

PRODUCT TAGGING AT HMV

Organisation	HMV
Trigger	<ul style="list-style-type: none"> • HMV Group initiative to survey security systems used in all stores around the world and review methods to improve store profitability and staff productivity.
Objectives	<p><i>Tagging system should:</i></p> <ul style="list-style-type: none"> • Reduce theft from stores and be cost-effective. • Improve staff working conditions. • Save staff time and be easy to apply to products. • Give a low false alarm rate and be deactivated reliably. • Be easy to remove by the purchaser after deactivation. • Not detract from attractiveness of store entrance.
Tools/techniques	<ul style="list-style-type: none"> • Exhaustive review of all systems on the market worldwide. • Regular three-way meetings between HMV, manufacturers of the tag itself and the external holder of the tag to discuss HMV's needs.
Enablers	<ul style="list-style-type: none"> • Positive attitude of store staff • Support from Board. • HMV's size increased the willingness of manufacturers to work with them to satisfy particular needs.
Tensions	<ul style="list-style-type: none"> • Trade-off between (i) cost of system and loss prevention & (ii) staff productivity and working environment.
Impact	<ul style="list-style-type: none"> • The store security programme has reduced theft by 20% over 3 years. • Employee satisfaction surveys indicate staff working-conditions have improved, as has productivity.
Lessons	<ul style="list-style-type: none"> • Working together with manufacturers ensures needs are understood and efficient product designs produced. • Improvements in working conditions can be achieved by good product design.

Synopsis

This case illustrates a product designed to increase resistance to crime in the form of theft. The case analyses the design, development and implementation of a new tagging system for compact discs, audio and video tapes. In 1996, the Head of Loss Prevention at HMV, Colin Cullerton, and his team undertook a review of all tagging technologies in a search for a better system. The existing tagging system required staff to shrink wrap the products in store, which was both an unpleasant and unproductive activity. Cullerton and his team identified manufacturers with whom they worked to design a new system, which used self-sealing, accousto-magnetic tags. These tags could be applied in store in a quick, easy, clean operation, could be reliably deactivated on purchase and reliably detected by pedestals at the store entrance manned by security staff. As a result of the introduction of this system, in conjunction with improvements in the overall security system, theft from stores has been reduced by 20%.

Background to Product Tagging at HMV

Sir Edward Elgar opened the first HMV store in Oxford Street in 1921, which sold sheet music, gramophones and recorded music. One of London's landmark stores during the 1920s and 1930s, it was destroyed by fire in 1937. By 1976 HMV had 20 stores around the UK and in 1986 opened its Oxford Circus store, the largest record store in the world, with 50,000 square feet of shop floor-space.

Whilst the other stores in the group operated a policy of putting only the empty cases of pre-recorded tapes on display, a system in which the purchaser takes the empty case to the till, and the sales assistant searches in the behind-counter store to find the matching tape, the Oxford Street store has always carried 'live' stock. Customers take their chosen purchase off the display shelf and bring it to the till to make payment. This enabled the store to carry a much bigger range of stock, provided a more pleasant shopping experience for customers by reducing queues at the tills and reduced the possibility of mismatching cases and contents. However, losses due to theft were high, some 2% of stock. Cullerton, Head of Loss Prevention, explains the security system used:

"The store relied on plain clothes store detectives, who were judged on how many shoplifters they could arrest. There was a fair amount of violence. There were no uniformed guards and we did not operate a 'bag' policy, that is, we did not require customers to leave bags at the store entrance. It became clear that we needed to invest in a better security system".

Tagging was a possible option. Cullerton knew of other retailers who had experimented with tagging of products as the sole anti-theft system in their stores and had "got their fingers burnt". Shoplifters still stole the products, despite the tag setting the alarm off. Stores soon realised that a high-profile, uniformed presence by the detection antennae was also required, so that, on entering the store, potential shoplifters would see these security staff and be unwilling to take the risk.

In the early 1980s HMV decided to experiment with the tagging of videos, in conjunction with a visible security presence, on the first floor of the Oxford Circus store. Tagging technology was in its infancy and they experienced some problems. The radio frequency (RF) tags were not particularly reliable in terms of detection or deactivation and they were very bulky. As technology advanced, high frequency (HF) systems came along, and from 1985 HMV converted to this system. These tags were much more reliable than the RF tags in terms of detection and deactivation but although somewhat flexible, they were still bulky. Videos and now, more importantly, CDs had to be shrink wrapped and the tag stuck onto this wrapping. Shrink wrapping was necessary because the tag had to be attached with permanent glue and the edges of the tag were sharp and thus it was not considered to be 'customer friendly' to attach it directly to the case. Nor was it staff-friendly. The shrink wrapping process was carried out in store. It took a lot of staff time and the fumes and noise from the machinery made it a very unpleasant and unpopular process.

As one alternative to this system, Cullerton and his team looked at a system used by some competitors' stores, the 'safer' or 'keeper' system, a 'case upon a case' system. The outer, clear case carries the tag. The customer takes the doubly encased product to the till where the outer case is removed and the case and tag reused. The system was trialled in one store by HMV, but rejected. The sales and recycling process proved a time consuming business and the large outer cases reduced the display space by 28%.

