

# Introduction To Exception Based Reporting For Loss Prevention

Determining Organizational Benefits And Return On Investment

## EXECUTIVE SUMMARY

Exception reporting systems are one of the biggest and most beneficial developments to hit retail in years. A well-utilized system can reap benefits in the areas of loss prevention, employee productivity, inventory, scheduling and more. It's easy to see how return on investment can be realized quickly, with some systems literally paying for themselves in less than a year.

For people unfamiliar with these systems, the path to these benefits may be undefined and start-up costs may seem daunting. A better understanding of exception reporting systems and a review of benchmark examples of other retailers' experiences with these systems can help retailers to see how an exception system could positively impact their enterprise.

For retailers considering implementing an exception reporting system, ROI can be estimated by developing a list of operations and practices that the system will impact and then projecting the system's effect on them. By assigning dollar values to all of the savings and efficiencies created by the system, a number can be calculated and then compared to the cost of the system in order to determine ROI and how soon after implementation that ROI may be realized.

## SITUATION ANALYSIS

"Exception reporting" is a term that most retailers have been hearing for some time now. It's made a huge impact in the North American loss prevention (LP) community and has been saving some retailers hundreds of thousands of dollars each year.

Retailers currently using other, less efficient investigation methods like in-store media audits or time-consuming examination of detail or journal tapes are easily sold on the ease-of-use and superior relative efficiency of exception reporting systems.

But retailers have also been hearing about companies spending thousands of dollars in implementation costs. These costs are easily justified for in-place systems because ROI/performance data is readily available. For retailers who are contemplating installing an exception reporting system, estimating value and ROI can be tricky. This is because it's difficult to predict benefits and ROI when exception reporting systems typically uncover more cases and higher values of fraud than retailers could uncover without the system.

### Exception Reporting: What The Buzz Is About?

At its most simple definition, exception reporting is a method of data analysis that compares an incoming stream of data to an established base set of data and flags items that don't quite match up. It's like the old children's game in which two pictures are compared and you have to spot what items in the second picture are different from the first.

In the case of POS exception systems, they are software applications that take data from POS systems and compare it to a set of business rules, developed by the loss prevention team, to identify transactions that might indicate fraud or loss. The LP team develops these rules by using existing POS data to define a range in which typical POS transactions fall – average amount of items per purchase, average dollars total per transaction, average returns per day, average dollars per return, and so on. The retailer can define any number of "normal" conditions for the system to compare against incoming data. When POS data feeds

into the exception reporting system, it's compared against this defined range of typical daily transactions. Any transactions that fall outside of this range are flagged as suspicious.

## Purchasing An Exception-Based Reporting System

Systems can be developed internally by the retailers IT and LP departments or can be purchased from third-party providers. They can be web, network, server, or single-client based. They can be as simple as data-mining systems with pre-saved queries and scripts, or complex, robust systems specifically tailored and designed for loss prevention exceptions. These systems usually offer features like:

- A user-friendly graphic user interface (GUI) or menu-driven structure designed around loss prevention concerns and issues.
- Incorporation of the organization's hierarchal structures for stores, districts, regional, and divisional reporting.
- Capability to accept data feeds from POS, sales audit, human resources systems, payroll, store demographics, and any other information that can be analyzed for fraud.
- Predefined business rules, queries, and reports that can be run on a regular basis to identify high-risk transaction and associates.
- Drill-down capabilities allowing the user to start at a summary level and then go into deeper detail down to the transaction or even SKU level.
- Ad-hoc reporting capabilities that allow users to define new queries against the available data.

The benefits of purchasing a system from a third-party provider vs. developing a homegrown solution are many. Third-party providers offer specialized experience, reduced start-up time, proof of performance in other retail operations, ongoing technical support and access to upgrades. Above all, bringing in a third-party vendor with exception reporting expertise reduces stress on a retailer's IT department. With reporting systems that are flexible to integrate with most POS systems and quickly deliver proven results, it seems impractical that a retailer would charge their internal IT staff to "reinvent the wheel" by developing a proprietary system.

## Early Results Of Exception Reporting

Exception based reporting can deliver results very quickly because of its ability to reveal cases of theft that were undetected in larger amounts than had been previously identified. The collective experience of one surveyed group of retailers includes:

- An increase in cases up to 50 percent more than the previous year.
- Identification of fraudulent activity 23 percent earlier than before implementation of the system.
- An increase of 20 to 70 percent in average dollars per case.

In the case of a specific retailer using exception reporting, total cases rose 64 percent in one year with the average dollar per case value rising by 32 percent. This dollar value was about 200 percent larger, per case, than those cases detected by other methods.

In the first year of implementation, some retailers are reluctant to report the exact numbers revealed by the exception reporting system, because the fraud numbers typically rise by so much. This increase is not due to a rise in fraudulent transactions, but rather a result of better detection and documentation of these activities.

## Improved Documentation And Case Resolution

The number one benefit of an exception reporting system is the improved ability to not only detect internal fraud cases, but to document them quickly and thoroughly for faster resolution.

