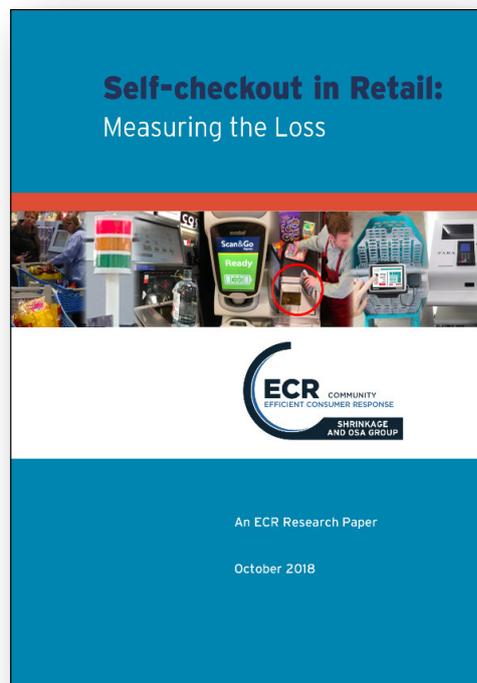# Managing Self-checkouts in Retail:
Utilising the SCO Management Pyramid

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Self-checkout in Retail:
Measuring the Loss

ECR COMMUNITY
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The Rise of Self-checkout in Retailing
Understanding the Risk and Managing the Problem

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Introduction

The use of self-scan and checkout (SCO) technologies has grown considerably in the past 15 years, predominately, but not exclusively in the Grocery sector, where customer and product volumes, and space utilisation issues, make it a particularly appealing proposition[1]. For many retailers it has provided a significant opportunity to reduce their core costs at a time of increasing competition, and as new iterations of the technology have evolved, there would seem to be a growing appetite amongst certain groups of users to prefer this mode of shopping[2].

A fundamental component of the SCO proposition is the transfer of responsibility for the accurate scanning of products and ensuring correct payment is made from staff employed by the retailer to the consumer. Since the very early days of retailing incidents of customers stealing product have been recorded and indeed a whole industry has been established trying to manage this problem as incremental changes in the retail environment have increased the risk of losses occurring[3]. For many of those tasked with ensuring that retailers sell more products than they lose, the emergence of SCO technologies has been viewed as a concern, not least in the difficulty in imposing strong enough controls over the way in which it may be used and abused[4].

It is within this context that research undertaken by Beck on behalf of the ECR Community Shrinkage and OSA Group[5] was formulated to deliver two key objectives: quantify the risks associated with different forms of SCO technology; and review the various ways in which these risks might be controlled and managed. While full details of this research can be found in a free report provided by the ECR Group, available from their website[6], and more comprehensively in a book published by Beck, this document provides a summary of one of the key findings from the study – how the management and control of SCO systems might be achieved through the use of the 'SCO Management Pyramid'. It is based upon earlier work by Beck focused upon developing a framework for presenting the core elements of how to deliver an effective loss prevention strategy[7]. Purposively shaped as pyramid it recognised the pivotal importance of the foundations delivered by senior management commitment and the embedding of organisational ownership of the management and control of loss prevention. Without these factors, the remaining eight elements of the pyramid, it is argued will not be achievable.

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[1] Research by Kiosk Market Place estimated that the global self-service market would reach $21.1 billion in 2017, growing by 15.8%, with retail being a major area of expansion: Slawsky, R. (2017) *Opportunities for Self-service Technology in 2017*, Kiosk Market Place. In addition, see: O'Shea, D. (2017) 'Shipments of self-checkout terminals hit record in 2016', *Retail Drive*, https://www.retaildive.com/news/shipments-of-self-checkout-terminals-hit-record-in-2016/446664/.

[2] See: Uncles, D. (2006) 'Understanding Retail Customers' in K. Manfred and M. Mantrala (Eds) *Retailing in the 21th Century: Current and Future Trends*, Berlin: Springer, 205-219; Orel. F. and Kara, A. (2014) 'Supermarket self-checkout service quality, customer satisfaction, and loyalty: Empirical evidence from an emerging market', *Journal of Retailing and Consumer Services*, 21 (2): 118-129.

[3] See Cameron, M.O. (1964) *The Booster and the Snitch*. New York: Free Press of Glencoe, Collier Macmillan; Curtis, B. (1983) *Retail Security: Controlling Loss for Profit*. Boston: Butterworths.

[4] See for instance: FierceRetail (2018) *Self-Checkout making it much harder to prosecute shoplifting*, https://www.fierceretail.com/operations/self-checkout-making-it-much-harder-to-prosecute-shoplifting.

[5] Beck, A. (2018) *Self-checkout in Retail: Measuring the Loss,* An ECR Research Paper, Brussels: ECR Community Shrinkage and OSA Group; Beck, A. (2018) *The Rise of Self-checkout in Retailing: Understanding the Risk and Managing the Problem*, Leicester: Erudite Publishing.

[6] https://ecr-shrink-group.com/page/self-checkout-in-retail-measuring-the-loss-available-nov-27th.

