Getting smarter about retail loss prevention.

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"With the downturn in the economy, we have seen an increase in theft, which is having a detrimental impact on retailers' bottom-line profits."

—Mark R. Doyle, president of Jack L. Hayes International, a leading inventory shrinkage control consulting firm[1]

Introduction

Shrink is a nagging and persistent challenge that infects any retail organization. It is easy to see why monitoring, identifying and reducing shrink is perpetually a top priority for retail organizations: Shrink eats away at already thin profit margins, costing the retail industry the equivalent of 1 to 3 percent of sales (based on industry averages) and billions of dollars each year. Clearly, decision makers want to do everything possible to combat shrink, but they run up against challenges in many areas.

- Solutions for combating shrink often are time and resource intensive.
- Budgets are tight and staff resources limited.
- Companies are wary of technology investments that they perceive can't deliver quick returns or that complicate store IT environments.
- Shrink is a complex, multifaceted problem that can involve checkout systems, sophisticated coupon fraud, associate error, employee theft and more.

This executive brief examines recent trends in shrink and loss prevention and explores approaches retailers can pursue to get better returns from new loss prevention initiatives. It also looks at the types of technology retailers can implement to accomplish more with less.

Growing shrink + shrinking budgets = big challenges

In its 21st Annual Retail Theft Survey of 22 major retailers, Jack L. Hayes International had both good news and bad news. The good news was that, on average, respondents caught record numbers of shoplifters and dishonest employees, for the study period. On the downside, theft has increased industry wide, spurred primarily by tough economic conditions. Here is a summary of some key findings in the report:

- The number of thieves apprehended (904,226) was up 7.26 percent from 2007. Of them, 832,106 were shoplifters and 72,120 were dishonest employees.
- One in every 30 employees was apprehended for theft from their employer in 2008 (based on more than 2.1 million employees). While employee theft apprehensions increased just over 3 percent, the recovery dollars from those apprehended dishonest employees increased almost 10 percent.
- Dollars recovered from dishonest employee apprehensions totaled over US$69.8 million in 2008, an increase of 9.9 percent from 2007. This was the fifth straight year that dishonest employee recovery dollars increased. The average dishonest employee case value in 2008 was US$969.14, a 6.7 percent increase over the 2007 average case value of US$908.33.
- Shoplifting apprehensions increased 7.65 percent, while recovery dollars from those apprehensions increased a dramatic 30.24 percent. The average theft case value in 2008 was US$202.28, up 13.4 percent from US$178.37 a year earlier.[2]

Addressing the increasing prevalence of theft and shrink is even more challenging as retailers are forced to tighten their budgets and cut back on both personnel and capital expenditures because of the economy. One of the keys to successfully mitigating this ever-increasing challenge is to focus on the areas where you can get the biggest return for your investments. Because employee internal theft can account for nearly half of store shrink, cashier-related shrink should be a primary area of focus for retailers. For example, as the *2008 National Retail Security Survey* found, "Retailers attributed nearly 43 percent of their inventory shrinkage to employee theft."[3]

Typical solutions and their limitations

Many of the loss prevention strategies today bombard retailers with data. Having data is a good thing, but it can also be cumbersome to manage.

Digital video recorders and high-quality/low-cost cameras, for example, provide a thorough and reasonably cost-effective solution for monitoring people and transactions. The problem is that when you need to go back and look at historical footage, finding what you need can be analogous to finding a needle in a haystack. Digital video surveillance systems, often used to track events at checkout, create terabytes of digital data that is traditionally very difficult to associate with point-of-sale (POS) transactions. POS systems only time stamp the beginning and/or the end of a purchase, and those time stamps rarely match time stamps on the footage captured by the video surveillance system. This makes it a guessing game as to which video and how much to pull back to find one incident of shrink or fraud.

Most experts agree that even the best auditors can only look at a limited number of incidents per day (typically fewer than 30, based on IBM client and industry averages) when using video that's not synchronized with the POS transaction log (TLog).

Exception-based reporting, which involves pulling POS data into a data warehouse and analyzing it for trends to help identify cashiers that consistently fall outside of norms, is an excellent tool in the fight against fraud. The shortcoming of exception-based reporting is that even if a retailer creates the necessary data warehouse and spends the substantial amount of time required to get the solution up and running, at the end of the day, you're armed with a spreadsheet of just the top exceptions.

