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LE MANAGEMENT DE LA TRANSITION

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THE ECR – EUROPE APPROACH OF SHRINKAGE MANAGEMENT IN THE SUPPLY CHAIN

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Defining Shrinkage

The ECR team considers shrinkage as consisting of four elements, as shown below.

Process failures can occur in the physical flow of goods along the supply chain, in Information systems or in finance systems. The effect of failure in any one of these systems is that stock will be lost and/or payment for goods is incorrect. When considering fresh product, process failure is likely to be the biggest cause of shrinkage. *Inter-company fraud* leads to shrinkage when trading partners intentionally deliver the wrong quantities and/or charge for goods to their advantage. This tends to occur when poor processes, procedures or controls are exploited. Whilst the effect is similar, *theft* is categorised as being either *internal*, e.g. by employees or contracted staff, or *external*, e.g. shop thieves or burglars. The ways theft occurs can vary significantly although in many instances it is a consequence of poor processes, procedures or controls within a company. Theft accounts for a significant proportion of shrinkage in the FMCG[1] sector with „Hot Products" being particularly vulnerable.

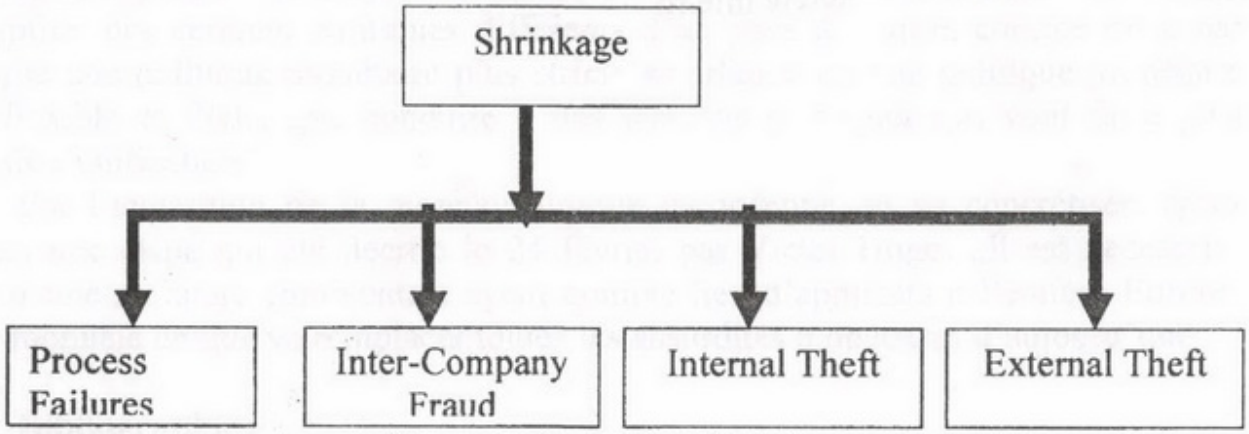

Figure 1. Defining Shrinkage

Source: ECR Europe report – ''Shrinkage: A Collaborative Approach to reducing Stocks loss in the Suplly Chain"

[1] The term Fast Moving Consumer Goods (FMCG) sector is used here to mean those retailers and their suppliers who provide a range of goods sold primarily through supermarkets, and hypermarkets. The core of their business is providing 'essentials' such as various fresh and processed foodstuffs, but they also stock a wide selection of other goods as well including health and beauty products, tobacco, alcohol, clothing, some electrical items, baby products and more general household items. Examples of FMCG retailers include Auchan, Carrefour, Coop Italia, ICA, Interspar, Tesco and WalMart. Examples of FMCG manufacturers include , Gillette, Johnson and Johnson, Procter & Gamble and Unilever. In the USA, this sector is also referred to as the Consumer Packaged Goods sector.

Counting the Cost

The FMCC sector in Europe is big business with a combined market turnover of over €820 billion. The groundbreaking research carried out on behalf of ECR Europe showed that shrinkage is a major threat to the efficiency and effectiveness of the sector. In 2000, retailers lost €13.4 billion due to shrinkage, equating to 1.75% of turnover or €258 million a week. Manufacturers are not immune from this problem and lost €4.6 billion, accounting for 0.56% of turnover or €89 million a week. Taken together, the FMCG sector is haemorrhaging €18 billion a year due to stock loss. In addition, retailers alone are spending €2.14 billion trying to tackle this problem. The impact on profitability is dramatic and retail profits could be 29% higher if companies reduced losses due to shrinkage by 50%.

