



# How Advanced Loss Prevention Tools Balance Friction and Risk At Checkout

retail  
**TouchPoints**<sup>®</sup>

**TOSHIBA**



With customers consistently seeking fast, convenient and simple self-checkout experiences, retailers are understandably reluctant to do anything that will add friction at checkout in order to protect their bottom line while maximizing trust and loyalty. Customers want to feel confident that their transactions are accurate, and retailers need to trust in the systems' capability to protect the store from shrink.

This *Retail TouchPoints* white paper, sponsored by Toshiba, explores how solution providers can help retailers by testing, measuring and optimizing self-checkout options to find the right balance between friction for the shopper and risk for the retailer. We'll highlight:

- ▶ The human element, including the shopper assistant's role, best practices, staffing and training requirements and the benefits of deploying a Mobile Operations Manager application;
- ▶ Leveraging proven technologies such as weight security, Internet of Things (IoT) sensors, cameras and item tagging;
- ▶ A look at object recognition, including key technology advancements and working proofs of concept, and;
- ▶ Taking a holistic view of the entire checkout process and all activities within it, including product switching, shopper error correction, shopper forgiveness and malicious fraud.

Since loss prevention is an ongoing challenge, we'll explain how retailers can analyze which techniques are most effective in the real world, using A/B testing to continuously ensure they are finding the right balance between risk and reduced friction.



# PUT YOUR PEOPLE FIRST

As self-checkout use grows, store associates are the cornerstone when it comes to balancing customer friction while proactively reducing risk for the retailer. In addition, loss prevention technology works better when associates know how to maximize the system's capabilities.

Put the right people in place who will proactively engage with customers — whether those customers have a question about using the system or perhaps would benefit from coaching on scanning techniques. A seasoned associate with a hospitality mindset can anticipate customers' needs and make their experience more pleasant.

A robust training strategy gives associates the tools they need to effectively blend customer assistance with loss prevention. Training should cover tips on monitoring the self-checkout area and being fully engaged in the process. For example, training should educate associates on what to do if they repeatedly hear the same produce code from the system, or whether they must perform an age verification when customers have wine in their cart. Customers should equate a well-trained associate's presence as welcoming and attentive, and for retailers, this presence acts as a fraud deterrent.

Refresher sessions are vital to long-term success. Recurring training gives associates the opportunity to review the top potential loss prevention items in self-checkout. With this training, associates can be better informed about current issues, such as which bulky items are difficult to scan, which promotional packages are confusing customers or whether new items are causing scanning errors.

Deploying a Mobile Operations Manager application (a mobile device integrated with self-checkout that is capable of lane control and exception handling) can further boost store associates' productivity, enabling them to monitor multiple lanes and clear some incremental exceptions without leaving their station. The technology gives front-end and customer service managers access to the same alerts and status indicators, providing them with visibility into the flow of self-checkout activities. This improves the shopper experience and allows staff to keep pace during peak traffic periods.

“ There will always be exceptions that require the touch of a store employee, so selecting and training the appropriate associates to do that is critical. We provide shopper assistant tools and best practices that make it fast and easy to resolve issues, resulting in fewer interactions and a more frictionless shopper experience.”

**PAUL LYSKO, GLOBAL PRODUCT LINE DIRECTOR, SELF-SERVICE SOLUTIONS, TOSHIBA**



## LEVERAGE PROVEN TECHNOLOGIES

Several technologies can improve the balance between risk and friction, including weight accuracy, IoT sensors, cameras and item tagging. Artificial intelligence and RFID are also being deployed to combat fraud and create smoother transactions. By embedding an appropriate mix of these technologies into their touch points, retailers can improve loss prevention performance while helping customers check out with fewer disruptions.

Retailers need the capability to adjust the system's sensitivity for triggering an intervention, allowing customers to continue scanning items. Weight-based security should also incorporate support for early bag removal. Once their most recent item is identified, customers can pull an entire bag to make room for more merchandise. Exceptions should be queued and handled at the end of the transaction for optimal flow. Options to skip bagging for large items are also available, reducing friction and streamlining checkout.