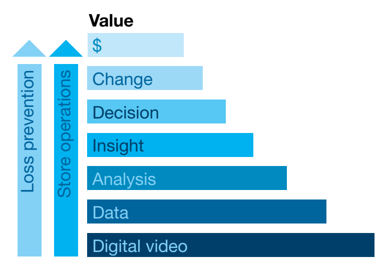
When taking the next step and trying to associate video with an exception-based spreadsheet, you still face challenges. You need to match the data from the spreadsheet to video footage that, as described above, can be inconsistent. In this environment where the solutions aren't tightly coupled, you are required to review the video footage with your human eye to try and find the occurrence of the offending incident in the video. This takes much longer than if you had a system that could instantly give you the associated video clip matched to an image of the actual receipt.

Combating cashier shrink on a tight budget

Given the shortcomings inherent in existing loss prevention solutions and the importance of curbing shrink, retailers need loss prevention systems that enable them to enforce best practices and to rapidly and accurately identify the information they need. At the same time, store operators don't want to be bothered with a lot of additional IT complexity or cost. So when advising clients, we ask if they are getting the full value from their existing store systems and if current investments position the company for growth and cost control. Using solutions based on open standards that allow you to integrate current and new technology is an important first step.

Ideally, a solution that can synchronize POS transactions, video data and exception-based reporting systems with accurate time stamps can enable auditors to quickly find what they need. With the right capabilities, you can rapidly and more easily detect things like refunds, void transactions, operational issues, "sweet-hearting" and even human presence during transactions. And because of the increased efficiency of the synchronized time stamping, you can cast a wider net and capture far more cashier shrink and fraud than just the exceptions.

Bottom of the basket shrink is another key loss contributor. While retailers have tried many approaches over time, ranging from mirrors to floor level cameras, enforcement is difficult when employee turnover is high. In many cases, employees become desensitized to solutions with audible or visual alerts or they don't respond to them to avoid conflicts with customers. Ideally, solutions that address bottom of the basket shrink should support item-level product identification and be integrated with the POS application so that the solution automatically enforces store best practices while recording exceptions in the POS system's transaction log.



Starting with a foundation of digital video, retailers can leverage data that can be categorized and analyzed against other data. The challenge is to find a solution that can complement the existing store environment and solutions to deliver clear insights that support a smarter loss prevention strategy and deliver incremental value.

Figure 1: Optimizing value from loss prevention solutions

Talking returns: What can you expect from the right solution?

Decisions about shrink solutions largely boil down to costs and the potential return on investment. Making the right choice can give a solid boost to the bottom line.

For example, clients that have implemented loss prevention solutions from IBM have been able to reduce losses from 5 to 50 basis points while improving front-end operational costs. For a company with an average shrink of 1.7 percent of sales, an average selling gross margin of 50 percent and annual sales of US$1 billion, a 25 percent reduction in shrink could drive an increase to gross margin of 42.5 basis points and potentially bring an additional US$4.25 million to the bottom line.

Key attributes of an ideal front-of-store loss prevention solution

- Supports current and new technology through open standards design
- Leverages existing investments in POS, digital video solutions and exception-based reporting
- Helps solve POS operational issues as well as fraud issues, thus enhancing shrink reduction
- Provides item-level product identification for the bottom of the basket and, in some cases, top of the basket
- Enforces best practices
- Synchronizes POS transactions, video and exception-based reporting systems with accurate time stamps
- Results in minimal disruption to business during implementation and delivers a fast ROI

Why IBM?

IBM Retail Store Solutions has more than 30 years of experience serving the retail industry and offering leading POS solutions: 69 of the top 100 worldwide retailers use POS systems from IBM in their operations. In cooperation with leading IBM Business Partners, IBM offers comprehensive loss prevention solutions to help reduce shrink from employee-related theft and fraud as well as from bottom of the basket and POS operational losses. The solutions can include everything from cameras, workstation terminals and servers to analytics software, integration and implementation services.

For more information

To learn about innovative loss prevention solutions from IBM, contact your IBM sales representative or IBM Business Partner, or visit:
ibm.com/products/retail

About the author

Wayne Truhan is a development executive in the IBM Retail Store Solutions organization. He is currently focused on loss prevention store solutions that help reduce shrink, improve agent productivity, drive revenue and improve store operations. Before joining IBM at the end of February 2004, Wayne spent 30 years in store operations and retail IT. He also has experience in the areas of shrink reduction, video surveillance, store telephony, electronic payments, direct store delivery, labor management, help desk, store ordering, wireless technology, energy management and best practices. To contact Wayne, send an e-mail to: wtruhan@us.ibm.com.

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1,2 Jack L. Hayes International, "21st Annual Retail Theft Survey," 2009, http://www.hayesinternational.com/thft_srvys.html

3 Richard C. Hollinger, Amanda Adams, *2008 National Retail Security Survey*, University of Florida Security Research Project, 2009.

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