

# CREATING A ZONE OF CONTROL

ITAB

NEW APPROACHES TO MANAGING  
SELF-CHECKOUT LOSSES



RETHINK RETAIL.TOGETHER.

# EXECUTIVE SUMMARY

This article aims to outline the impact that loss through self-checkouts (SCO) can have on a retailer, and how ITABs prevention solutions can minimise loss, without impacting the all-important consumer experience.

It is estimated that a Grocery retail store that has some indicators of elevated levels of overall risk, with annual sales of approximately £40 million, is likely to experience at least 140 trolley pushouts a year (almost three a week), costing in the region of £31,500 a year. Put another way, it is calculated that trolley pushouts may account for approximately 4 per cent of all unknown stock loss (shrinkage)<sup>1</sup>.

Many retailers have developed a significant amount of knowledge and experience managing various types of self-checkouts, and there are several retailers who are now implementing prevention solutions to control SCO loss.



<sup>1</sup> Beck, A. (2021) Controlling Trolley Push-Out Thefts: An Evaluation, page 6

# THE RISE OF THE SELF-CHECKOUT

Recent years have seen retailers increasingly rolling out a wide range of self-checkout technologies, including Fixed (the consumer goes to a SCO machine to scan and pay for their products), Scan & Go (where the consumer is provided with a device to scan items they wish to purchase), Mobile SCO (where the consumer uses their own hand-held device to scan and in some cases pay for their items), Smart Trolleys, some of which can automatically detect items placed within them, and Whole Store SCO systems, where once a shopper has registered and scanned themselves into a store, they can pick up items and leave without any need for further scanning or interaction with a payment point. By far and away, the most dominant form of SCO in use at the moment though is Fixed SCO, which is the focus of this article.

## Types of SCO Systems in Use in Retailing<sup>2</sup>



### Fixed SCO (Basket to bag SCO)

Consumers go to a fixed checkout and pay station where they can, in various ways, record and pay for the items they wish to purchase.

### Scan & Go SCO

Consumers are provided with a 'scan device' by the retailer that can be used to register items they wish to purchase. They are then directed to a payment point that processes the transaction and takes payment.



<sup>2</sup>Beck, A. (2022a) Global Study on Self-checkout in Retail: Use, Impact and Control, ECR Retail Loss: Brussels

## Mobile SCO (Scan and shop)

Consumers use their own mobile device to record items they wish to purchase (using some form of pre-loaded app). They are then either directed to a confirmatory payment point and/or pay directly within the app anywhere in the store.



## Whole Store SCO (Just walk out technology)

Consumers register when entering the store using their mobile device, and then in-store technologies automatically record the products they wish to purchase and pay for without any further interaction. They are then provided with an electronic receipt after leaving the store.

## Smart Trolleys (Carts)

There are currently numerous types of 'smart' trolley in use or under development. Essentially, consumers can place items into a dedicated trolley and products are recorded and payment taken in various ways.



Whilst primarily driven by a desire to reduce labour costs (80% of labour costs for Grocery retailers are incurred at the checkout<sup>3</sup>), retailers also see them as a way to provide some consumers with greater convenience, more choice and a way of reducing the number of friction points in the consumer journey, not least the need to queue to checkout.

Although SCO technologies are not necessarily a recent development within retailing – early forays into enabling consumers to scan and pay for their items without recourse to a member of retail staff can be seen in the late 1980s/early 1990s – in the last 10 years the pace of development and adoption has quickened considerably, especially in the Grocery sector, where some businesses are aiming in the next few years to have as much as 80% or more of all consumers transactions taking place via SCO.

<sup>3</sup>Beck A. (2011) The Impact and Control of Shrinkage at Self-scan Checkouts, An ECR Europe White Paper, Brussels: ECR Europe.

