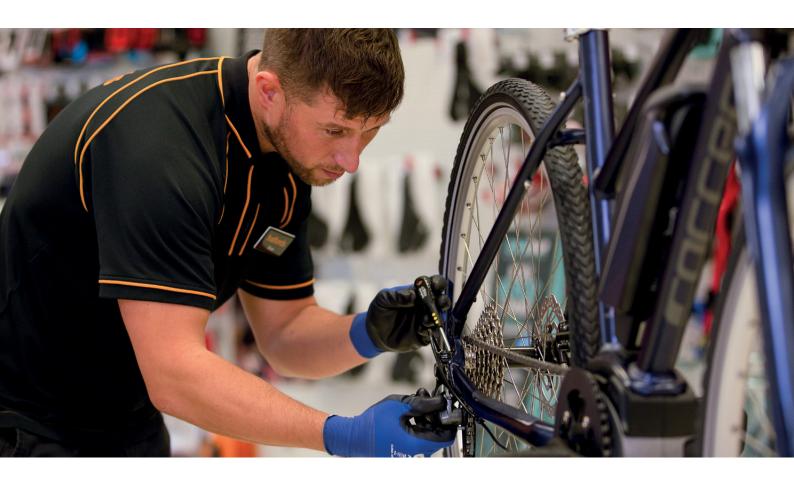Case Study

halfords

Halfords, the UK's leading cycling and automotive products retailer, boosts operational efficiencies and visibility into their loss prevention activities with Sensormatic, Source Tagging and Shrink Management as a Service (SMaaS) solutions.

Sensormatic
by Johnson Controls

Summary

Industry

Retailing automotive and cycling products, as well as providing car servicing and repairs

Solutions

- Acousto-Magnetic (AM,) Electronic Article Surveillance (EAS)
- Shrink Management as a Service (SMaaS)
- Source Tagging as a Service (STaaS)

Benefits

- Harmonised loss prevention system and visibility throughout the enterprise
- Increased level of customer service and customer satisfaction
- Substantial operational cost and time savings

Halfords is the UK's leading provider of motoring and cycling services and products. Customers shop at 386 Halfords stores, Performance Cycling at **tredz.co.uk** for direct home delivery plus 2 stores (trading as Tredz and Giant), 645 garages (trading as Halfords Autocentres, McConechy's, Universal, National Tyres and Lodge Tyre) and have access to 266 mobile service vans (trading as Halfords Mobile Expert, Tyres on the Drive and National) and 554 Commercial vans. Customers can also shop at **halfords.com** and **tredz.co.uk** for pick up at their local store or direct home delivery, as well as booking garage services online also at **halfords.com**.

The Challenge

With a high number of stores and garages spread across UK and Ireland, enhancing customer experience and optimising operational efficiency remained the key goals for Halfords.

1. Inspiring customers through a differentiated, super-specialist shopper experience – this includes a modern and exciting store environment where customers can experience and test the products first-hand.

2. Developing modern technologies and infrastructure to realise operational efficiencies, while at the same time managing a wide range of risks in-store, online, and within its different business units.

Over the past two decades, a variety of manufacturers have installed Electronic Article Surveillance (EAS) systems at Halfords, using a combination of AM and RF technologies, with RF pedestals being dominant throughout the estate of several hundred stores.

As none of the pedestals were remotely monitored, Halfords relied upon store employees testing the systems each week and manually reporting faults.

Additionally, significant costs were incurred through the manual application of labels at store level, fixing outdated pedestals, and stock losses. Only products with the highest risk of theft were protected, around 17% of the entire range.

James Crowther – Support Centre Profit Protection Manager said, "We completed a survey of all stores to review the performance of our EAS pedestals and discovered that only 20% of stores had systems that operated at optimum levels, with the biggest issue being older pedestals that had developed a 'gap' over time in the centre where a tag could pass through without activating the gates. We also found that 10% of stores had pedestals that did not work at all, but store employees were fully unaware of this fact.

With this insight it was decided we needed devices that are network connected into one EAS system, that could be remotely monitored so we would know instantly when they were not operating correctly.

Upon the completion of our review, it became evident that if we wanted our pedestals to activate every time a tagged product passed through (or as close to 100% as we could get), then Acousto-Magnetic (AM) technology labels best suited our difficult to tag product range, with the Sensormatic APX labels being our preferred choice."

Going on the offensive against stock losses

Over the preceding years, losses connected to these challenges added up to circa £1 million a year, which put pressure on the profit protection team to prevent shrink and help drive the profitability of the business.

"After reviewing the stockloss numbers for all of our products, over 1,000 products were selected to be tagged at source (which is significantly more than can be tagged in store by the employees). With such a diverse range of products in Halford's portfolio, there were several products that we wanted to secure but would struggle to activate most EAS pedestals due to challenges with either the product itself or the packaging. Many of our products contain fluids, have high metallic content or both, all of which are known to impair the performance of EAS labels."

The Solution

"To establish which technology would give us the best activation rates, we tested several easy products (no metal or fluid), together with some of our more challenging items", continued James Crowther. "We tagged each product with a variety of different manufacturers AM and RF labels and tested them using their recommended EAS pedestals.

As an average across all the products tested, the activation results ranged from 43% to 72% when using RF systems, but 90% to 98% of the time with AM systems. However, it was the difficult-to-protect product category that was the biggest differentiator when it comes to various EAS system performance.

Most of the tested RF labels simply did not work on those products, and even the very best labels did not achieve high activation rates. AM labels overcame these issues performing significantly better. The EAS system/label tag combination with the highest activation rates tested was the Sensormatic Synergy system using APX AM labels".

