

Accuracy In Action: Item-Level RFID Takes Off

A variety of apparel brands and retailers are embracing item-level RFID and achieving benefits including inventory accuracy, increased sales and labor optimization.

Cost-effective item-level RFID applications — once thought unattainable — are rapidly gaining ground in the apparel industry. Major retailers such as Macy's, Kohl's and Lord & Taylor as well as smaller chains, specialized retailers and apparel brands are pioneering the use of item-level RFID and reaping benefits including visibility, improved inventory accuracy and efficiency, and sales uplift.

Lord & Taylor, for example, recently implemented item-level RFID in the shoe department at its flagship New York City store. The retailer's objective is to ensure that every shoe available in the stockroom always remains on display on the sales floor. This way, customers have access to the retailer's entire shoe selection — and have more merchandise to choose from, and hopefully, purchase.

Prior to the implementation, making sure every shoe model was visible on the sales floor involved manual, time-intensive inventory checks; today Lord & Taylor employees quickly scan the entire shoe sales floor with handheld RFID readers, and fill in any missing models with stock from the backroom. The company has reported increased sales and labor savings since the implementation.

Lord & Taylor is not alone in seeing these improvements. "Implementation of item-level RFID takes away the need for manual cycle counting. Instead of an associate manually pulling every UPC and tag-

ging it on a tick sheet, it can be done using hardware and software, reducing the time of the cycle counting process by 96 percent," says Melanie Nuce, vice president of apparel and general merchandise for GS1, a global information standards organization.



A C&A employee performs a cycle count on jeans with a handheld RFID reader equipped with Checkpoint's Merchandise Visibility software.

Why now?

So why the drive toward item-level use now? For one thing, the cost barrier has been greatly reduced. Tag costs have dropped as much as 40 percent over the past 18 months, with tag prices today commonly ranging from 7 cents to 12 cents each.

In addition, the trend toward tagging merchandise further upstream is helping to bring costs down. (Placing tags on items at the point of manufacture also brings the added benefit of improved supply chain visibility.) "The further up the supply chain

you apply the tags, the less it costs," Nuce explains. "The push in the industry is to get to that tipping point where enough retailers and brands are making use of the technology that it behooves the manufacturer to put it on at the point of source. And we are getting close."

For now, frequently replenished items such as men's basics and suits, denim, footwear, and intimates, and highly valuable goods such as jewelry and handbags are leading the way in upstream tagging, she notes.

But more importantly, the apparel industry is embracing item-level RFID because of an expanding range of use cases. According to Vinod Rangarajan and Randy Unger of Kurt Salmon, item-level RFID is

suddenly garnering so much attention because it is a fundamental building block for omnichannel retailing. To be able to fully capitalize on having multiple sales channels, retailers must obtain accurate, enterprise-wide inventory availability — and item-level RFID implementations are a crucial first step, they explain in a recent report, *RFID's New Reality*.

"Item-level RFID ties into omnichannel retailing because it helps retailers know exactly where their products are — whether in an online DC or on the sales floor or stock room of a brick & mortar store," adds Nuce. "This tight inventory control makes it that much more certain retailers can fulfill customer's orders." ▶

VENDOR VIEWPOINT

Prasad Putta, Executive Vice President and General Manager of Merchandise Visibility and RFID, Checkpoint Systems



Apparel: As RFID adoption among apparel companies has picked up, the benefits of the technology are becoming clearer and more defined. What would you identify as the top three areas to date where apparel retailers are realizing the most benefit from their investment in the technology?

PUTTA: The No. 1 benefit retailers are enjoying because of RFID adoption is in increased inventory accuracy, which leads very directly to reduced out-of-stocks, reduced working capital, and increased sales, as well as a better shopper experience. Studies show that typical PI accuracy is about 65 percent; the gap between reported and actual inventory availability can literally make the difference between a profitable store and one that loses money. Several independent studies note that RFID-enabled stores, by contrast, enjoy inventory accuracy of 98 percent or more; this alone justifies retailers' strategic investments in RFID.

A second key benefit of today's RFID solutions is enabling omnichannel retailing, including e-commerce, mobile shopping/ordering, in-store pick up, and more. All of these rely upon inventory accuracy. This is where RFID changes the game, as evidenced by major retailers like Macy's, whose CEO recently said, "We see RFID as a very big part of our future, not just on how we run our business but certainly from an omnichannel perspective as well."