In 1995 the HMV group carried out a survey to determine what types of security systems were being used by all their stores worldwide. The following year they

initiated a review of methods to improve store profitability and staff productivity. All stores were found to be using the High Frequency (HF) tagging system, which, for the reasons described above, was not wholly satisfactory, especially from the viewpoint of staff productivity. Thus, as a result of these two initiatives, a development programme was set into motion to come up with a more effective and cost-efficient tagging system. This case is based on an interview with Colin Cullerton, Head of Loss Prevention, HMV.

Design Process

Research

The process started with an eight-month review of all potential technologies undertaken by Cullerton and a Business Analyst from HMV group Head Office. The two visited every manufacturer of tagging systems in the UK, USA and Japan. One technology emerged as the clear favourite, the accousto-magnetic (AM) system. It had a low false alarm rate, reliable deactivation, and allowed the pedestal antennae to be produced in clear acrylic, placed further apart, which allowed easier access to the store and provided a more friendly entrance area. HMV were impressed by this technology and committed worldwide to AM tagging. Work started on developing a system.

Modification

Sensormatic, the giant US electronic security company, the supplier of their previous HF system, developed an AM tag. However, the original designs were still a little bulky and, when applied to the CDs, the CDs would no longer fit into the display slots. HMV discussed the bulkiness problem with Sensormatic and in less than 4 months a small ultra thin strip, less than the width of a CD case, was developed (see Figure 1).



Figure 1: Ultra thin AM strip

A further problem was to develop an outer tag to wrap around the opening side of the CD case to seal the case and hold the inner AM tag in place. The self-sealing tag had to be able to be removed easily by the customer, removing the AM inner tag with it, thus leaving the customer with a pristine CD after purchase and removing the need for the problematic shrink wrapping process by HMV sales staff. Sensormatic

developed a partnership with a company, Entertainment UK, to develop a system and the joint partners then asked HMV to trial the new system.

A team of four headed by Cullerton and made up of an operations specialist, a warehousing/distribution specialist and a management accountant started work in February 1998 on what became known in HMV as the 'shrink wrap replacement plan'. This was a two-way development process between HMV and the Sensormatic-Entertainment UK partnership. Regular meetings were held between the parties and by August 1998 the prototype (see Figure 2) was on trial in an HMV store.

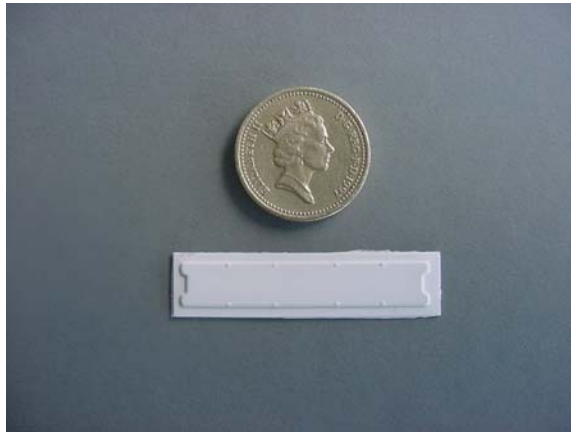


Figure 2: CD tagged with the new self-sealing tag

Implementation

The system was extremely successful. The plan was to put the system into two new stores and review the situation after 6 months. However, after the installation in a new store in September 1998, the HMV Board were so impressed with the working environment improvement that they committed funds to bring forward the schedule and install the system in all new stores. There were cost problems. The price of the tags did not come down as fast as HMV had envisaged. One year after the first installation the cost had only dropped by 8%. It was not until all 135 stores had been converted to the new system that a price drop of 30% was achieved.

The speeding up of the installations also caused some headaches for the manufacturer of the machine which applied the tags to the CDs. At the start of the process they had only produced 2 prototypes and HMV's requirement grew rapidly to 18 per month. Despite these problems, the system was introduced successfully.

Impact

Since the new tagging system was first introduced, some 3 years ago, loss due to shrinkage has reduced by 20%. However, during this period, the presence of uniformed security guards at the store entrances has increased, and it is therefore

impossible to say that this improvement can be solely attributed to the tagging system. Nonetheless, a key feature of the new tagging system has been the freeing up of sales staff from the time consuming shrink wrapping process, thus releasing more sales staff for the shop floor, an important factor in the shoplifting-deterrent armoury.

The introduction of the system has also had a major impact on employee working conditions and satisfaction. Employee satisfaction surveys indicate that staff are much happier with their working conditions and happier in their jobs.

Lessons Learned

This case demonstrates that working together with manufacturers ensures needs are fully understood and more efficient product designs are produced more quickly. Support at Board level is also shown to be a key feature, but perhaps the most important issue to emerge from this case is the impact of the system on the staff. A loss prevention scheme has demonstrated significant benefits both in terms of reduced shrinkage and improving staff working conditions.

References, Related Case Studies and Further Reading

Home Office Report on HMV: <http://www.homeoffice.gov.uk/prgpubs/fcpu5.pdf>

Design Policy Partnership (2001) *Off the Shelf*. University of Salford and Sheffield Hallam University.

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Ekblom's crime classification	Misappropriation
BCS crime classification	Theft/handling stolen goods
DAC	Product protection/improved working conditions
Primary motivation	Remove cost of theft/limitations of tagging
Type of designer	Industrial/engineers
Approach	Research and modify existing systems crime
Sector	Music
Location	Retail outlets
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DAC - HMV tagging