

Axis cameras watch shoppers' behavior. Network video equipment used to analyze shopping habits by SBXL.



Organization:
Shopping Behaviour
Xplained

Location:
UK and Europe

Industry segment:
Retail

Application:
Customer behavior
analysis

Axis partners:
InCam, Milestone
Systems

Mission

Shopping Behaviour Xplained (SBXL) provides in-depth analysis to the retail sector on what shoppers actually do in-store and how their conscious and sub-conscious motivations and opinions affect their buying decisions. SBXL uses surveillance cameras to monitor a specific product or aisle in-store and record shopper's behavior, enabling them to identify barriers to sale for product manufacturers and retailers. Recording quality, accessibility to data and portability of cameras are essential requirements for SBXL, and it approached Axis partner InCam to recommend an IP-based surveillance solution suitable for this highly specialized retail application.

Solution

InCam designed and commissioned a compact, robust, easy-to-set up and portable bespoke 'kit' including nine Axis network cameras: the AXIS 207W, AXIS 211M and AXIS 214 PTZ models. SBXL operators use the AXIS 214 PTZ wirelessly to move and track shopping behavior as it

provides more depth and breadth of coverage than fixed cameras can provide on their own. Operators can use a wireless laptop to maneuver the camera as required.

Result

The solution provided by InCam incorporated Axis cameras and provided SBXL with a portable solution that offers excellent recording quality, maneuverability and scalability to store hours of footage. SBXL now has an essential tool kit it can use around the globe to analyze shoppers' every move and provide essential feedback on the behavior of customers – everything from how they move around the store, to what they pick up and put back. Depending on the results of its analysis, SBXL can then recommend changes the brands and retailers can make to increase that chance of purchase e.g. an increase in the font size on packaging or the repositioning of goods to a different part of the store.

"InCam was able to come up with a solution that was compact, robust and easy-to-set up, but most importantly offered us excellent recording quality, maneuverability and scalability to store hours of footage. There is a huge difference between shoppers and consumers and the quality of the Axis cameras allows us to analyze real shoppers, really shopping."

Phillip Adcock, managing director, Shopping Behaviour Xplained.

Shopping habits revealed

SBXL works for some of the world's best-known retailers and brands and has conducted its research in a variety of environments including betting shops, bars, supermarkets and petrol station forecourts. By analyzing the behavior of shoppers, SBXL is able to identify the barriers to purchase which help retailers and product manufacturers make necessary changes to their store layout or products in order to help increase sales.

Shopping behavior analysis brings the shopper into the heart of retail marketing, merchandising and category management. Following a period of in-store monitoring, SBXL provides analysis which examines the number of shoppers that look at a product but who then choose to buy something else. It also analyzes when and where purchasing decisions are really made and looks at what in-store information actually influences shoppers and how. Monitoring the length of time a shopper spends in a particular aisle, whether they select the product or return it to the shelf, provides SBXL with essential data to build a picture of the shoppers' habits.

Level of detail

The choice of cameras used by SBXL to record shopping behavior is extremely important as operators need to be able to zoom in and analyze what a shopper has picked up and examine how he or she is looking at the product's packaging. The cameras also need to be able to follow the shopper's movements and monitor the length of time spent in a specific aisle.

From a purely practical point of view, the cameras need to be wireless, compact, robust and easy-to-set up as the company transports the cameras from store-to-store. SBXL approached InCam to provide a robust, portable IP-based surveillance solution that would offer high-quality, detailed footage. It also needed to be able to store a large amount of data to allow SBXL to carry out the thorough analysis necessary to provide feedback to their customers.

InCam also included Milestone XProtect® Professional video management software to allow SBXL to carefully

analyze and extract key imagery for presentations to retail executives. SBXL reviews the recorded footage and provides its customer with detailed data, broken down into categories such as gender, time and length of shopping expedition and whether or not a basket or trolley is used.

A portable solution

InCam recommended Axis cameras to SBXL due to the quality and breadth of product portfolio and innovation with new technologies such as megapixel and H.264 encoding. H.264 is a new open standard for video encoding and can, without compromising image quality, reduce the size of a digital video file by as much as 50 percent when compared with the MPEG-4 standard. This means that much less network bandwidth and storage space are required for video files. This is beneficial to SBXL as it has very large amounts of data to record and store.

InCam provided SBXL with a number of custom-built, portable kits incorporating AXIS 207W, AXIS 211M and AXIS 214 PTZ cameras. The AXIS 214 PTZ is a pan and tilt camera with 18x optical zoom and auto-focus. The motorized lens with auto focus makes it possible to zoom in, with no loss of clarity, on small or distant objects. SBXL operatives use this camera wirelessly to move and track shopping behavior as it provides more depth and breadth of coverage than fixed cameras can provide on their own, and can be maneuvered as required.

SBXL uses high-end Dell and HP laptops to power the Milestone recording solution using Milestone XProtect® Professional 6.5 Infrastructure which consists of a mix of Power over Ethernet (PoE) and wireless (dual) band networking, depending entirely on the filming and camera placement requirements.

Now equipped with four kits each containing the Axis cameras, wired and multi-band wireless infrastructure and ruggedized casing to safely transport the equipment, SBXL has the necessary equipment to provide essential feedback to its customers on what shoppers actually do in-store, why, and what to do about it to improve sales.



Shopping Behaviour Xplained Ltd

inCAM
digital surveillance

