

RFID Is Fit to Track Clothes

Wilfried Kanzok of Kaufhof Warenhaus says RFID will be widely adopted in the textile industry as soon as tag prices fall a little further.

By Mark Roberti

Mar. 13, 2006—Wilfried Kanzok, head of logistics for central functions at German retailer Kaufhof Warenhaus, told an audience at CeBIT, the large electronics exhibition in Hanover, Germany, that mass adoption of radio frequency identification technology in the clothing and textile industry will soon be a reality. He said the benefits have been proven, with only a further decline in the price of tags necessary before widespread use can begin.

Speaking at the RFID Forum, organized at CeBIT by GS1 Germany and German IT trade association BITKOM, Kanzok said the clothing industry has changed dramatically in the past 10 years. There has been a rise in vertically integrated players—such as Benetton, Esprit and the Gap—as well as an influx of discount retailers into the market.

Department stores, the traditional outlet for clothes, need to innovate and provide a better customer experience. Kaufhof, part of the Metro Group, has tested RFID at two of its Gerry Webber stores for the past two years. Webber, which sells women's clothes, has found that the technology provides benefits both in the supply chain and in stores.

The benefits of using RFID in logistics involve being able to receive goods accurately without opening a box. When a box of jeans is shipped to a distribution center, it can be scanned and the contents confirmed, and the box can then be put right on a truck bound for a store. "With RFID, we can execute these processes 22 times faster than before," Kanzok said.

Kanzok added that Kaufhof has been able to read tags on items at a rate of 150 to 160 tags per second. He believes the company can eventually increase that to 500 tags per second, he said, though he did not explain how this could be done.

The key benefit to using RFID in the store is the improved on-shelf availability of items. Kanzok cited a German regional government survey, which found that 15 percent to 20 percent of clothing sales are lost because the right size is not available when the customer wants to buy an item.

In addition, Kanzok said, RFID speeds up the process of taking inventory. "RFID is also more accurate. When you take inventory manually, you might get a wrong count and have to recount. We have proved, in large field trials, that RFID is more than 99 percent accurate."

To reduce costs, Kaufhof has opted for a handheld reader, rather than fixed shelf readers; one handheld reader can cover the entire store, whereas it might take dozens of shelf readers to cover all the store shelves. It can take two to two and a half hours to take inventory in stores without RFID. Using a handheld reader, it takes only five minutes.

The main reason clothing companies are not rolling out RFID right now is the cost of the tag. According to Kanzok, the cost of RFID interrogators and software is not significant—the big issue is tag cost. "We are selling 70 million textile items per year," he said. "At 20 cents per tag, it will cost us an additional \$14 million to tag every item, so we need to find \$14 million in savings or additional sales to justify the cost."

Kanzok estimated that the cost of the entire label, with an embedded RFID transponder, would need to be 10 cents before the clothing industry would adopt RFID. "Today, a paper label costs from 3 to 15 cents, depending on the quality of the paper, printing and so on," he said. "RFID inlays are around 10 cents, so we are not that far away" from the 10-cent threshold needed to spur adoption.

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