NRF® StORES®

Caging Technology

Tesco implements RFID to boost supply chain efficiency

BY LAURI GIESEN

Making sure the right products get to the right store can be a big challenge for a large chain. Few retailers know this better than U.K.-based Tesco: With more than 2,000 stores and 30 distribution centers around the world, it had a tough task ensuring its stores were getting the correct merchandise.

With its prior system of having employees manually read tags and match that information against a chart, the company often had merchandise being shipped off to the wrong location. About a year ago, however, Tesco implemented an asset-tracking and work-in-process solution from Waltham, Mass.-based OATSystems that addressed concerns about asset visibility and utilization. The RFID system also was designed to increase supply efficiencies and offer error-proof deliveries.

The system places RFID tags on each rolling cage of merchandise. Before a cage is loaded on a truck, a reader checks each tag. If the cage's reading matches what is supposed to be in that delivery, a green light goes on and the cage is placed on the truck. If the cage is headed for the wrong location, the system flags it and it can be rerouted.

To make even more certain items are headed for the right location, the tag on each cage is read again when it arrives at the store's receiving door.

What the system addresses are problems with having excess merchandise

arrive at one store and none arrive at another, says Paul Cataldo, vice president of marketing for OATSystems.

"Once the merchandise has been verified, it can be moved to a secured area or right to the sales floor, but either way, the store knows it has the right merchandise on hand," he says. "That creates a big savings for Tesco."

Building confidence

Tesco spokesman David Nieberg says the company has "identified existing process errors and qualified them. We have achieved very positive read rates in the depot and the stores, which has built confidence in the technology and allowed us to learn which tags performed best in different situations."

The system was at Tesco stores in Northern Ireland from March through August before rollout to other operations began, Nieberg says. Within the first week of installation, errors were

caught by the system and Tesco was able to correct them.

Besides simply catching mistakes, Tesco can analyze the errors to search for patterns. "This technology allows them to get a handle on where there are problems so they're not just catching errors, but preventing them," Cataldo says.

Chris Brocklesby, director of U.K. IT for Tesco, says OATSystems "has given us visibility into our supply chain that was not possible before. It has enabled us to see where and when delivery errors occur and better understand how this impacts stores and, therefore, our customers."

The system addresses one of the biggest concerns retailers have: asset tracking. A 2007 study by the Council of Supply Chain Management Professionals found that businesses' total logistics costs — transportation, inventory carrying and order administration — have risen more than 64 percent in the past decade. Systems that improve these operations can have a big impact on a chain's bottom line, but their implementation is not always easy.

"RFID technology requires time to optimize the solution," Nieberg says. "Developing the solution to the point that we could roll it out took us longer than the trial period. However, I understand much of the functionality we developed with OAT is now part of their standard offering."

> OATSystems "has enabled us to see where and when delivery errors occur and better understand how this impacts stores and, therefore, our customers."
>
> **— Chris Brocklesby, Tesco**

Nice fit, minimal integration

One thing that made the implementation process somewhat easier is that the OAT technology fit nicely with existing technology and computer systems with only minimal integration.

OATSystems has 200 RFID systems deployed on five continents, and its experience in developing customized systems has allowed it to incorporate its findings in a new standardized solution.

"We've long had a presence in retail, but it had been pockets of opportunity where retailers saw value in using the technology more on the item level —

such as monitoring the supply levels of perishable items in stock," Cataldo says. But distribution is a good place to start when addressing supply chain problems. "If you begin at the distribution level, you can catch problems quickly and it is less costly," he says. "Ultimately, having the right merchandise at each store will improve sales and customer satisfaction."

With its DC operations greatly improved, one of the next decisions facing

> **"Ultimately, having the right merchandise at each store will improve sales and customer satisfaction."**
>
> — **Paul Cataldo, OATSystems**

The system addresses problems with having excess merchandise arrive at one store and none arrive at another.

Tesco is whether to address item-level tracking through the same portal designed for cage tracking. A number of retailers are using a similar application to track item-level inventory inside their stores, Cataldo says.

"A store might have a couple hundred different varieties of jeans by sizes, styles and brands and it is hard to track the merchandise," he says. "Additionally, it is an item where there is a high amount of shrinkage and theft. Most stores can take physical inventory only once or twice a year. As a result, it is difficult to keep a good count on the merchandise and you end up with too much or you run out of stock. Either way, it can be costly to retailers not to have a good count."

Through the use of RFID, a store can cycle count items as often as twice a day. "You really understand what items are on your shelves and can avoid mark-downs," Cataldo says. **STORES**

Lauri Giesen is a Libertyville, Ill.-based business writer with extensive experience in covering payment and finance issues.

O A T

OATSystems: Transforming RFID Data into Value

OATSystems, Inc.
200 West Street
Waltham, MA 02451

Tel: (781) 907-6100
Fax: (781) 907-6098

www.oatsystems.com

43333