Sector	Loss as percentaje of sales	Value (billions)
Retailers	1.75	13.4
Manufactures	0.56	4.6
Total	2.31	18.0

Table 1. Stock Loss in Europe

Source: ECR Europe report– "Shrinkage: A Collaborative Approach to reducing Stocks loss in the Suplly Chain"

The FMCG sector is losing €50 million a day due to shrinkage. Annually this is equivalent to the GDP of Luxembourg

The FMCG sector is highly complex with many manufacturers having logistical webs covering all of Europe, while many retailers have product ranges between 40,000-250,000 SKUs. Research shows that all points of the logistical chain are vulnerable to loss not just the retail store. In 2000, €6.1 billion of stock was lost even before it made it to stores.

Causes of Shrinkage

Highlighting how stock is lost is a vital part of any effective stock loss reduction strategy - it can identify priorities and enable responses to be tailored to specific needs. The research showed that for retailers, the biggest perceived threat came from theft - over €8 billion or over 60% of all stock loss was thought to be due to staff and 'customers' thieving from their organisations. Process failures were seen as the next major cause of shrinkage - €3.6 billion lost due to products being 'misplaced' in the supply chain, getting damaged or going out of date. For manufacturers, the biggest culprit was process failures with over three-quarters of all losses being seen as a consequence of this. For them theft was less of an issue although it still accounted for over €1 billion of loss in 2000. Theft is thought to account for over €9 billion of loss in the FMCG sector.

The recent work by the ECR Europe Shrinkage committee has developed a definition that has received relatively broad acceptance, wich strickes a middle ground between the two, driven in party by the current limitations imposed upon the ability to accurately measure the impact of shrinkage upon organisation. It is based upon four categories of shrinkage encompassing both stock and cash and made up of supplier fraud, internal theft, external theft and process failures. The first three can be regarded as malicious and intentional, while the fourth is non-malicious and unintentional, but higly regrettable consequance of ineffective business processes, procedures and activities.

The first three can be regarded as malicious and intentional, while the fourth is non-malicious and an unintentional, but highly regrettable consequence of ineffective business processes, procedures and activities (FMCG).

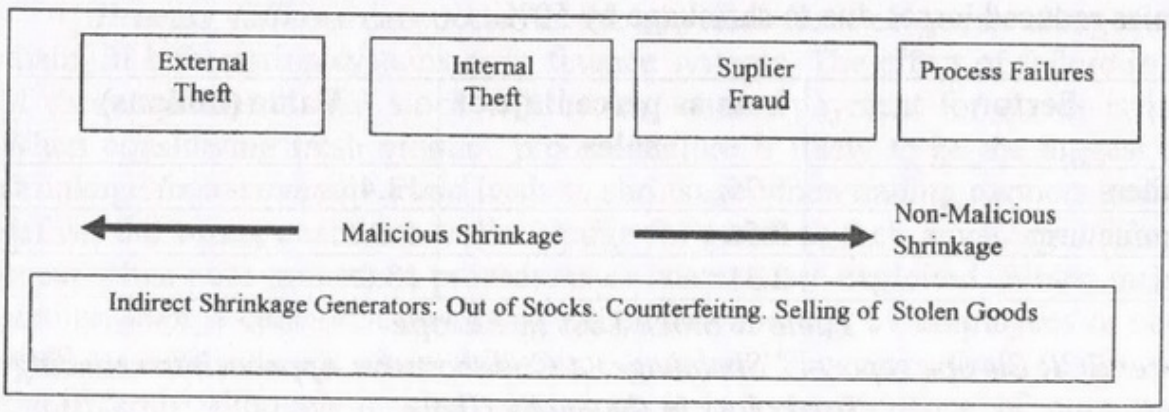

Figure 2. The Categories of Shrinkage

The research has identified the key elements that contribue to process failures (paper shrink). They are:

Stock going out of date: product not being sold in time because too much was ordered; it was not discounted in time; or stock was not rotated properly.

Price reductions: stock being sold below the price originally envisaged; too much was ordered; stock had not been rotated properly; or expected sales targets had been overly ambitious.

Damage to stock: caused by the methods used to store and distribue products. This can include temperature sensitive products such as foods.

Delivery errors: a combination of the wrong products being delivered to the wrong places at the wrong times. This can include the failure to record products transferred between stores.

Pricing errors: the incorrect pricing of product, either below the planned price or incorrectly discounted in connection with product promotions.

Scanning errors: store staff incorrectly scanning products on the shelves causing errors in the inventory; checkout staff forgetting to scan products; or incorrectly entering the product identification code.

Incorrect inventory checks: staff mis-counting product in the warehouse, in the storeroom or on the shelves, causing errors in the expected and actual levels of stock.