Faster resolution increases chances of recovery. With legacy LP systems, fraudulent activity could go undetected for months as LP staff pored over backlogs of register tapes or unfiltered POS data. With the high amount of employee turnover in many retail operations or in the case of temporary holiday staffing, the dishonest employee could be long gone before anyone discovered any suspicious transactions.

Properly administered, exception reporting systems can detect suspicious transactions immediately – allowing for employee confrontation in days, not months, effectively stopping the problem and allowing for faster

resolution and recovery of lost money and/or merchandise. And, law enforcement officials often recognize and accept exception reports as evidence in prosecutions.

## Deterrence Of Internal Theft

Due to the success of POS exception report systems in detecting internal theft and aiding in recovery/resolution, many users find that it quickly becomes a deterrent to internal fraud and shrink. In fact, while case results initially go up, many organizations find that over time, cases actually start to go down as the word gets out and employees see the system in action, catching people who engage in dishonest activities.

Some retailer even "advertise" the capabilities of their system to educate associates and, hopefully, keep them from making a bad decision. Mike Smith, senior vice president of loss prevention at Finish Line, ensures that associates know about their exception reporting systems by educating them in new-hire orientation, regular meetings and even with to bold lettering on the border of each register that reminds associates that every transaction is monitored.

"We clearly don't hide the fact that we scrutinize all transactions," says Smith. "We'd much rather deter fraud than lose profits, engage in confrontations, and spend time investigating people."

## Overall Reduction Of Loss

Exception reporting systems have been shown to reduce loss in many areas of store operation, including:

### Shrink

With increased detection and apprehension rates in fraudulent transactions as a deterrent, retailers find that they experience a reduction in overall retail inventory shrinkage. One study reports that retailers are seeing a 10 to 30 percent decrease in shrinkage that they can directly attribute to a system. Another shows that when one retailer installed a system in 50 stores as a trial basis, those stores enjoyed 50 percent less shrink than the stores without the system.

### Cash Shortages

While most retail organizations already have some level of reporting on cash shortages, exception system users reported decreases in this area as well. This represents potential savings of hundreds of thousands of dollars, if not more, since one study showed cash shortages alone were 0.37 percent of sales in 2002.

This example demonstrates a decrease in an area where reporting already existed. Why? Often, it is because existing reporting did not have the depth and detail necessary to improve performance. For instance, the ability to see cash shortages by cashier, or by register drawer, over a period of time is critical for follow up and remediation. Additionally, the ability to associate other transaction data, such as no sales and voids, gives additional insight.

### Credit And Gift Card Losses

Not only do credit card write-offs get reduced, due to lower internal fraud and better compliance, but external credit card fraud can be impacted as well. Several retailers have used an exception reporting system to identify, track, and prosecute externally-based fraud cases. In a particular case, a group using fraudulent cards was hitting a retailer's locations up and down the coast. The retailer was able to track them and have them arrested through the use of the exception reporting system. In prosecution of the individuals, the police thought the reports alone constituted significant evidence in the case.

Another retailer use exception reporting to reduce losses where fraudulent credit card transactions are used to purchase gift cards. By using ad hoc reports on a daily basis, the retailer was able to identify to freeze gift cards purchased this way before they could be redeemed,

## Additional Benefits: Time Savings And Efficiencies

A key issue for many users is the increased efficiency of POS exception reporting systems when compared to traditional methods they've used. In the past, investigations relied heavily on in-store media audit or time-consuming examination of detail or journal tapes. Once automated, these processes are streamlined in a dramatic manner.

One specialty chain using a POS exception reporting system is experiencing a total savings of fifty-four hours a week in payroll as a direct result of the efficiency of the reporting. At first glance, the number seems small, until you consider that this company has a total payroll of just twelve positions in the loss prevention group. Then, fifty-four hours it is a significant savings of time that can be reinvested into key activities, not "busy work."

An exception reporting system eliminates hours of tedious manual review. In fact, one study shows that only 8 percent of internal theft cases were identified in less than two weeks with retailers prior to implementation of a system. However, that figure jumps to 35 percent of all cases after installation of the system.

"After all, isn't this the rationale for exception report systems?" muses Jim O'Connor, director of loss prevention for Bed Bath & Beyond. "When we implemented the system, one of my driving forces was to make my staff more effective by freeing them up to focus on the people, not the data."

Most retailers agree that while these systems are primarily used for loss prevention, it's a "win-win" situation when the same platforms are utilized for behavior modification and other operational issues, such as compliance, productivity and time management. One retailer uses the system to provide store management teams with weekly reports showing their lowest performing cashiers on a number of key performance indicators (KPIs). But even more importantly, they also receive a list of their three top performing cashiers. This information is then used to recognize and reward these top performers in a public forum creating a positive environment where other cashiers strive for improved performance.

