



# Stopping Noncompliance and Fraud with Inventory Data

Harness AI-Driven Analytics to Gain Actionable Insights  
into Inventory Issues



## Introduction

Every day, retailers are fighting against different forms of fraud and noncompliance — two of the most serious loss prevention (LP) issues. Retailers have long contended with narrow margins, but the potential for fraud has only increased and broadened during the COVID-19 pandemic due to lower financial performance and changing operational structures. Together, these challenges created more opportunities for fraudsters to strike, requiring retailers to grapple with the rise of savvier criminals and organized retail crime.

While virtually all loss prevention managers are aware of the magnitude of fraud and noncompliance, they may be overlooking one of the most powerful tools to stop them: inventory data. Retailers have long had access to inventory data, but they may not be harnessing actionable insights from it that would allow them to detect and prevent fraud.

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Without clear insight into in-store inventory data, retailers are leaving themselves vulnerable to internal and external threats that could cost billions of dollars in revenue loss. A 2018 National Retail Federation report revealed that shrink costs retailers approximately 1.33 percent of sales on average, whether the losses are coming from dishonest employees or organized retail crime rings. Additionally, 41 percent of retailers experienced overall increases in inventory shrink during the same year.

AI-powered analytics helps minimize asset loss, because actionable insights are sent directly to the exact employees who can then put a stop to fraudulent behavior as soon as anomalies are detected. Artificial intelligence and machine learning collect valuable inventory data, detect unusual patterns and convert data into concrete mitigation strategies. This optimizes investigative time for employees and decreases the number of false positives.

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**National Retail Federation**



## Increasing Risks for Loss Prevention Teams

In an already competitive environment, retail fraud increases the potential to suffer the loss of profits and high-value inventory assets. In 2019, retail fraud and theft cost U.S. businesses \$62 billion — an increase from \$51 billion in 2018, according to the National Retail Federation. Without taking firm action, fraud and noncompliance are likely to continue avoiding detection and impacting profit margins.

The size and value of items, ease of resale and whether items are easily returned are common risk factors for fraud. Consumers returned approximately \$428 billion in merchandise in 2020. The same survey found that for every \$100 in returned merchandise accepted, retailers lose \$5.90 to return fraud.

It's not just external actors that companies need to guard against. Insider threats are a major issue, too. Employees have in-depth insider knowledge of companies' security procedures, including any gaps they can exploit — from CCTV blind spots to other security measure lapses. They also have access to merchandise in the back room and may abuse high-risk register functions, all of which make it difficult to detect fraud and theft.

## Identifying Fraud and Noncompliance with Inventory Data

Retail fraud is especially risky when committed by insiders who can exploit their knowledge of the company's inner workings for their own nefarious gains. Although retailers may identify suspicious behaviors in an inventory report, it can be challenging to connect these events to fraud rather than a change in demand for certain products.

Many warning signs of fraud and noncompliance can be identified by using inventory data to uncover patterns. Fraud and noncompliance are often subtle, but the right data solution can reveal connections that provide course-corrective actions to rectify these issues.



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Some examples of inventory data that can help identify fraud and noncompliance include:

### Suspicious product movements

Price switching is an ages-old form of retail fraud. It can involve customers attaching barcodes for inexpensive products to those of premium products, employees pricing pay-by-weight items inaccurately, entering the wrong PLU codes at checkout, and other assorted schemes. Whatever the exact methodology, price switching is an incredibly subtle form of fraud that gains in popularity every year.

Inventory data presents a solution. An advanced AI-driven analytics solution can uncover evidence of price switching. The numerous phony sales result in higher-than-normal movements of lower-cost items, along with slower sales for the higher-cost products that are actually being acquired, which can be signs of price switching. This is especially suspicious if unusual inventory movements are only happening at a few stores, rather than across all locations – suggesting a localized operation versus chain-wide sales patterns.

In one example of this, a grocer's prescriptive analytics solution pinpointed two stores that showed some suspicious product movements on meat items. Both stores appeared to have sold over 30% more chicken legs than either location had in stock. In parallel, movements of large beef cuts like rib roasts and tenderloins were a mere fraction of typical movements at the stores. The solution sent a corrective action to the asset protection manager for the stores' district, directing her to interview the meat workers on duty that week.

It turned out that a local caterer was paying several meat workers to price the beef (\$22-\$35 per pound) at the price of chicken legs (\$0.89 per pound), resulting in losses of more than \$25,000. Thanks to the analytics solution's alert, all parties were quickly identified and prosecuted. They later paid the grocer full restitution.