Datalogic ScaleSentry™, for example, addresses weight accuracy by eliminating revenue leakage from mis-weighed products. By monitoring items placed on the scanner, it can determine if they are located accurately on the weight scale. LaneHawk™, another Datalogic loss prevention solution, detects and recognizes bottom-of-basket items for the customer to verify before the transaction concludes.

To further speed up transactions while providing better loss prevention performance, a growing number of innovative technology solutions are taking input from multiple sensors rather than from just one data stream. Using a variety of information types enhances accuracy and makes the customers' experience less cumbersome. One integration appearing in the market is pairing weight accuracy with computer vision. The combination provides the system with more comprehensive information, giving it the ability to complete transactions with greater certainty and create fewer false positives — situations where customers didn't do anything wrong, but the machine incorrectly interpreted their behavior.



# EXPLORE OBJECT RECOGNITION TECHNOLOGY INNOVATIONS

Recent advancements in object recognition technology have given retailers the opportunity to further augment their loss prevention strategies without creating additional friction for customers. Self-checkout can benefit from improved object recognition, meeting the shopper's need for easier product identification.

Retailers realize that customers sometimes skip self-checkout because they don't want to spend time sifting through dozens of product codes as they weigh their items. Today, object recognition technology can identify the product and provide only a few on-screen options from which customers can select. Over time, as the system gains intelligence and retailers monitor accuracy levels, items may be added automatically, reducing steps for the customer. This alleviates a long-standing frustration for customers, who now can scan their items quickly without going through an assisted checkout lane or waiting for help at self-checkout if the product sticker is missing. For the retailer, this technology helps ensure that the correct product is leaving the store for the correct price — for accurate inventory and revenue reporting.

Whether customers try to use the non-organic code when purchasing organic foods or they slip expensive, non-produce items in with a bunch of bananas, product-related fraud is all too prevalent. Modern object detection tools can spot when one code has been entered but a different, more expensive item is on the scale. The technology catches the error, allowing the shopper assistant to quickly address the situation and determine whether the customer simply chose the wrong code or is attempting to commit fraud.

“ Neural network based Artificial intelligence (AI) combined with deep learning enable retailers to confirm the accuracy of the items selected by the customer and ensure what the customer intended to purchase is included in the transaction. This provides peace of mind for the retailer and reduces friction for the customer.”

**BRIAN YOUNG, GLOBAL DIRECTOR,  
INNOVATION AND CONSULTING,  
TOSHIBA**



## TAKE A HOLISTIC VIEW

The self-checkout process has lots of moving parts. Taking a full-scope view of the customer's journey and the loss prevention activities within it allows retailers to simultaneously deliver a better experience and reduce shrink.

Retailers must first consider if a store is suited for self-checkout. High-shrink stores or stores with frequent product switching or fraud issues might not be good candidates, or their loss prevention strategies may need to be configured differently than a store with historically low losses. To determine if self-checkout is the best approach for their store, retailers should evaluate key metrics like demographics, basket size, store usage patterns and workforce availability. Retailers should also ensure the store has enough staff to manage shopper error correction and shopper forgiveness efforts.

Physical layout is also an important component of the overall strategy. Customers should encounter self-checkout first as they complete their circuit of the store, and associates should be able to see the entire self-checkout area from their primary station. This will help them complete loss prevention efforts unimpeded as they help customers to complete their transactions. A poorly located self-checkout area adds friction into the shopper journey and makes even the best loss prevention systems less effective.

Decisions on everything from training best practices to how vigorously executives will champion the technology will also impact operational success. Store Operations' buy-in and a commitment to driving good self-checkout adoption can make the difference between a rollout that's well-supported and one where adoption is low, interventions are excessive or shrink is high.

“ Executive sponsorship and stakeholder involvement, including IT, store operations and loss prevention, all contribute to a holistic strategy that successfully balances friction, risk and a good shopper experience.”