# GROWING CONCERNS ABOUT SCO-RELATED LOSSES

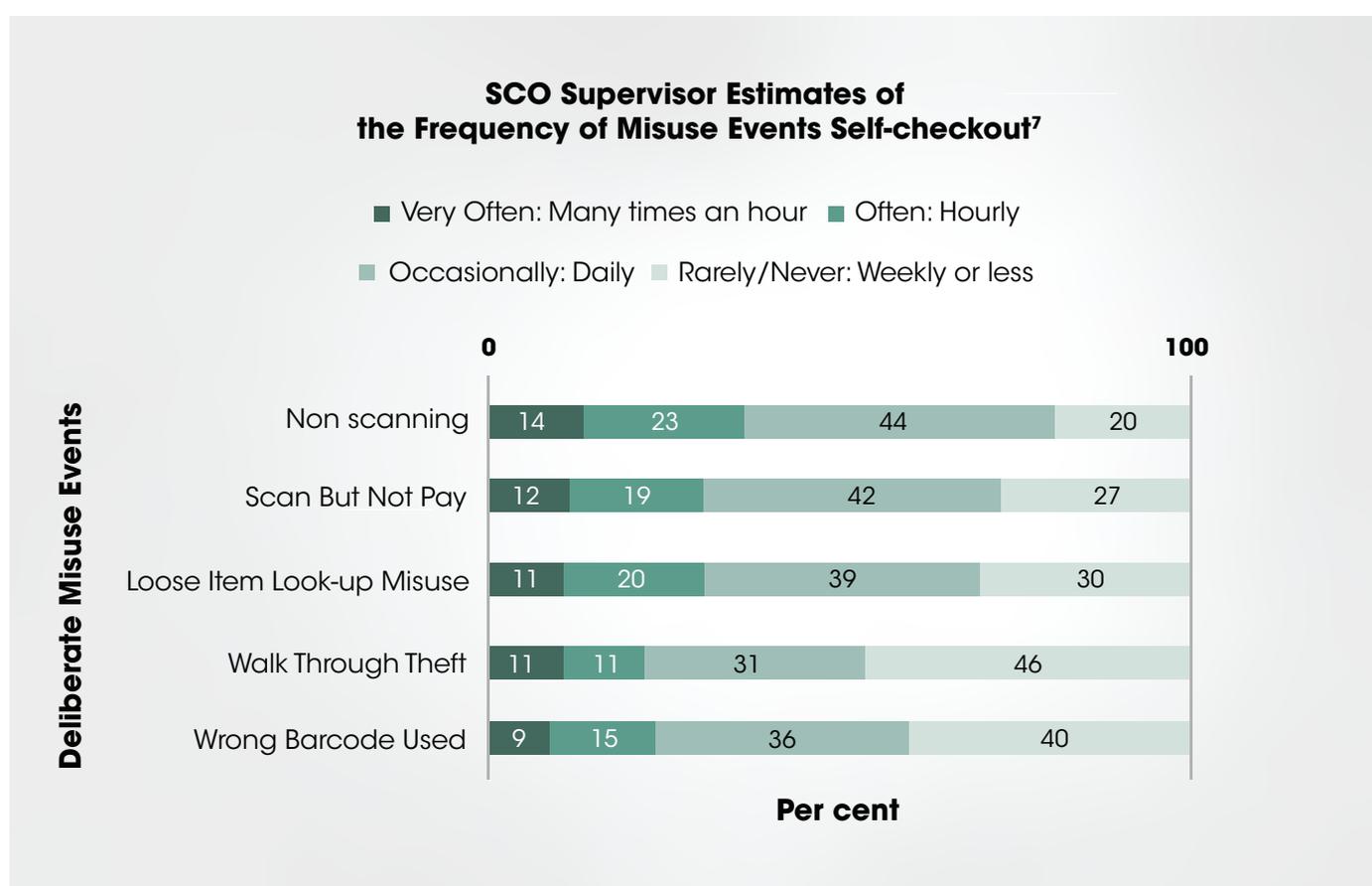
While retailers investing in SCO technologies have certainly benefitted in terms of significantly reducing their labour costs and providing their shoppers with greater flexibility in how they can check out and pay for the goods they wish to purchase, they have also typically experienced an increase in retail losses as a consequence of these systems.

In particular, various research studies have begun to show how they generate a range of opportunities for both malicious and non-malicious activity, such as the non-scanning of items. Mainly opportunist theft however still on the increase, as given an experience where you get away with accidental theft you are likely to repeat. Then the mis-representation of products, such as barcode switching, walkaways and so on are all on the rise. Taken together, a 2018 ECR Report estimated that for each 1 per cent of retail sales processed through Fixed SCO, a retailer will suffer an increase in unknown loss of 1 basis point<sup>4</sup>. This means that if 50% of sales value goes through this type of system, then a retailer could see an additional loss of 0.5% of their retail sales. With some estimates suggesting that unknown losses (shrinkage) for a Grocery retailer might be in the region of 1.50% of retail sales per year, this would represent a 30% increase in losses. The same study also found that for other forms of SCO system, such as Scan and Go and Mobile SCO, the losses could be even higher, perhaps 5-7 times higher.



