

The Emperor Has No Clothes: What Future Role for Technology in Reducing Retail Shrinkage?

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Introduction

In the ECR Europe shrinkage survey of 2004, the overall rate of loss for retailers in the Fast Moving Consumer Goods (FMCG) sector was estimated at 1.84 per cent, a figure not strikingly dissimilar to the estimates back in the late 1980s when I first started undertaking research on crime against the retail sector (Beck, 2004). It would seem that on the whole the rate of loss has remained stubbornly constant over this time despite the enormous amount of developments in, and expenditure on, security “solutions”. Undoubtedly the retail market globally has expanded dramatically since the first edition of the *Security Journal* was published 20 years ago – for instance the FMCG market in Europe alone passed 1 trillion Euros in 2004 (Planet Retail, 2004) – and security technology providers in particular would no doubt claim that they are keeping the lid on a problem that would be much worse were it not for their efforts and innovations. But I would like to argue that for the most part within the retail sector efforts to tackle the problem of shrinkage can be described as a tale of failure, with too many practitioners being led down too many blind alleys by security providers offering yet another high tech quick fix panacea to the problem of shrinkage. Undoubtedly the lure of technology and the promise of a single easily introduced “solution” to the problem is deeply attractive to a practitioner under pressure to meet financial targets and satisfy the demands of senior managers. Indeed, “solution” providers are quick to offer examples of Return on Investments (ROIs) on their products, regardless of the veracity or robustness upon which these calculations are often based. In the harsh world of retailing, it is often better to be seen to be doing something rather than nothing, especially when you have some “evidence” to back up your assertions.

In this short piece I would like to argue that for too long the role of technology within retail loss prevention has been overstated and that this has led to an overemphasis of the scale and extent of one particular problem – external theft – and meant that other issues such as internal theft and process failure have been to a significant extent sidelined as concerns for loss prevention practitioners. In addition, I would like to argue that the importance of engaging people within the business, developing more robust processes and procedures that are less prone to shrinkage, and the need to base decisions upon high-quality data and analysis rather than hearsay and prejudice, need to be recognized in the future.

Extravagant claims and false promises

In the mid 1990s myself and Andrew Willis, as part of a broader study, carried out a relatively unsophisticated review of the advertising used by security companies targeting the retail sector in a range of U.K.-based publications (Beck and Willis, 1995). These were companies primarily selling closed circuit television (CCTV) and Electronic Article Surveillance (EAS) and the language was almost universally that of absolute solutions solving a plethora of problems relating to crime and shrinkage. The use of the words “solution” “answer” and “proven” was frequent and widespread. In reality, the extent of actual research on either of these technologies in terms of understanding their impact on retail crime was at best partial and at worse nonexistent. The studies that did exist were usually wholly funded by the technology providers themselves and few could have stood up to the rigours of any form of independent assessment of the methodologies used to generate their findings. To often they were carried out by the self interested and the untrained (Pawson and Tilley, 1997). Even now, the number of studies on EAS in particular that can be considered reliable is few, with the findings being rather mixed and inconclusive on its impact on shrinkage. Technology providers have also been shy in commissioning independent research that looks at the way in which their products actually work in the retail environment, particularly when it comes to those for whom the system is originally designed – offenders themselves. Probably little wonder as the few available studies based upon this type of methodology show that offenders have rarely anything but contempt for devices such as EAS and CCTV and consider them as a minor irritation to their thieving activity (Gill, forthcoming; 2005). Indeed, if CCTV or EAS were a drug, we would be absolutely appalled at the way it has been introduced and widely used without any rigorous testing of its likely impact on the patient. But there has been an overwhelming sense of technological determinism within western societies that can be charted back to the iconic images of the space race in the 1960s, when the future was to be one where technology would make our lives easier, more affordable and above all exciting. Old problems could be fixed by the “appliance of science” – nuclear power would make electricity so cheap it would not be worth metering, and the introduction of the computer and automation meant that the world of work would be but a small adjunct to lives primarily focused on leisure activities! Happy days indeed.

Getting to grips with retail loss in the future

One of the key consequences of technologies such as EAS is that its suppliers tend to over emphasize the problem that is most suited to their particular solution, in this case external theft. One of the key findings of the 2004 ECR Europe shrinkage survey was that unknown losses accounted for the majority of losses suffered by businesses – a startling statistic that significantly undermines our understanding of the problem. Indeed virtually all the recent surveys on stock loss that try to offer an explanation of the extent to which different types of problem (external theft, internal theft, process failure etc) are responsible for shrinkage are essentially based upon guesswork by the respondent as the majority of loss is unknown. Essentially, this question is more useful in understanding *how* retail loss prevention respondents think rather *what* the scale of any particular problem really is. So for instance,

the Retail Theft Barometer survey (Bamfield, 2004), which is sponsored by Checkpoint Systems (a provider of EAS technology), found that 46 per cent of loss was due to external theft, while the 2004 retail survey carried out by the University of Florida in the U.S. found that internal theft was responsible for 48 per cent of loss. Regardless of differences in methodology, definition, and location of the survey, the underlying problem is that all such studies (including my own in Europe) are essentially flawed when it comes to deciding what is responsible for the losses suffered by retail businesses.