**PAUL LYSKO, GLOBAL PRODUCT LINE DIRECTOR, SELF-SERVICE SOLUTIONS, TOSHIBA**



## USE DATA TO IDENTIFY EFFECTIVE TECHNIQUES

Loss prevention is an ongoing process that requires regular review. Data analysis will help reveal how well loss prevention techniques are working within each store, and where configuration changes can help strike a better balance between risk and a more streamlined customer experience.

Utilization data is an excellent place to begin. It can help retailers analyze what settings to change to strike the right balance between leaving the system the way it is or resolving issues that arise from day-to-day operations. Retailers can make more informed decisions by analyzing data that's tied to associates, interventions and actions taken. By getting an overall view of what's going on in the store, they can catch issues that arise before they impact other stores across the enterprise. Over time, the data will show exception trends and where the system's configuration can be changed to improve the customer experience while reducing losses.

The careful use of A/B testing helps retailers determine which system configuration changes work for a specific retailer's customers and stores. Everything from security sensitivity thresholds to audio duration levels can be evaluated and changed to suit the needs of the retailer and its customers.

### USE CASE 1

One retailer offered cut fruit bowls weighing 1.2 pounds (.544 kilograms). The UPC indicated the bowls weighed 1 pound (.453 kilograms). Every time a bowl was scanned, it triggered an intervention. By reviewing intervention data and identifying item-specific trends, the retailer was able to revise its system data and fix the problem.

### USE CASE 2

A retailer felt interventions were too high and considered deactivating item security. It selected three groups of stores for A/B testing. In Group 1, the retailer turned off the security scales. In Group 2, scales were left on, but the settings were tweaked slightly. Group 3 also retained the security scales, but its system configuration changes were drastically different from those in the Group 2 stores. By evaluating the intervention, utilization and shrink rates for the three groups, the retailer was able to make more informed adjustments to improve the shopper journey without sacrificing loss prevention efforts.



Retailers don't need to sacrifice loss prevention effectiveness in the self-checkout process to reduce friction for customers. Toshiba provides the solution expertise to guide retailers through the operational decisions necessary to drive maximum value from design to rollout, while proactively maintaining the retailer's solution from decision to investment protection. Post-deployment data analysis and configuration adjustments further enable brands to tune these technologies and tools to their unique set of needs and achieve the best possible results long term. Toshiba's tools and best practices enable retailers to mitigate risk, while delivering a frictionless customer experience to shoppers that increasingly demand speed and convenience.

**LEARN MORE ►**

# TOSHIBA

Toshiba Global Commerce Solutions is a global market share leader in retail store technology and retail's first choice for integrated in-store solutions. Together with a global team of dedicated business partners, we achieve brilliant commerce by advancing the future of retail with innovative commerce solutions that enhance customer engagement, transform the in-store experience, and accelerate digital transformation. To learn more, visit [toshibacommerce.com](http://toshibacommerce.com) and engage with us on Twitter, LinkedIn, Facebook and YouTube. #EmpoweringRetail

[Toshiba Comms@toshibagcs.com](mailto:Toshiba_Comms@toshibagcs.com)



---

## retail TouchPoints®

*Retail TouchPoints* is an online publishing network for retail executives, with content focused on optimizing the customer experience across all channels. The *Retail TouchPoints* network is comprised of two weekly e-newsletters, special reports, web seminars, exclusive benchmark research, an insightful editorial blog, and a content-rich web site featuring daily news updates and multi-media interviews at [www.retailtouchpoints.com](http://www.retailtouchpoints.com). The *Retail TouchPoints* team also interacts with social media communities via Facebook, Twitter and LinkedIn.

201.257.8528

[info@retailtouchpoints.com](mailto:info@retailtouchpoints.com)



“Datalogic, ScaleSentry, and LaneHawk are trademarks or registered trademarks of Datalogic S.p.A. or its affiliates.”