Recognising the strategic importance of advanced loss prevention technologies for its business, Halfords decided to invest in a best-of-class loss prevention programme and focused on three project pillars.

High Performance EAS Infrastructure	Source Tagging as a Service (STaaS)	Shrink Management as a Service (SMaaS)
Update and harmonise the EAS equipment to one technology (AM – acousto magnetic).	Remove manual tagging labour from the employees/store associates and have them source tagged (applied directly inside the packaging at the time of manufacturing).	Add a networking capacity to the EAS systems, to enable remote equipment diagnosis, up-and down-time visibility, remote maintenance and data gathering.
Increase EAS system performance rate to over 98%.	Expand the product protection to the selected 1000 items.	
Choose a modular EAS system that provides the flexibility to integrate or upgrade to RFID capabilities at any future point.	Increase label protection consistency and effectiveness.	
	Use source tagging partner support and service to ensure 100% tagging compliance and Key Performance Indicators (KPI) achievement.	

During the first phase of the project, Halfords and Sensormatic Solutions decided to concentrate on immediate improvement opportunities, namely:

- **Harmonise** its EAS estate, as a first step in re-specification of all new store openings with AM EAS systems and increasing benefits of higher detection rates, especially on metal–containing parts.

- **Invest** in the Source Tagging as a Service (STaaS) programme on their top 400 product lines in order to help increase merchandise protection without compromising open merchandising and customer experience.

- **Connect** 25 new stores to the Sensormatic Shrink Management as a Service (SMaaS) platform in order to gather insights into the general usability of its EAS systems, as well as shrink patterns and advanced loss prevention analytics in these estates.

The Results

During the initial 25 store roll-out, Halfords profit protection team proved that a connected, integrated loss prevention system enabled them to substantially lower operating costs, while increasing the level of product protection across the tested estates. By connecting their test stores to the SMaaS platform, they gathered invaluable insights into how the EAS systems were being used, as well as initial shrink trends, causes and patterns.

"We now have multiple stores with Sensormatic Synergy pedestals installed and networked, and all using the SMaaS platform. In the 3 months since these have been installed, shrinkage rates in these stores have been 36% lower than in the rest of our estate and we have known every time an issue has affected our pedestals (such as electrical interference), with the majority of issues being resolved remotely without the need for an engineer to visit the store.

By using the SMaaS dashboard we can now more easily distinguish shops that are heavily affected by external theft and have been able to take action to address this. Theft patterns are now much more visible with data to support, so if for example, a store see's consistently high alarm counts every Tuesday evening between 6pm & 7pm, then more colleagues can be deployed to the sales floor during these times to provide a deterrent."

James Crowther

Support Centre, Profit Protection Manager, Halfords

On an end-customer/shopper level	On a store/employee level
Better level of customer service (by removing the manual tasks of tagging at the stores).	Higher conversion rates and service-levels by freeing employee time from administrative tagging task to customer-facing activities.
Increased product availability and improved customer satisfaction (reduced number of stolen items means increased on-shelf availability).	Immediate product availability – source tagged products can be displayed directly after receiving the shipment, without the need to double-check and tag in-store.
Staff optimisation (by using the traffic counting module in the EAS antennas, the company could count gross footfall and spot peak hours where additional staffing might be required).	Higher level of confidence in product protection and system – if the system is alarming, it is for a reason!
	Eliminated costs of daily equipment checks and maintenance (most can be done remotely).

Current status

Despite the slowdown in project roll-out during the pandemic, Halfords stayed on course, and by the end of September 2023, they have successfully connected 173 stores to SMaaS with new EAS gates.

Since the first stores were installed back in 2019, Halfords have seen an average of 9% reduction in shrink rates versus stores without Synergy EAS system.

Additionally, the SMaaS platform has also allowed Halfords to unveil alarm patterns and focus on stores with unusually high alarm counts. In many cases, bad processes and inaccurate tagging created a lot of noise and false alarms in stores, which store employees started to simply ignore. Tackling such issues meant that stores are now more focused and aware that when an alarm activates, action needs to be taken.

About Johnson Controls

At Johnson Controls (NYSE:JCI), we transform the environments where people live, work, learn and play. As the global leader in smart, healthy and sustainable buildings, our mission is to reimagine the performance of buildings to serve people, places and the planet. Building on a proud history of nearly 140 years of innovation, we deliver the blueprint of the future for industries such as healthcare, schools, data centers, airports, stadiums, manufacturing and beyond through OpenBlue, our comprehensive digital offering. Today, with a global team of 100,000 experts in more than 150 countries, Johnson Controls offers the world`s largest portfolio of building technology and software as well as service solutions from some of the most trusted names in the industry. Visit **www.johnsoncontrols.com** for more information and follow **@johnsoncontrols** on social platforms.

About Sensormatic Solutions

Sensormatic Solutions is the leading global retail solutions portfolio of Johnson Controls powering operational excellence at scale and enabling smart and connected shopper engagement. Our intelligent digital operating platform – Sensormatic IQ – combines the full Sensormatic Solutions portfolio, including third-party data to deliver unmatched insights into shopper experience, inventory intelligence, loss prevention and operational effectiveness with advanced technologies, like AI and Machine Learning. This enables retailers to act on prescriptive and predictive data-driven outcomes to confidently move into the future. Please visit **Sensormatic Solutions** or follow us on **LinkedIn**, **X**, and our **YouTube channel**.