

Rfid Reinvents Itself And Retail With It

The retail industry stands poised to benefit exponentially from advancements that are spurring a plethora of new applications for already proven radio frequency identification (RFID) technology. On-pitch printing and encoding technology are increasing the accuracy while decreasing the size and cost of RFID tags, and consequently increasing the value of the technology beyond just the supply chain and throughout the entire value chain.

Item-level tagging is at the core of RFID's value to the retail industry. Value that is experienced as 100% inventory accuracy, a reduction in the man hours required to track and manage that inventory, a decrease in loss and theft, a simplified checkout experience, increased customer satisfaction and sales, and as a result a rapid and highly measurable return on investment in RFID.

"With item-level tagging, from a retail perspective, this value is exploited from the minute the products arrive at goods receiving until they leave the store in the customer's hands; offering retailers unprecedented visibility into their business," said Kevin Norton, Director Mobility Solutions Southern Africa at Westcon-Comstor Southern Africa.

On receipt of the delivered goods, RFID yields retailers an up to 96% reduction in cycle-counting time versus a barcode system. This according to a 2009 study by the University of Arkansas Information Technology Research Institute, which compared the time it took to count items using RFID versus a barcode scanner. The exercise revealed that scanning 10 000 items took a mere two hours with RFID whereas it took 53 hours using a barcode scanner.

"As for inventory, item-level tracking offers 100% accuracy and a real time view on what is available and on which rack it's located. The latter is a significant advantage for customers looking for a particular item in a specific colour and size, and can mean the difference between a sale and a customer who leaves to shop elsewhere," explained Norton. "As for inventory management, it goes without saying that the time and labour savings are significant."

Other innovative retail applications that are gaining traction, and which allow retailers to extract more value and ROI from RFID, include smart checkout systems where cashiers simply drop the customer's items on the counter and an RFID scanner rings the total up instantly. In addition, by combining Electronic Article Surveillance (EAS) and RFID tags into one, retailers can identify when, and which, items left the store without being paid for.

Of course for RFID to be effective, accuracy is needed and it starts at the point of origin of the smart label – usually the manufacturer. Each smart label must contain 100% accurate and unique data pertaining to that item, which is reliably transferred to the tag by specially designed RFID printer/encoders. Finally, the tags must be securely affixed or the exercise is worthless. The customer, or retailer in this instance, is king though and around the globe demand by retail trendsetters is driving the use of superior RFID equipment like that of Zebra Technologies, whose suite of RFID products is distributed and supported in Southern Africa by Westcon-Comstor.

"New technology is always exciting, but what's even more exciting is to see an established technology like RFID grow, develop and be reinvented. RFID may not be the new kid on the block, but it has a whole lot of new applications that have placed it squarely back at the bleeding edge of technology. Frankly we're excited about RFID, and retailers should be too," Norton concluded.