<sup>4</sup>Beck, A (2018) The Rise of Self-checkout in Retailing: Understanding the Risk and Managing the Problem, Leicester: Erudite Publishing

Other ECR studies have also estimated what the losses associated with SCO might be. For instance, a 2022 global survey of retailers using SCO found that on average, they estimated that 23% of all their store losses were now caused by SCO. In addition, two thirds of respondents were of the view that the problem of SCO losses was becoming more of a problem in their businesses<sup>5</sup>. This concern was further reinforced by a recent survey of more than 6,000 SCO supervisors who believed that more than one-half of all the losses occurring at SCO were due to customers purposefully trying to obtain products without paying for them<sup>6</sup>. The survey went on to highlight the three main ways in which SCO supervisors thought losses were occurring, typically many times an hour: customers non-scanning, scanning but not paying, and misusing the product look-up facility.



Taken together, the available data increasingly shows that retailers are not only experiencing significant and growing levels of loss associated with their SCO systems but also highlight the increasing need to invest in developing new approaches to manage and control these losses.

<sup>5</sup>Beck, A. (2022a) Op cit.

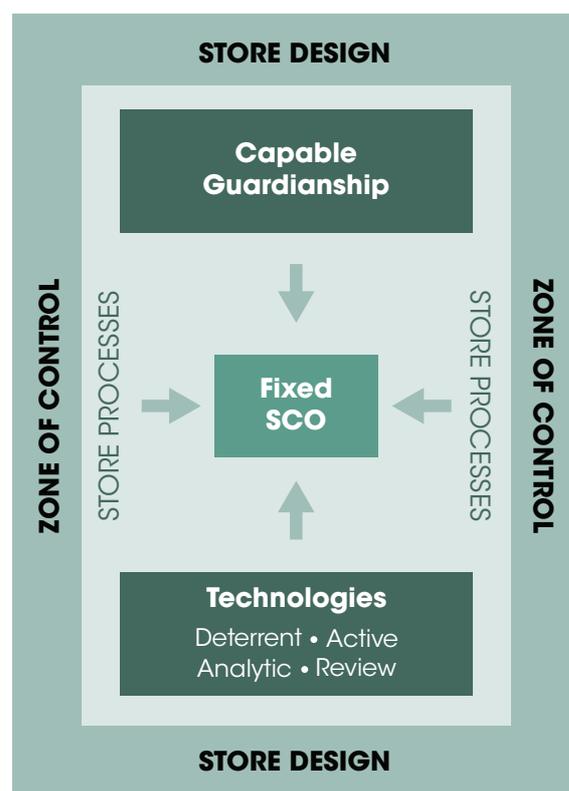
<sup>6</sup>Beck, A. (2022b) Working on the 'Front Line' of Retail Self-checkout: A Survey of the Experiences of Self-Checkout Supervisors, ECR Retail Loss: Brussels.

<sup>7</sup>Beck, A. (2022b) Ibid.

# CURRENT APPROACHES TO MANAGING SCO LOSSES

Despite these considerable losses, for many retailers, the proverbial Genie is now out of the bottle and few SCO adopters are realistically envisaging a future that does not see it featuring as a major part of their checkout environment. It is therefore no longer a question of will SCO be a significant part of the landscape of many parts of the retail industry, but more how can it be effectively managed and controlled to ensure it does not become an unacceptably large drain on business profitability? In this respect, there has been growing interest in, and development of, a wide range of interventions/approaches designed to try and mitigate the risks posed by SCO systems.

These have largely been focussed upon key points within the shopper journey: registration, entering the store, selecting product in-aisle, the checkout area, and exiting the store. In addition, they have coalesced around four broad themes: the application of various types of technologies, such as video technologies and weight-based interventions; changes in the way in which guardianship is delivered, such as changes to the selection and training of SCO supervisors; adjustments to store processes, such as closing Fixed SCO machines in off peak times; and changes to the design and layout of stores and SCO-specific environments, such as the use of Corrals and exit control gates<sup>8</sup>.



