



WHITE PAPER | DECEMBER 2023

# Balancing Shrink & Customer Experience in Retail

## THE EVOLUTION OF SELF-CHECKOUT AND A.I.-POWERED LOSS PREVENTION

Self-checkout (SCO) technology initially emerged as a means for retailers to streamline the checkout process and reduce labor costs. Early iterations of these systems were very basic, often plagued by technical glitches, and faced resistance from both retailers and shoppers.

Over time, SCO technology evolved, becoming more user-friendly and reliable. Retailers recognized the potential for significant cost savings by reducing the need for cashier staff. However, a critical challenge emerged: striking the right balance between operational efficiency and providing a positive customer experience. Shoppers, initially hesitant to embrace self-checkout, perceived it as impersonal compared to traditional cashier-assisted checkout.

## IN THIS WHITEPAPER, YOU'LL LEARN:



How self-checkout has evolved



The challenges with traditional loss prevention



The impact loss prevention has on retail



How retailers can use A.I. technologies to improve loss prevention

## TRADITIONAL LOSS PREVENTION AT SELF-CHECKOUT

Traditional loss prevention methods rely heavily on physical staff presence and surveillance cameras. Retailers place employees near SCO lanes to deter theft and assist shoppers when needed. These staff members play a dual role, helping customers navigate the checkout process while also watching for potential theft or scanning errors.

To enhance security, retailers have introduced weight security measures. These systems require shoppers to place items on the scale to ensure that the weight matches the items scanned. While effective in reducing shrink, these weight security measures can add friction to the shopping experience.

Some common issues of traditional loss prevention are:

- › False alarms because a weight scale reacts to shifts in the bagging area
- › Calibration issues that cause weight inaccuracies
- › Frequent maintenance needs on scales
- › Resource allocation issues due to associates having to play both assistant and security

**51%** c-store  
of retailers

currently offer  
or are piloting

**traditional  
self-checkout**  
(c-store Q5)



## CATALYST EVENT – THE PANDEMIC FORCES CHANGE

The COVID-19 pandemic represented a seismic shift in the retail landscape. To remain open and serve their communities, retailers had to adapt quickly to ensure both staff and customer safety. Social distancing measures meant that minimizing physical contact between employees and customers became paramount.

One significant consequence was the widespread adoption of self-service options, which had previously faced resistance from shoppers. Customers, now concerned about minimizing contact with others, began to embrace SCO as a way to complete their purchases with reduced interaction.

### Challenges with Traditional Loss Prevention

The pandemic posed significant challenges to traditional loss prevention methods. With the need for social distancing, physical staff presence at SCO lanes became impractical. As a result, the critical human element of theft deterrence was largely absent.

Moreover, weight security measures, while effective in preventing theft, caused increased friction at checkout. Longer waiting times frustrated shoppers, leading to dissatisfaction and, in some cases, abandonment of their purchases.

### Unintended Consequences

As retailers adapted to the challenges posed by the pandemic, they explored alternative ways to serve customers safely. This led to the acceleration of online shopping and curbside pickup options. While these alternatives offered safety, they had their own set of challenges.

Online shopping and pickup limited the opportunity for "impulse buys" that typically occurred in physical stores. Shoppers faced confusion, uncertainty, and a lack of available options, all while retailers grappled with increased shrink due to unattended SCO lanes.



In essence, the pandemic forced retailers to choose between protecting their assets and providing a seamless customer experience. Striking this balance became more critical than ever.

## THE IMPACT OF LOSS PREVENTION

The retail industry has always been a battleground for profit and loss. It's a domain where businesses strive to strike the delicate balance between maximizing revenues and minimizing losses. The evolution of loss prevention technology has revolutionized the way retailers approach this challenge.

### Reducing Shrink

Shrink is a retailer's worst nightmare. Traditionally, retailers heavily relied on security personnel and surveillance cameras to deter theft. However, these measures were often reactive rather than proactive.

Modern loss prevention technology has brought about a shift in tackling shrink. Advanced surveillance systems equipped with artificial intelligence (A.I.) and machine learning algorithms can identify suspicious behavior patterns in real-time. These systems can alert store staff or security personnel to potential theft, allowing them to intervene before a loss occurs.

### Enhanced Customer Experience

Loss prevention technology isn't just about preventing theft; it also plays a pivotal role in improving the overall customer experience. Traditional security measures like visible cameras and imposing security personnel can make shoppers feel uncomfortable and unwelcome.

