Shrinking Shrinkage

Apr 1, 2007 12:00 PM, By Bennett Voyles

Retailers lose \$37.4 billion a year to shrinkage — inventory loss due to theft or fraud — according to a University of Florida study sponsored by the National Retail Federation, or 1%-3% of sales depending on the category.

Fortunately, retailers have many new ways to mind the store these days, thanks to digitalization. Digitized video, for example, can be treated like any other kind of data now, making it simpler to store, move, and integrate with other information. “Like every other industry, the digital technology explosion has affected the security industry and given us much better tools,” says Stephen May, president of LP Innovations, a loss-prevention firm based in Milford, MA.

The downside is that all these new choices are making security decisions much more complex for retailers than they were even a few years ago.

Cue the cameras

Most store video systems used to consist of an analog camera connected to a videocassette recorder. But with the VCR going “the way of the dodo bird,” as Mike Morper, director of product management for GE Security video platforms, puts it, retailers need to go digital.

Although roughly 85% of all cameras used in stores are still analog, according to Morper, increasing numbers of stores are seeing advantages in going digital. For one, because they run on Internet protocol (IP), digital cameras can be maintained by the same crew who maintain your computer systems. You no longer need special personnel to manage the cameras or the network attached to it. “It might as well be a printer,” says Morper. Digitalization also makes it possible to bump up image quality at just those times when something may be happening, giving investigators much more data to use after the fact than they once had with the grainy first generation of store video. This also makes storage much more manageable during quiet times, according to Morper.

Camera features vary. Models that can pan, tilt, or even monitor a store in complete darkness are available for less than \$400. But one reason that conversions to digital are still fairly limited is that they require replacing coaxial cable with a different set of wires. In the short run, many retailers are gaining some advantages of digital recording by using digital video recorders equipped to convert an analog TV signal to digital.

There is a wide range in the cost of such systems. At GE, for instance, the most basic DVR can connect to four analog cameras, comes with enough hard disk space to record a month of activity (500 gigabytes), and sells for \$1,200-\$1,300, according to Morper. A

more-advanced system that can handle 16 analog cameras and 4 IP cameras and comes with four terabytes of storage runs about \$5,000.

Even if it is converted from analog, digital video allows engineers to create a variety of possibilities. Motion alarms, for instance, can be triggered if the DVR detects movement. Morper says that some store owners are using digital cameras as a way of minding the shop via the Web when they are away. Point-of-sale data, too, can be integrated into the system, alerting the cameras to snap to higher resolution when a cash register is open too long or a clerk keys in an unusually high refund.

Analytics

Security software is becoming so powerful that retailers are using it not just to prevent losses but also to increase sales. Some companies are now finding that they can use camera systems for training purposes, as well as for insights into performance. For instance, Morper says, by viewing the store camera footage you may be able to discover why one employee is better at upselling than another.

Marian McDonagh, a spokesperson for Verint Systems, a Melville, NY-based manufacturer of software that integrates video with security and business systems, says that many companies are now also using the footage to understand shopper behavior, store traffic-flow patterns, and conversion rates and are even using it to help them schedule staff more efficiently.

Nonvideo data are being watched more closely too. Austin, TX-based Infoglide Software is taking technology it developed to help the Department of Homeland Security find terrorists and applying it to the challenge of sniffing out bad guys in stores.

In its first trial about 18 months ago, with a retail chain that has more than 2,000 stores, Infoglide uncovered \$15.8 million of previously undetected returns fraud in one quarter, says Douglas Wood, senior vice president of global sales. That was a 740% increase from what the retailer had identified in the previous quarter.

Like Infoglide's Homeland Security application, the new software is based on the insight that large organizations sometimes know important information about a person, but because that information is separated in multiple databases, the enterprise doesn't always "know what it knows."

Infoglide searches for relationships among its client's own databases, such as customer information, employee information, and vendor information. A system might, for example, identify if a neighbor of a clerk is making an unusual number of returns or if an employee is trying to return something without a receipt at another store without identifying himself as an employee.

As you might expect, this technology does not come cheap. The costs of licensing the patented software range "from the low-six figures" to more than \$1 million, says chief

marketing officer Bob Barker.

Merchandise sensors

Merchandise sensors may be one area of relative calm in the otherwise changing world of security.

Popular with middle-market stores, sensor tags are unpopular at both the upper end and the lower end. “The higher-end retail merchants believe that the ambience of the garment is somewhat diminished by hanging a big piece of plastic on it or an ink tag,” explains Michael Gilligan, managing director of loss-prevention consultancy Hilco Asset Protection in Northbrook, IL. Low-end retailers, on the other hand, often can't afford the tags.

Like those of video recorder systems, the costs of merchandise sensor systems vary enormously, says Gilligan, a former vice president for loss prevention at a division of Federated Department Stores. When negotiating with a provider, keep in mind that many follow what he terms “a razor-blade strategy”: The cost of the merchandise monitors and the tag detachers is relatively low, as is the case with replaceable-blade razors, because the providers make their profits on the tags, just as razor companies do on the blades.

Budgeting for security

Estimating how much to invest on security is not always easy, particularly for smaller retailers.

For a specialty merchant, one simple — and frequently overlooked — way to go about it is to compare sales growth to inventory growth, says Pat Murphy, president of LPT Security Consulting in Houston. A 1.6% discrepancy in a store with \$2 million in annual sales, for example, would amount to \$32,000 in shrinkage from all causes.

Having that number should give you a good idea of how much you can spend, but not necessarily on what. “The reality of the situation is it's very difficult to systematically determine what's working,” says Dean Dabney, an associate professor of criminal justice at Georgia State University in Atlanta.

For a data-driven industry, retailers make surprisingly intuitive decisions about what to spend on security. Dabney says that systems are often chosen by “a flavor-of-the-month approach,” typically by copying the competition or listening to a persuasive salesperson. Decisions tend to be made, he says, “just based upon hunch or based on a sales pitch.”

Watch your workers

Some retail veterans say that spending time hiring good employees and then making sure the workers you hire feel committed to the company may be the best antitheft investment of all.

Customer shoplifting accounts for just about a third of all shrinkage — \$12.2 billion — by the National Retail Foundation study estimates. By comparison, employee theft amounts to nearly half of all shrinkage, or \$17.8 billion.

While new hires are reportedly the highest risk, even top salespeople aren't immune to the temptation to steal. The irony in retail is that your best associates tend to be those who love your product most. That passion can translate into both sales and a strong temptation to walk off with the goods, says Stan Fridstein, president of Synapse Infusion, a Westlake Village, CA-based catalog consultancy.

For example, when Fridstein was with The Right Start, a baby-products cataloger/retailer he cofounded, he says that young mothers were his best salespeople — but they were also the most likely to steal the merchandise. “If I'd had 16-year-old boys on the sales force, I'd never get anything stolen,” he says, “because they wouldn't want anything.”

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