[7] See: Beck, A. with Peacock, C. (2009) *New Loss Prevention: Redefining Shrinkage Management,* Basingstoke: Palgrave Macmillan.

The pyramid has also proved itself to be a useful analytical tool for assessing not only how organisations are responding to the challenges of loss prevention, but also reflecting upon a broader range of good practices in retailing. Within this context, it also offers a useful framework for considering how retail businesses can go about developing an organisation-wide approach to managing the risk associated with use of SCO systems.

The SCO Management Pyramid is made up of 11 component parts which are grouped together under three headings: Strategic; Organisational; and Operational.

Strategic Factors

At the root of the Pyramid are three strategic factors that can be viewed as the foundation stones upon which all the other elements rest. Without these key stones none of the other component parts can be developed, delivered or sustained – they are the bedrock of the model. These factors are: Senior Management Commitment; Organisational Ownership; and Embedded Responsibility.

Senior Management Commitment: Without a recognition from the senior management team that the issue of developing a balanced scorecard to understand the impact of SCO investments is important, then any attempts to mitigate and control losses will be highly unlikely to be successful. Having this commitment provides access to resources, generates urgency within the business and, perhaps most importantly, ensures that the rest of the business is much more likely to be compliant with any agreed strategy.

Organisational Ownership and Embedding Responsibility: As with most LP-related issues, without the rest of the business agreeing to play a role, then it is unlikely a successful and sustainable outcome is likely to be achieved. For many retailers using SCO systems there have experienced a degree of tension between those parts of the business wishing to push forward with an agenda to transform the consumer experience through reducing friction, particularly around the front end, and those tasked with managing retail losses. What seems key is that other retail functions involved in the development and management of SCO systems do not abrogate all responsibility for any adverse outcomes from their use; they need to recognise and take some responsibility for ensuring that the use of SCO systems operate in way that is beneficial to the business as a whole.

Organisational Factors

The following Organisational Factors typically can be directly influenced by various departments and affect not only the way the business operates in general but also more specifically the way in which SCO systems and any associated losses may be managed and controlled.

Data Management: The research Beck research provided much evidence on both the challenges of collecting data on SCO systems and the current lack of prioritisation within many businesses to collect meaningful data to help them fully understand the negative consequences of their use. Retailers need to ensure that they have developed a clear set of data protocols to fully understand the impact of various types of SCO technologies on their businesses. Without this data, it will be difficult to deliver the three foundation blocks described above.

Operational Excellence: The Beck study also outlined the various ways in which different types of SCO technologies might best be controlled, focussing particularly upon ways to amplify risk and enhance detection, and minimise product-driven errors. Across all of the approaches described, the issue of compliance was considered key – ensuring that the policies, procedures and practices agreed by the business were actually delivered in practice. The recent growth of SCO in retailing has been rapid and at times undertaken with what might be described as a cavalier approach as to how it will be managed and controlled. Retailers need to ensure that the future use of SCO systems is firmly grounded in a philosophy of operational excellence – developing, wherever possible, business practices and procedures that ensure they are a benefit and not a liability to the company.

Innovation and Experimentation: The use and abuse of SCO systems is a rapidly evolving space and so retail users need to be prepared to constantly innovate and experiment to understand how risk might be changing and what new approaches and technologies might be available to manage these risks. New SCO-related technologies are developing quickly, such as product recognition systems, and so it is important that retail companies continue to actively prioritise a programme of SCO-related innovation and experimentation.

Collaboration: There is a real need for retailers and SCO technology providers to work together much more closely on not only understanding the risk side of the SCO equation, but also developing and evaluating interventions that may help mitigate the identified risks. Equally, retailers need to ensure that there is better collaboration within their own organisations – that those tasked with risk management are an active and welcome contributor to current and future discussions on SCO-related store developments. Moreover, losses can also be caused by the way in which product packaging is designed, particularly the barcode. While there has been much work done to better align product manufacturers and retailers relating to streamlining the movement of goods in the supply chain, as yet, little work has been carried out to ensure all products are fully 'SCO-friendly' – that they do not inadvertently generate opportunities for error and loss to occur. As such, there is a real need for retailers to work more closely with the suppliers of products that feature highly in their lists of items found not to be scanned in the SCO environment.

Prioritising People: One of the most striking findings of the Beck research was the critical role the SCO supervisor was considered to play in providing control and yet many respondents to this research also highlighted how this role had not been prioritised in their businesses. Too often the 'walking wounded' were given responsibility for managing the SCO environment when in fact what is needed is somebody who is highly experienced, outgoing, customer-focussed and highly attuned with the peculiarities of this demanding and risky space. It is therefore critically important that the role of SCO supervisor is transformed with specialist training, proper recognition and appropriate remuneration.

SCO Leadership: For a considerable number of retailers using SCO systems, the drive is to yet further increase the proportion of customer transactions being processed through them – the development curve seems to suggest that there will be more not less SCO in the future. It is important, therefore, that there is clear and strong leadership for SCO that can articulate all aspects of its use within retailing, including not only the possible benefits but also the likely risks. To date, much of the emphasis has been on the former but it is now beginning to be clear that SCO Leadership teams now need to take much more account of the latter.