What seems clear for retailers using fixed SCO systems in particular, is that all these elements need to be combined to create an effective SCO 'Zone of Control', where thieves will find it hard to operate without being concerned about being detected, and consumer alerts/mistakes will be readily identified and corrected with minimum interruption to the consumer journey.

<sup>8</sup>Beck, A (2018) Op cit.

This Zone of Control should be seen as an integrated, connected and focussed space, balancing often competing priorities - improving customer service and convenience whilst limiting retail losses, via focused solutions. From Sesame solution tackling- not paid and walk out theft, to Fraud detection solutions - wrong barcode and non scanning.



## ITAB'S SOLUTIONS CREATE A TOTAL LOSS PREVENTION PLATFORM

No single measure is enough to ensure security within a store or a commercial facility, as this requires a comprehensive approach.

Technological innovations represent the first line of defence for retailers in the reduction of shrinkage and the protection of the quality of customer service.

The entrance and exit gates represent one of the systems that mainly aims to create a controlled access flow, avoiding the backflow inside and preventing fraud attempts at the exit.

Choosing the ideal system for your store depends on a few factors:

- type of checkout solutions adopted
- type of losses to face
- type of layout

# ENTRY SOLUTIONS: SAFE AND WELCOMING ACCESS

The entrance gates are designed to welcome your customers in the best possible way, with particular attention to functionality and safety, but also to design.

They are designed and manufactured with the aim of:

- Welcoming the customer to the store type of losses to face
- Optimising the flow of consumers
- Protecting your assets and reducing dispersion

Each type of layout involves different needs, including the need to create a safe and secure system.

## Improved consumer experience

Shop entrances guide the consumer towards the point of sale access and at the same time also inform them about the place from which they cannot leave. The consumer needs clear indications for a better and faster experience.

## Improved efficiency

Create a seamless consumer journey into the store that increases throughput and improves service levels.

## Reduction of theft and losses

Store entrances prevent the consumer from exiting the store through an unattended area, therefore reducing losses and theft.



# ALPHA GATE

## THE BEST IN CLASS AUTOMATIC SECURITY SOLUTION

### SAFETY:

The anti-panic safety feature triggers a pressure sensitive alarm when the arm is pushed in the wrong direction.

### ARM OPTIONS:

Use our range of colours & arm styles to design an entrance that suits your store environment.



### CHILD SAFE:

The optional childsafe sensor allows detection of an infant in the vicinity and prevents opening to avoid injury.

### FINISH:

Available in stainless steel, with the option of additional custom colours.

## Increase in-store efficiencies with ITAB's Alpha Gate

# 180°

0 to 180 degree operation for a flexible solution that works in multiple scenarios.



Easy linking system for synchronisation of multiple solutions through GateCOM.



Left and right hand functionality by a flick of a switch.



Automatic arm reset after release of the panic function.

# EXIT SOLUTIONS: REDUCE LOSS WHILE IMPROVING CONSUMER EXPERIENCE

Solutions for safe and flexible exit gates, including our **SIGMA** gate, allows for a controlled outflow of consumers. The implementation of exit control solutions increases security and allows the personnel in charge of the area to concentrate on customer service.

The state-of-the-art exit gate solutions, for both manned and self-service checkouts, powered by ITAB's patented **SESAME** sensor system enable the tracking of customers to validate that they have made valid payment before allowing frictionless exits through the various gate solutions.