Third is the ability to better integrate loss prevention and store operations, using a OneTag approach to support both LP and merchandise visibility. Since most apparel retailers now have adopted RFID for at least some inventory-based activities, OneTag is an efficient and economical decision to incorporate loss prevention as well.

Additionally, there are multiple supply chain benefits for RFID, notably around ensuring vendor compliance. By RFID-enabling merchandise at the source, retailers gain much more granular visibility into shipments from Asia to DCs and from DCs to stores, ensuring the right quantities, mix of SKUs, colors, styles, etc. are being shipped, and even that the items are RFID-tagged for in-store benefits downstream.

Apparel: We're seeing apparel companies get more from RFID when they integrate it more deeply into their supply chains, i.e., tagging at the source of production instead of at the DC. At a time when omnichannel has become a paramount goal for most retailers, what benefits does this offer?

PUTTA: It's first important to think about why source tagging is so important for RFID deployments. When a retailer is getting started with RFID in a pilot stage, tagging in the store or perhaps in the DC works well. But as a retailer scales up, it is not economical or scalable to apply tags in these locations. Also, source tagging leverages the same process that retailers employ today with the application of a variety of tags and labels; simply with the replacement of an encoded RFID tag, the item is now RFID-enabled, with no increase in labor costs. Source tagging also reduces the risk of errors that can occur further downstream, because of standardized processes and procedures at the point of manufacture.

With all items source-tagged, retailers are much better prepared for omnichannel. They gain full supply chain visibility into the location of merchandise across factories, DCs, and stores, better positioning them to leverage stores as local fulfillment centers, with hyper-accurate inventory visibility that promotes greater merchandise availability. Walmart for example, is embracing omnichannel, using in-store personnel to fulfill orders, and RFID solutions provide real-time inventory visibility enabling faster and more accurate order fulfillment. According to RFID expert Bill Hardgrave, dean of college of business at Auburn University, traditional physical retail outlets using RFID to support their omnichannel initiatives are able to compete more effectively against leading online retailers by leveraging a wider collection of physical locations.

Apparel: The 800-pound gorilla in the room where RFID conversations take place has been the cost of the technology, but falling tag prices have shrink that gorilla to more of a monkey. Still, infrastructure costs for a full-blown RFID program represent a significant investment for retailers. What tips can you provide for helping retailers determine whether or not the time is right for RFID in their particular enterprise?

PUTTA: Cost is certainly an important factor in the decision-making process for adopting any new technology; as emerging technologies mature, costs normalize, much as we have seen with RFID over the past several years. More importantly, these decisions really come down to return on investment. When deploying RFID, retailers generally see compelling increases in sales by 3 percent to 6 percent, often significantly higher. The

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cost for deploying RFID then, is integrally tied to performance, and proves itself in a compelling ROI typically under 12 months.

To determine if this is the right time for RFID, retailers need to ask themselves four questions:

1. *Do we have the right cross-functional team engaged in this initiative so that we can obtain all of the benefits?*

Retailers need IT involved to ensure integration with key back-end systems, Operations to leverage RFID for replenishment, and Sourcing to optimize source tagging critical for RFID roll-outs, for example. These and other functions must be part of the core team to ensure success with RFID.

2. *Are we prepared to integrate the real-time RFID data into our systems so that we can take action appropriately?*

RFID in retail is all about leveraging item-level inventory visibility to improve operations, and it offers tremendous benefits to retailers who are prepared to leverage them, integrating the data into their inventory and other enterprise systems in order to get the immediate and real-time value.

3. *Are we prepared for RFID source-tagging?*

Source-tagging is the economical and scalable way to apply tags in a broad roll-out, and retailers need to prepare for this key enabling step.

4. *Which areas of our operation are best positioned to take advantage of RFID to enhance key workflows?*

RFID data can be leveraged for multiple benefits, for example by Operations to enhance inventory management, Ecommerce to enable omni-channel, and Loss Prevention to enhance shrink management cost-effectively. Retailers should examine their operations and prepare internally to leverage the value of the information that RFID provides.

