Handleman Deploys RFID for Supply-Chain, Internal Benefits

The entertainment CD and DVD distributor is tagging individual items to improve supply-chain tracking and replenishment.

By Beth Bacheldor

Aug. 9, 2007—Entertainment distributor and category manager Handleman Company is building item-level RFID functionality into its operations so it can provide faster, more transparent and more intelligent supply-chain services to its customers and suppliers.

"We are a distributor and category manager that sits in the middle, between labels, studios, publishers and retailers," says Khaled Haram, Handleman's senior VP and CIO. Handleman is a $1.3 billion-a-year distributor and category manager of CDs, console video games and other products to retailers in the United States, United Kingdom and Canada. "We have the ability to transform any commodity-based service to a premium value-added service through technology, by applying visibility, velocity and intelligence to that service. Handleman Company has developed a series of systems and programs that captures and manages information on individual items through the use of RFID technology."

Handleman began developing enhanced tagging on individual items before Wal-Mart issued RFID tagging requirements (see Movie, Music Suppliers Opt for Simple RFID Compliance). The company also participated in a U.K.-government initiative designed to test RFID's ability to help prevent CD counterfeiting (see CD Tracking Project Deemed A Hit). Recently, the company began to expand and market its unique systems and programs that utilize RFID. This includes integrating RFID tags into its high-speed shipping lines within its distribution facilities.

Now, Handleman has installed an RFID printer-encoder and applicator on a shipping line in its Indianapolis distribution center, which automatically tags individual CDs, console video games and some promotional items (bundles, packs and so forth) as they move down conveyor belts.

The system automatically associates the unique ID number in the RFID tag with an item's Universal Product Code (UPC). The company's electronic resource planning (ERP) system, which handles purchase orders, is integrated with program logic controllers on the shipping line. When a purchase order requiring RFID-tagged products is filed, the ERP set-up instructs the system to apply tags to the appropriate products, with no human involvement.

As items are placed in their respective cartons, the system creates the proper item-to-carton associations and generates advance shipping notices (ASNs)—formatted and configured to each retailer's specifications—that include each item's unique ID number, or Global Trade Identification Number (GTIN), and the associated UPC, as well as the number of items in each case and the case's UPC code and GTIN. To give suppliers and retailers visibility to the items in the supply chain, Handleman has also developed a Web-based portal that its customers can access to check the status of their shipments.

In addition, Handleman is testing methods to help its employees merchandise and stock shelves at retail stores with handheld RFID interrogators. "We can take the same ASN we send to the retailer and send it to our field merchandising representatives," says Haram. "Now the Handleman rep gets a notice that something has been sent to a store, and when it is expected to arrive. The rep can go to the store and locate the shipment in the back room. The rep's RFID reader will beep as they get near a tagged carton, allowing the rep to take the carton and merchandise the products on the floor. With this technology, we have given our reps not just visibility but also velocity in performing this task. The back rooms of retailers can make it extremely challenging to locate boxes, particularly during the holiday season. This speeds up that process."

Handleman is not presently RFID-tagging items automatically at the full line speed of 180 to 200 tags per minute. Instead, the applicator affixes about 45 tags per minute. Haram says Handleman can quickly upgrade the capacity and be able to operate the lines at full speed. To ensure the right tags are applied to the correct cartons, and that the tags are working properly, Handleman integrated an error-checking capability into its operations.

"So if a UPC code does not match the associated RFID code, the carton or unit is diverted," Haram says. "If there's a bad RFID read, the carton or unit is kicked out. Or if the bar code has an issue, we kick it out."

An item or carton that has been kicked out is diverted to an audit station, where employees can check the content and correct any issues they identify. "It is critical to achieve an extremely high rate of accuracy," Haram explains. "Otherwise, you will be passing the problem on downstream, where it is more difficult and expensive to fix." Haram will be a keynote speaker at EPC Connection 2007, a conference and exhibition co-produced by EPCglobal North America and RFID Journal.

RELATED_ARTICLES Handleman's RFID investment is designed not only to provide entertainment publishers and retailers a more nimble and transparent distribution service, but also to offer consumer goods companies a method of speeding up the time needed for a product to reach the retailer's shelf, as well as to improve the visibility of their goods in the supply chain. Haram says the technology may also help improve other processes as well.

"You know how sometimes people talk about technology and the killer application? With RFID, we think it is going to be about killer processes," Haram says. For example, he states, the time it takes to check inventory in a retail store can be drastically reduced using the technology. "It can take several days to inventory the music department in a large store. With RFID, you can go in with a handheld and get an exact inventory count in a few hours."