## Improved consumer experience

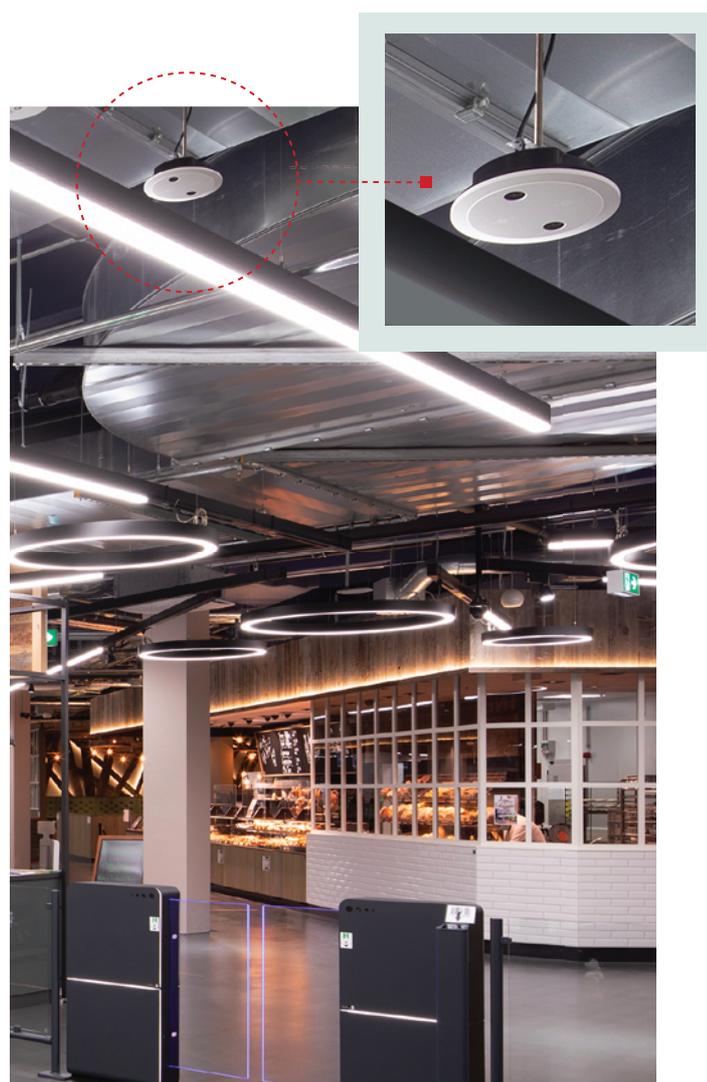
Provides a point of control for the retailer however ensures that the consumer can exit freely without any point of friction.

## Improved efficiency

Reduces the need for colleague intervention at the point of exit that provides labour efficiencies for the retailer and a quicker experience for the consumer.

## Reduction of theft and losses

An added form of control at the point of exit for the retailer whilst creating a deterrent for consumers that are likely to leave the SCO area without paying for their goods.



# SIGMA GATE

## SLIM, SLIDING, SAFE AND SECURE

### CONNECTIVITY:

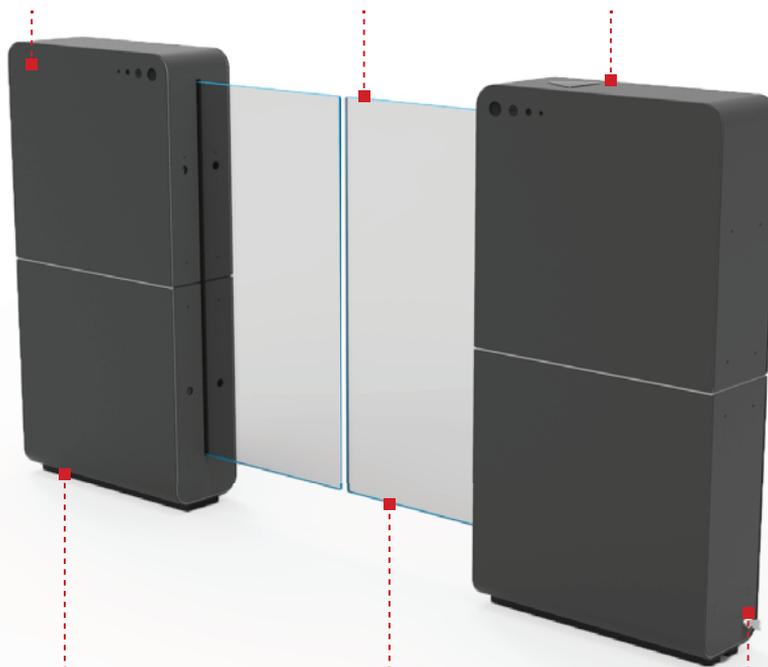
Connected or stand alone scanners can validate transaction completion.

### PANIC FUNCTIONALITY:

Safety feature allows forced opening in emergency scenarios.

### SCANNING:

Integrated receipt scanner provides added security within the slimline design.