Product promotion errors: products being sold at promotional prices when they should not be; associated products being sold at discounted prices when they should not be; or incorrect multi-buy discounts being applied.

Master file errors: incorrect entry of product type or quantities on the master inventory file. This can lead to companies thinking that they have more or less of a particular product than is currently in the supply chain.

Returns: products that have been legitimately returned by customers not re-entering the supply chain correctly.

Intra-company transfers: products being misplaced as they move between different parts of the organization, such as between different retail stores.

Malicious Shrinkage

Understanding Theft

Organizations can be the victims of theft carried out by both the staff they employ (internal theft) and from outsiders targeting their assets (external theft). The extent to which internal and external theft accounts for shrinkage is very much open to speculation, but in order to assess the potential role of Auto ID to tackle this problem, it is important to first of all understand the context of theft from organizations. Criminological research suggests that three key elements need to be present in order for an offence to be committed: a likely or motivated offender, a suitable target and the absence of a capable guardian.

Offence = *Motivated Offender + Suitable Target + Absence of Guardian*

Figure 3 Factors Required For an Offence to Take Place

In addition, there are a number of factors that act upon the offenders decision-making thought processes, which can be broken down into five areas: temptation; motivation; opportunity; risks and consequences (Figure 4).

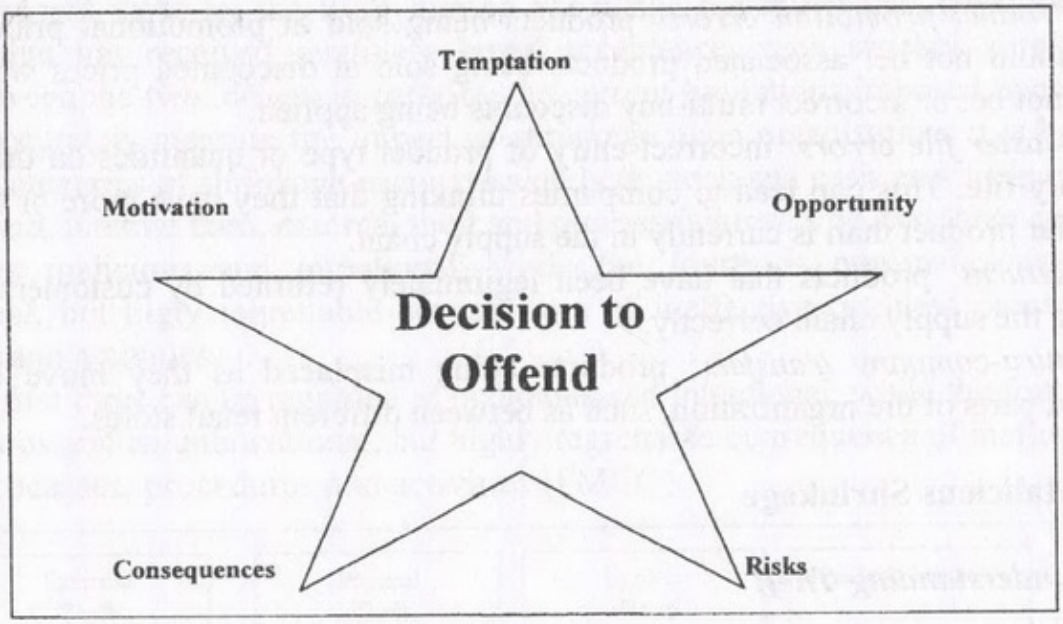

Figure 4. Factors Likely to Influence Decision to Offend

Internal Theft

The ECR survey estimated that for retailers 24 per cent, and for manufacturers 11 per cent of all losses were due to internal theft, which accounts for just over €3.7 billion of loss each year.

Looking at the specific threats presented by staff, four areas of concern are highlighted below:

Theft of Stock: members of staff removing goods from the premises, either by hiding it in their personal belongings, placing them outside the building ready for collection at a later date, or using the internal mail to post it to their home or some other location. This also includes theft by delivery staff, who remove stock from their vehicles.

Grazin: staff consuming stock while at work.

Collusion or Sweethearting: members of staff, often operating the till, collusding with customers to steal products. This is usually done either by staff not scanning items at the check out or mis-scanning (using a code for an item that is cheaper than the one being purchased). It can also include collusion when goods are being returned to the store (possibly stolen in the first place) and with delivery workers, suppliers and contractors.

Theft of Cash: members of staff stealing cash from the till or cash office, or short changing customers and pocketing the proceeds.