Communication: Closely linked with the previous factor on Data Management, retailers need to ensure that their businesses are kept fully abreast of the impact of SCO. A key challenge is ensuring store compliance, which has often been undermined by a lack of awareness on the part of store managers

about the risks posed by SCO systems. Unless there is clear and consistent communication of robust and reliable data on SCO, retailers will continue to struggle to develop a coherent and profitable strategy for their ongoing and future use.

Organisational Factors

The final aspect of the Pyramid focuses upon just one area: Store Management Responsibility

Store Management Responsibility: Ultimately, the management of SCO systems is dependent upon store teams and it is important, therefore, that they are given the support to enable them to take on this responsibility. They need to be given the data to understand the challenges, the training, resources and technological tools to create an environment that minimises risk and be incentivised to ensure that they remain compliant.

Placing Store Management at the top of the loss prevention pyramid (when often their position within organisations is perceived as at the bottom of the pile) is important – they are the ones that ultimately deliver and they need to be given the recognition and support to enable them to achieve the overall goal of enabling the business to utilise SCO systems profitably.

Summary

Taken together, the 11 elements of the pyramid may be a better way to begin to develop a more coherent and co-ordinated strategy to manage the risks associated with SCO systems in retailing, one that continues to recognise the benefits, but also takes more account of the growing challenges that they now seem to be presenting.

Benchmarking Your Business Using the SCO Management Pyramid

Very often there are distinctly contrasting views on how and in what ways SCO systems should be developed, managed and controlled in a retail business. This can often be seen in profound rifts between those responsible for delivering a more friction-less shopping experience for consumers and those tasked with controlling retail risks. Understanding how people perceive the management of SCO in a retail environment is an important first step in beginning to firstly recognise and, where possible, heal any evident organisational conflicts. In this respect, the SCO Management Pyramid offers a simple and easy to use tool to begin to gauge how various functions/individuals within a retail business perceive the current situation regarding the management and control of SCO. Detailed below is a set of benchmark SCO-related questions together with a simple scoring system to begin this journey. In addition, a more expansive feedback document is also provided which provides participants with an opportunity to reflect upon how any organisational failings flagged up by this approach might be resolved.

Benchmarking Tools

Scoring:

0 = Completely nonexistent within our company.

1 = Some evidence of alignment but at a low level.

2 = My company is aligned but more needs to be done.

3 = My company is fully aligned on this issue.

Benchmark Statements	Score
Senior Management Commitment	
Senior management recognise the need to understand both the benefits and challenges of SCO.	
Organisational Ownership	
All parts of the business recognise that they have a role to play in managing and controlling SCO-related losses.	
Embedded Responsibility	
All parts of the business are acting to address the problem of SCO-related losses.	
Data Management	
The company has available actionable, reliable and timely data on SCO-related losses.	
Operational Excellence	
All parts of the company recognise the need to develop processes and practices that enable SCOs to be managed effectively.	
Innovation and Experimentation	
The company is willing to innovate and experiment to deal with SCO-related losses.	
Collaboration	
The business collaborates effectively with other organisations to better manage SCO-related losses.	
Prioritising People	
The company recognises the valuable role people can play in controlling SCO-related losses.	
SCO Leadership	
There is clear and strong leadership in place to manage all aspects of SCO systems used in the business.	
Communication	
The issue of SCO-related losses is clearly and regularly communicated across the business.	
Store Management Responsibility	
Store management teams are given the necessary support to deal with SCO-related losses effectively.	
Total Score	

Benchmarking Exercise for Your Company: Utilising and Controlling SCO

Scale: 0 = Completely nonexistent within our company   2 = My company is aligned but more needs to be done
       1 = Some evidence of alignment but at a low level   3 = My company is fully aligned on this issue

Benchmark Indicators	Your Score	What needs to happen in Your Company to score a 3?
Senior Management Commitment Senior management recognise the need to understand both the benefits and challenges presented by SCO.		
Organisational Ownership All parts of the business recognise that they have a role to play in managing and controlling SCO-related losses.		
Embedded Responsibility All parts of the business are acting to address the problem of SCO-related losses.		
Data Management The company has available actionable, reliable and timely data on SCO-related losses.		
Operational Excellence All parts of the company recognise the need to develop processes and practices that enable SCOs to be managed effectively.		

Benchmark Indicators	Score	What needs to happen to score a 3?
Innovation and Experimentation		
The company is willing to innovate and experiment to deal with SCO-related losses.		
Collaboration		
The business collaborates effectively with other organisations to better manage SC0-related losses.		
Prioritising People		
The company recognises the valuable role people can play in controlling SCO-related losses.		
SCO Leadership		
There is clear and strong leadership in place to manage ALL aspects of SCO systems used in the business.		
Communication		
The issue of SCO-related losses is clearly and regularly communicated across the business.		
Store Management Responsibility		
Store management teams are given the necessary support to deal with SCO-related losses effectively.		
Total		

Notes and Next Steps