When interpreting such data it is not difficult to see why external threats may be viewed as a more palatable problem to address – it is undoubtedly easier to look outside the business than within (after all you may have been responsible for selecting the staff that are now stealing from your company or designed the processes that are now failing!) and technology providers have been quick to reinforce this emphasis upon the external threat of shoplifting. But the evidence is certainly less clear cut and until high-quality data that is timely, accurate and fine grained is available from across the various global retail sectors, estimates of the relative seriousness of the different parts of the shrinkage pie will remain merely unreliable guides to how loss prevention specialists feel about the problem at any moment in time.

What is clear, is that any decisions on potential “solutions” need to be made based upon a rigorous analysis of the problem within the each company, which in turn needs to be evidence based rather than being premised upon anecdote, gut reaction and the prejudices of suppliers. In a recent study, looking at the way in which five high performing U.S. retailers managed to keep their shrinkage low (Beck, forthcoming), all highlighted the need to have high-quality data upon which to base their decision-making. An important trend in the future, therefore, will undoubtedly be the way in which increasingly rich data environments will enable retail companies to begin to fully understand what the actual problems are that they face and then begin to develop prioritizes and “solutions” accordingly.

A second key area of future development will relate to the way in which organizations use the people they employ to tackle the problem of shrinkage more effectively. In a world of technological solutions, there is often little need for humans to play a part, after all they are fallible and unreliable compared with our mechanical brethren. But people are a critical part of responding to shrinkage, including external theft (numerous studies have highlighted the impact on shoplifters of human interaction compared with technologies such as EAS and CCTV, see for instance Butler, 1994). My recent study of best practice in the U.S. highlighted the importance of using people within the organization to collectively respond to the problem (Beck, forthcoming). This started with: ensuring the active support of senior executives; moved on to the prioritization of the problem across all organizational functions (including embedding it into their everyday working practices); encapsulated the careful selection of company staff and ensuring that they are properly trained, monitored and incentivized to respond to the problem; and finished with the development of multi-functional loss prevention teams that are not driven solely by a “policing” style agenda premised upon investigating and catching thieves. This in itself is not a new message, but it is easy for staff to feel that they have little or no role in security as they see the introduction of more and more security technology into their work place – a double edged sword, as more technology equates to less staff vigilance and commitment.

I love my ipod

It would be easy to reflect upon this article and decide it was written by somebody who is a technophobe pining for the return of the Luddites. This could not be farther from the truth and I am as wedded to an array of communication and entertainment devices as any other middle-aged man with slightly more money than sense! Technology has undoubtedly transformed many aspects of our lives in the last 100 years and will continue to do so (not least in medicine and the Internet's truly remarkable capacity for sharing information). New innovations within the world of retail loss are developing at a pace, with much hype surrounding the use of Radio Frequency Identification technologies (RFID) and the rapid growth in applications for digital CCTV. The former undoubtedly has tremendous potential to make a real difference throughout retailing although the technological and ROI challenges are such that it is doubtful whether we will see its use on most retail items within the next 10 years. For the latter, it may be the case we will begin at last to have some real use for all those cameras out there! Both of these technologies should play a key part in the future research agenda in this area. But so should the way in which people are used in organizations. This is nothing like as exciting to some as the introduction and use of a new technology, but there is growing evidence that ensuring the active support of all staff in responding to shrinkage could be the most effective way to make a difference. Finally, we need to do much more research on understanding what data organizations need to collect on shrinkage, how it should be analysed and used by the business, and what impact it may have upon deviant behaviour.

Effective shrinkage management is about using a tool box of solutions to meet an increasingly complex array of problems. How these tools are selected needs to be based upon high-quality data and rigorous analysis. In the past solution selection, particularly when it has been technology based, has lacked any sense of rigour, indeed there has been the development of a provider-driven consensus that it works. This in turn often generates a sense of "vulnerability" in those that do not have it – they are told that the thieves will come to those not protected. Meanwhile the level of shrinkage remains stubbornly the same across the sector. It is time that the emperor was exposed. Technologies such as EAS and CCTV can only ever have a limited impact as they only address a minority of the shrinkage problems faced by retailers. In the future, retail businesses will need to ensure that they strike the right balance between employing and motivating the right people, ensuring they adhere to agreed processes and procedures, and making use of a range of technologies to support their endeavours. Otherwise they could be found naked on the high street and none of us want that!

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