External Theft

In stark contrast to internal theft, external theft has for the most part dominated the stock loss agenda. There are five main threats from external theft:

Shoplifting: offenders entering a retail store and removing goods without paying for them. The goods can be concealed in many different ways (in bags, under clothing or secreted in push chairs and prams). This includes so called 'sweep thefts' when offenders take a large number of the same item at the same time, and tag switches when shop thieves replace a bar code or sales ticket with one representing a lesser value.

Returning stolen goods: shoplifters returning previously stolen items in order to obtain a cash refund. There are many variants of this, including: the purchase of the same product as the one stolen and then using the genuine receipt to refund the stolen item; using a stolen or invalid cheque book/credit card to purchase items and then returning the goods and getting a cash refund; or simply intimidating store staff, claiming that receipt-less items were genuinely purchased.

Grazing: customers consuming stock while they are in the store.

Till snatches: offenders targeting till operators, demanding or grabbing cash and usually carried out in a threatening or violent manner.

Burglary: offenders entering a building (usually by force) when it is closed, and removing goods and or cash.

Supplier Fraud

The recent workshop on RFID and shrinkage identified the key ways in which this form of malicious shrinkage took place. They were:

Under/Over Delivery: suppliers delivering less goods than the retailer ordered, but charging them for the full amount, or deliberately sending them more goods than they ordered and billing them for the new amount.

Phantom Delivery: suppliers claiming to have delivered orders when they have not.

Invoice Error: suppliers charging for more goods than delivered.

Returns: supplier not crediting retailers for the full value of goods returned by them.

Promotion: supplier using promotions to mask under or over deliveries or invoice errors.

Quality/Weight of Items: suppliers sending sub-quality products (compared to those stated on the original order) or delivering products that are below the original weight stated or expected (for instance in the delivery of fresh food).

The Shrinkage Reduction Road Map

The Road Map consists of a general approach made up of the steps that need to be followed, together with techniques and tools to help undertake each phase and to deal with problems that may be encountered.

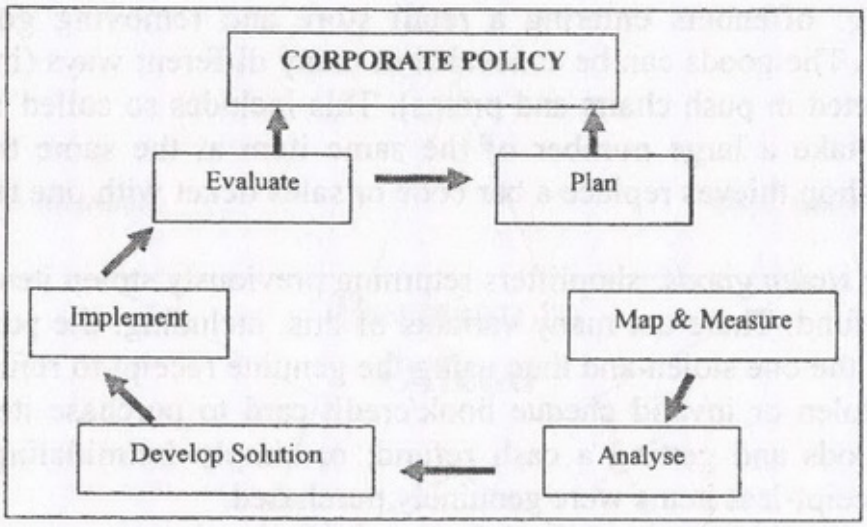

Figure 5: The ECR Shrinkage Reduction Road Map

Step 1: Develop a Project Plan

Objectives

- Set a systematic approach to the project
- Identify and assemble project resources
- Undertake a stakeholder analysis
- Set project goals

Step 2: Map key processes & gather measures

Objectives

- Map key processes
- Gather measures

Step 3: Analyse risk and identify root causes

Objectives

- Undertake a supply chain risk assessment
- Identify root causes of process failure

Identify Root Causes of Process Failure

A range of individual problems, as well as interactions between problems can cause supply chain Hot Spots. In order to reduce losses, a cause and effect analysis is undertaken on each Hot Spot. In keeping with the ECR principle of collaboration, the cause and effect analysis is once again a team effort. A further brainstorming session allows everyone to contribute their findings, experience and understanding. The key to the analysis is for the project team to repeatedly ask themselves variations around the question; How/why/when does process or procedural failure occur at this Hot Spot? An example of the results from a cause and effect analysis is shown in Figure 6.