With advancements in technology, surveillance systems have become more discreet and less intrusive. High-definition cameras are now smaller and can blend seamlessly into the store's design, reducing customer anxiety and preserving the aesthetics of the store.

Moreover, A.I.-driven systems can analyze customer traffic and behavior to optimize store layouts and product placements. This leads to a more enjoyable shopping experience, as customers can easily find what they're looking for, reducing frustration, and increasing the likelihood of purchase.

## **Employee Productivity and Accountability**

Effective loss prevention technology doesn't just safeguard against external threats but also addresses internal risks. Employee theft and fraud can be significant contributors to retail losses. Loss prevention technology has introduced tools like biometric access control, which restricts unauthorized access to inventory and sensitive areas of the store.

Furthermore, surveillance systems can monitor employee behavior to ensure that staff members adhere to company policies and procedures. This not only reduces the incidence of theft but also enhances overall employee accountability and productivity.

## **Data-Driven Decision Making**

In today's retail landscape, data is king. Loss prevention technology not only helps protect inventory but also provides valuable insights into store operations. Surveillance cameras equipped with A.I. can analyze customer behavior and generate data on customer preferences and buying patterns.

Retailers can use this data to make informed decisions about inventory management, marketing strategies, and customer engagement. For example, if the data indicates that a particular product is frequently stolen, retailers can consider relocating it to a more secure area or implementing additional security measures.

## **Cost Savings**

While investing in loss prevention technology may seem like a significant upfront cost, it often leads to substantial long-term savings. Traditional security measures, such as employing a large security staff or relying solely on physical surveillance, can be costly and less effective.

## TECHNOLOGY TO THE RESCUE – IMPROVING LOSS PREVENTION

### Adapting to the New Normal

As the pandemic subsided and society adjusted to a new normal, customers had become conditioned to prefer SCO options in various shopping scenarios. However, labor shortages persisted, and shrink remained a significant concern for retailers. In response to these challenges, the retail industry turned to technology and innovation.

### A.I.-Powered Loss Prevention

Artificial intelligence (A.I.) is emerging as a critical tool to combat shrink while preserving customer satisfaction. A.I.-powered tools, such as Produce Recognition, are bridging the gap between new and experienced workers. These tools enable less experienced employees to perform at the level of their seasoned counterparts, mitigating the skill gap created by the changing labor force.

Moreover, A.I.-driven solutions are designed to prevent "sweet-hearting," a practice where employees intentionally bypass security measures. Seasoned workers are unable to manipulate these A.I. systems, thereby ensuring greater loss prevention.

Computer Vision tools also play a vital role in loss prevention at self-checkout. Computer Vision technology enables computing devices to correctly identify an object or person in a digital image and take appropriate action. These technologies monitor SCO lanes, providing gentle prompts and guidance to inexperienced users. This proactive approach improves the customer experience, as shoppers feel more uncomfortable with traditional shopper assistants "leaning over their shoulders."

### Creating a Positive Customer Experience

The integration of A.I. and Computer Vision technologies has marked a significant shift in SCO's role within the retail environment. A.I.-driven solutions help educate and guide inexperienced shoppers, minimizing scanning errors and checkout delays so shoppers view it as a convenient and efficient way to complete their purchases.

Loss prevention technology has transformed the retail industry in profound ways. It has not only significantly reduced shrink and theft but also improved the customer experience, increased employee accountability, and empowered retailers with valuable data-driven insights.

As technology continues to advance, we can expect even more innovative solutions to emerge, further enhancing the impact of loss prevention technology on retail. In this fiercely competitive industry, embracing these advancements is not just an option but a necessity for retailers looking to thrive and prosper in the modern landscape.

**49%** of retailers believe  
Computer Vision is  
important to their innovation  
roadmap  
(Innovation  
Q10)



## THE FUTURE OF LOSS PREVENTION

Overall, the history of self-checkout in retail has been a journey of balancing cost savings and customer experience. The pandemic accelerated the adoption of self-checkout, forcing retailers to grapple with shrink while meeting customers' new preferences.

Traditionally, retailers struggled to find the right balance between offering self-checkout and reducing loss prevention, often adding friction to the shopping experience. However, the emergence of A.I.-powered loss prevention technologies post-pandemic has transformed SCO into a more seamless and secure process.

As the retail industry continues to evolve, finding the right balance between protecting assets and providing a positive customer experience remains paramount.

46% of c-store retailers & 45% of grocery retailers

believe **A.I.-enhanced self-checkout systems** with anti-theft features is important to their in-store enhancement plans over the next 1-2 years.



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