## CALCULATING THE ROI FOR POS EXCEPTION REPORTING

Given all of the possible benefits that can be realized with an exception reporting system, calculating ROI can seem like a daunting task. A way to simplify the process is to consider the following factors:

### Identify Total Cost Of Implementation.

The first step to calculating ROI is to identify the total costs of implementing POS exception reporting. If developing a system internally, it would include the following:

- All resource costs for the loss prevention team in developing the business and technical requirements necessary. This includes what queries, reports, and outputs are required from the system.
- All resource costs for IT personnel to develop the technical requirements based on the above and the management of the project plan.
- The equipment costs for servers, PCs, and data lines to run the system on.
- All costs for the actual programming and development of the application, data migration and integration from external data streams, database administration and maintenance, quality assurance and testing, and technical support.

If purchasing an external system, additional considerations and trade-offs would include these items:

- The price of the software application, whether a one-time purchase, an annual license, an application server provider (ASP) model, or another purchase model.
- Annual maintenance or support contracts.
- Installation costs and training fees.
- Many of the internal resources costs will be lower than an internally developed system, but there will still be loss prevention and IT costs for project management and integration of the system into existing IT structures.

### Determining The Impact Of Exception Reporting

After implementing the system, what will be different as a result? In order to justify the expense, you will have to quantify these benefits in financial terms. For example: Nearly all system implementers can say that the system will save time. However time savings alone has no real impact in justifying the expense unless

you can quantify that saved time in terms of reduced payroll or reallocated time allotment that will have some other financial benefit to the organization.

In regards to the other LP benefits listed previously, an organization has to make an executive decision—are they going to justify the system based on increased apprehensions and associated savings, or are they going to project a reduced shrinkage result? One has to be careful about using both figures because they are likely redundant, since increased case results would feed directly into reduced shrinkage results.

For instance, if a case is identified by the POS exception reporting system and the associate makes an admission to \$25,000 in theft and makes restitution to the company, your shrink for that location would be reduced by \$25,000. You can't count it again in shrink results.

However, if you use shrink reduction as an incremental benefit, you could also include other cost savings due to such things as credit card write-off, time savings, cash shortages, and operational improvements, since they are separate financial issues from shrink results.

### **Some Important Questions To Ask When Estimating Exception Benefits**

How much will shrinkage go down? How many more cases will we resolve? How much time will be saved? How much will compliance improve?

## **Case Studies And External Benchmarks**

Another good practice is to have a reasonable basis for the estimates and the method most often used is to benchmark what other organizations have experienced when they have implemented a system.

This is the reason that presentations on POS exception reporting systems are usually well attended at professional conferences. Everyone wants to hear about the experience other organizations have had and how they have best utilized their systems to determine if it would benefit their own.

Benchmark data and case studies continue to be the best source for estimating the incremental benefits of implementation and a great way to see the real world performance of exception reporting.

## **ROI – THE FINAL ANALYSIS**

Once total costs are identified and incremental financial benefits estimated, a financial analysis can be calculated. The first level of analysis is simple: Do the total benefits outweigh the costs?

The next logical question is: How quickly will the system pay for itself? This is called payback period and is calculated by dividing the total cost by the annual return (or savings) in dollars.

An example might look like this:

Total costs = \$500,000

Annual return = \$750,000

Payback period = 8 months

## **Selling The System Internally**

ROI is probably the single most important factor in persuading an organization to adopt any new technology or practice. In the case of selling an exception reporting system to a CFO, once time until payback has been determined, it becomes a much easier sell. If that ROI is in less than a year's time – even easier still.

After that initial hurdle has been overcome, the other organizational benefits and efficiencies in loss prevention, recovery, and productivity complete a powerful case for implementing an exception reporting system.

## THE DATAVANTAGE XBR EXCEPTION BASED REPORTING SYSTEM

XBR (eXception Based Reporting) from Cleveland-based Datavantage Corporation is an expert business intelligence system that provides decision support for all areas of retail operations. It helps retailers cut through mountains of enterprise data to quickly and easily identify exception conditions.

As an exception-based technology solution, XBR lets you do more by providing you with more information – and more ways to look at it. First, it lets you set the control parameters that determine the exceptions. Then you can identify trends against these points to group, rank and score a wide range of data and then generate drill down summaries for analysis of comparative exception reporting.

XBR Loss Prevention is an essential business tool that can help you dramatically reduce shrink for immediate savings, greater productivity and ROI. It goes into action right away, using exception-based reporting methods to easily identify, track and manage potentially fraudulent transactions. XBR can flag incidents almost as they happen, allowing for quicker investigation and ultimate resolution.

### **About Datavantage**

*Founded in 1988, Datavantage Corporation is a retail technology management company that helps retailers gain a better competitive advantage in multi-channel marketing, streamlined operations, reduced shrink, and increased productivity. Headquartered in Cleveland, Ohio, USA, the company serves retail chains of all types, nationwide and worldwide. It is a wholly-owned subsidiary of MICROS Systems, Inc. For more information about Datavantage, visit [www.datavantagecorp.com](http://www.datavantagecorp.com).*

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