### SPACE SAVING DESIGN:

Automated sliding doors allow for a smaller operational footprint for multiple scenarios.

### LIGHTING:

Built-in LED lights signal status with blink patterns and shifting colours.

### FINISH:

Available in stainless steel, with the option of additional custom colours.

## Reduce retail loss with ITABs Sigma Gate



Adaptable with interfaces for fire alarms & computer control etc.



Optional QR & barcode receipt scanning for added functionality.



Secures against unauthorised access & safe for your consumers.



Adjustable opening times for optimal performance.

# SESAME

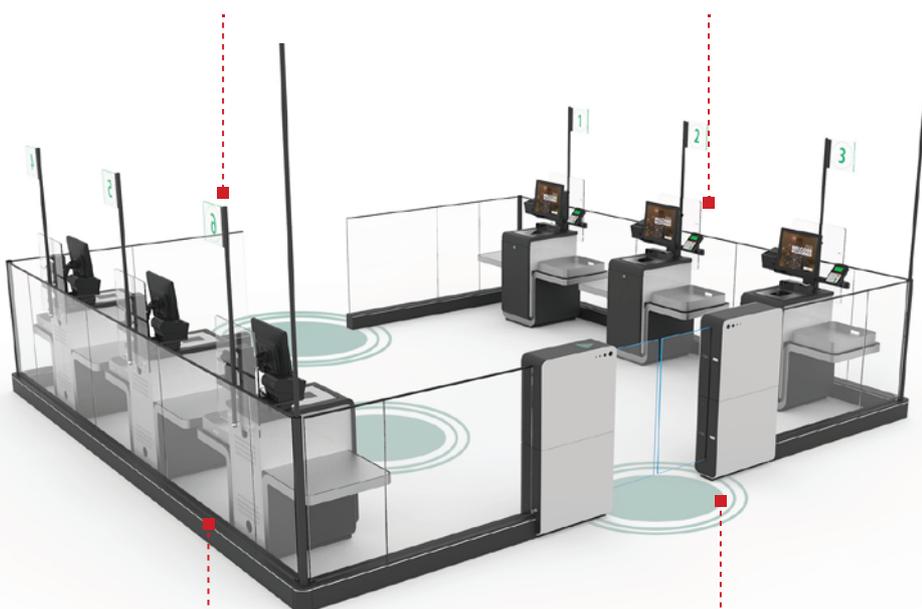
## BARCODE-FREE PAYMENT DETECTION FOR RETAILERS

### STEP 01:

Consumer enters Checkout Arena and starts at any available SCO.

### STEP 03:

When the consumer reaches the exit validation zone, the digital signature will be checked.



### STEP 02:

As transaction is finalised, a unique digital purchase signature is created.

### STEP 04:

Once approved, the gate opens automatically allowing the consumer to exit.

## Increase security & reduce friction

SCO  
**X50**

Able to support up to 50 SCO's in one retail area (multiple areas possible).



Ceiling sensor able to monitor up to 200 consumers simultaneously.



Recommended ceiling height is 3 m to 15 m (sensor covering <64 m<sup>2</sup>).



Simple POS integration with the same protocol as standard ExitFlow.

# ONRED: THE ITAB CONNECTED PLATFORM

ITAB's Onred technology platform connects your in-store solutions and enhances retail experiences. One unified software platform that connects ITAB's suite of digital and physical solutions. Enabling one integrated platform to drive multiple customer experiences at the same time.

Making it possible for retailers to aggregate and analyse data across all endpoints, use AI modelling to build personalised in-store solutions for their consumers, and allow a consolidated view for maintenance and support.



The unique multi-dimensional data insight element of ITAB's Onred is key, eliminating silos and opening up opportunities to streamline a shopper's brand experience, offering them more targeted, bespoke and interactive journeys and recommendations. By selecting the optimal products for individual consumers, the retailers' average basket sizes increase, and sales conversions improve.

The Onred platform also drives efficiencies and lower costs for retailers in the short, medium and long term – increasing return on investment, while supporting their strategic growth. On top of those benefits, Onred provides a single integration platform and just one maintenance system for all endpoints, facilitating swift and proactive support.



Do you want to know what could be the most suitable solution for your store?

For further information get in touch with our Solution Design experts.

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