### Excessive Adjustments

Inventory adjustments are important in retail, but still require meticulous oversight. If not monitored carefully, dishonest associates can easily use them to steal products and cover up their tracks by altering the item count. This type of fraud is even more difficult to catch because miscounts, packing errors and mis-deliveries are somewhat common in retail, and adjustments are often the go-to solution for fixing them.

Adjustment misuse can be quickly identified with the right analytics solution. Many retail LP teams have their solutions configured to comb through inventory data and flag any adjustments that are:

- Unusually high value
- Unusually large in quantity
- Happening with suspicious frequency
- Made on stock levels of known theft targets

A convenience-store chain used this logic to identify an employee conspiracy at one of its stores. Its prescriptive analytics solution informed its LP team that this store was showing a well-above-average number of adjustments, both in terms of monetary value and quantity. A check of CCTV footage revealed two store managers padding inventory and using a combination of adjustments and non-receipted returns to steal both cash and merchandise. Prescriptive analytics empowered this retailer to catch this scheme quickly and prevent a long-term, large-scale loss.



## Declined BOPIS Fulfillments

On their own, declined BOPIS fulfillments are not hard proof of fraud. If the declined requests are on known theft targets, however, that certainly merits suspicion. Should those incidents turn into a larger pattern, it's entirely possible that the items in question were declined for fulfillment because they've been stolen. Then again, it's possible that products were not stolen – employees have been known to decline fulfillment requests on hot-selling items simply because only one or two were left on the shelf. Typically, this is either because they want the products for themselves, or they want to save it for in-store shoppers, for whom they don't want to risk the in-person disappointment.

An advanced analytics solution like prescriptive analytics can both identify suspicious fulfillment declines and pinpoint the most likely root cause. The right solution can be configured to alert your LP team to any of the following behaviors alongside a given decline:

- Hot-selling item or known theft target
- Inventory system shows exactly one item remaining on hand
- Above-average number of declines per store/picker
- Frequent declines on a particular day of the week



## Combat Fraud and Noncompliance with AI-Powered Analytics

Utilizing accurate inventory data is one of the most effective ways to fight fraud and noncompliance, because this data cannot be manipulated or bypassed. Prescriptive analytics provides insight into a number of unusual behaviors and inventory movements by leveraging machine learning and artificial intelligence to analyze inventory data and determine what is happening, why it happened and who should perform the corrective action. This increases accuracy, results in a higher number of true positives and optimizes labor. Greater visibility into inventory data patterns helps cut through the clutter of disparate data and improves employee consistency across stores.

The added precision of AI-powered analytics saves a significant amount of time, allowing retailers to resolve more cases of fraud and noncompliance in less time. The immediacy of flagging anomalies helps employees make corrective actions in the moment. AI-driven analytics makes data understandable and free from personal bias while also converting that information into actionable insights for employees at all skill levels via automated alerts. This drives efficiencies and saves money before asset losses can grow and drive down profit margins. A prescriptive analytics solution can determine the value and frequency of markdowns, as well as the store locations and times of days when marked down merchandise is sold.

AI-powered analytics improves directives for associates by automating data analysis, task assignment and action verification. An AI-based analytics solution can alert a specific employee to take a corrective action, such as auditing a customer's purchase, which can stop fraud in real time.

## Harnessing Inventory Data to Stop Fraud

As organized retail criminals get more sophisticated and employees find new ways to exploit loopholes for their own gains, retailers need advanced tools to eliminate fraud in real time. Zebra Prescriptive Analytics gives retailers a competitive advantage to identify even subtle cases of fraud and noncompliance, helping employees tackle high-priority instances of loss. The solution assigns a proposed monetary value to inventory issues and analyzes data to come up with the most ideal, cost-effective action to solve the problem without human intervention.

With the right solution in place, retailers can optimize labor and speed up investigations to prevent fraud from compounding. ZPA ensures that course corrective actions are generated from the analysis of inventory data, allowing loss to be promptly dealt with as soon as it's detected.



### Sources

<sup>i</sup> Inventory Shrink Cost The US Retail Industry \$46.8 Billion (forbes.com)

<sup>ii</sup> NRF | Retail shrink totaled \$61.7 billion in 2019 amid rising employee theft and shoplifting/ORC

<sup>iii</sup> NRF | \$428 Billion in Merchandise Returned in 2020

To learn more about prescriptive analytics and how it can help retailers combat fraud and noncompliance, visit [zebra.com/prescriptiveanalytics](https://zebra.com/prescriptiveanalytics).



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