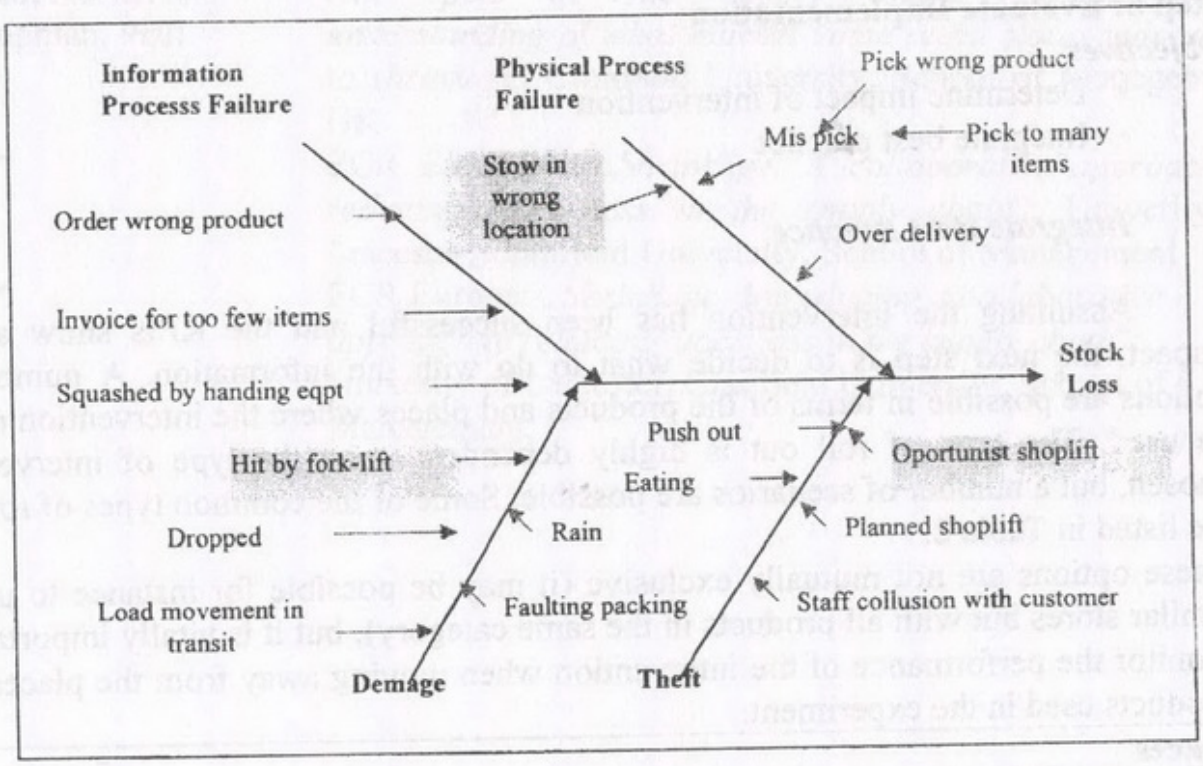

Figure 6 A Cause and Effect Diagram (Ishikawa)

Step 4: Develop Solutions and Prioritise Actions

Objectives

- Design solutions that reduce risk
- Balance solution cost against projected benefits

Step 5: Implement and Trial Solutions

Objectives:

- Develop implementation plans
- Implement solutions

Performance Measures

At the planning stage, the metrics to be used to evaluate the performance of an intervention need to be clearly identified.

However, other outcomes may need to be identified, such as:

- Actual cost against planned cost.
- Actual cost/benefit against planned cost/benefit.
- Levels of loss on similar products not included in the experiment.
- Levels of loss on unrelated products.
- Impact on working practices of store staff.
- Development of staff skills.
- Better relationship with supplier/retailer/other departments in the company.
- Extent to which staff awareness is raised.

Step 6: Evaluate Implementation

Objectives

- Determine impact of intervention
- Integrate best practice

Integrate Best Practice

Assuming the intervention has been successful and the KPIs show a real impact, the next step is to decide what to do with the information. A number of options are possible in terms of the products and places where the intervention might be used. The type of roll out is highly dependent upon the type of intervention chosen, but a number of scenarios are possible. Some of the common types of roll out are listed in Table 2.

These options are not mutually exclusive (it may be possible for instance to use in similar stores but with all products in the same category), but it is vitally important to monitor the performance of the intervention when moving away from the places and products used in the experiment.

Places
• Roll out to all stores • Roll out to similar stores • Roll out to specific stores with high levels of loss (Hot Stores)
Products
• Use on all products • Use on the same products only • Use on the other products in the same category • Use on other products in a similar category

Table 2. Types of Roll Aut

The overall aim of the Road Map is to help companies develop and deliver a corporale policy that enables organizations to reduce the impact of shrinkage, increase shopper satisfaction and improve the overall profitability of the company. It does this through utilising an approach that is holistic, systematic and based upon genuine collaboration between all partners in the supply chain.

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