To sum it up, RFID plays a key role in helping retailers improve their operations, increase sales, and enhance the consumer's experience, and the ROI is compelling. Smart retailers are aligning systems and people to obtain the value today, and enjoying a tremendous competitive advantage as a result.

Vendor Viewpoint is a regular Apparel advertorial feature.

Another new use case for item-level RFID is anti-counterfeiting and product authenticity, Nuce adds. "We are just dipping our toes into the water on this aspect, but it is promising," she says.

Here, a look at two apparel firms that have taken the promise of item-level RFID and turned it into reality.

C&A case study: conquering size and SKU complexity

As an apparel retailer that caters to "everyone from age 0-100," size and SKU complexity are a given for C&A, one of Europe's leading fashion retail chains. The company, which operates 1,600 stores in 20 European countries, stocks more than 400 different SKUs on its ladies' jeans wall, and offers 30 to 40 different sizes just for men's suits. The stores also offer other specialized categories such as large sizes and maternity.

"We have a huge number of SKUs in our stores, so due to size complexity it is hard to guarantee shelf availability for every SKU. We also run the risk that inventory data in our systems differs significantly from the actual stock that is available in the store," explains Joachim Wilkens, C&A's supply chain development manager.

That's why the company has embraced item-level RFID. After an initial pilot in five locations in Germany — launched in June 2012 using Motorola readers and Checkpoint Systems' RF/RFID antennas, point of sale RFID solution, and software — C&A has expanded its RFID trial to 25 stores. It has also expanded the categories being tagged to include all of its most high-demand items: men's and women's jeans, ladies' and children's underwear, and men's suits, blazers and trousers.

The aim of the item-level initiative? To provide an automated way of tracking inventory as it travels from C&A's DC to each specific store, and then knowing where goods are located within each store (in the back room or out on the sales floor); and which goods have sold. The goal is to ensure that its "never out of stock" (NOS) items are always on the shelf, Wilkens says.

Another benefit C&A discovered from the item-level RFID pilot was lower numbers of out-of-stock items and a decrease in what it calls "not on shelf but on stock" or NOSBOS instances. "NOSBOS refers to goods that are in the back room instead of out of the sales floor— meaning we were not successful in keeping them on display for customers to purchase," Wilkens explains. Reducing NOSBOS numbers, then, yields greater potential for customer purchases.

"We want to make sure that merchandise is available on C&A store shelves in the right color, size and fit so consumers can always find the item they want when they are ready to buy," he explains. "With RFID, we can do that while also reducing the workload for our employees and gaining better visibility to all of our stock."

Bogner case study: A downhill race to inventory accuracy

Implementing an item-level RFID solution in the midst of a hurricane and on the cusp of your busiest sales season is not an ideal situation. "Hurricane Sandy shut down our store for 10 days right when we planned to implement our RFID system. In addition, October marks the end of our fiscal year, and the prime selling time for skiwear," explains Elizabeth Johnston, manager of the New York City location of high-end European skiwear brand Bogner.

But the results of the implementation have more than made up for the bumpy start experienced by Bogner's only U.S. store location. In partnership with RFID solutions provider Truecount, the RFID solution — which includes one workstation, one printer, and one mobile handheld — was deployed in a single day. And the benefits kicked in immediately.

All store items — about 2,000 normally and up to 5,000 in peak season — now sport RFID tags, replacing the traditional barcode/pricing and product data tags it was using. As a result, Johnston and her staff can do a complete scan of the entire store every morning in less than 40 minutes. This frees them up to focus on selling Bogner's line of fashion-forward skiwear, outerwear and activewear.



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Each day, Johnston receives an inventory discrepancy report from Truecount, which she checks against the daily product data file that is sent from Bogner's POS system at its headquarters in Germany. If she discovers any discrepancies, Johnston quickly uses the scanner to search for the items in question.

In one case, two hats that Johnston knew were no longer in the store popped up on the discrepancy report. By searching the store with the scanner, she found the RFID tags stuffed into one of the couches. "I knew this was a theft. Someone took the hats and left the tags behind," she explains.

"We are now operating with 100 percent inventory accuracy," Johnston says, adding that the high-dollar value of some of their items makes this inventory accuracy crucial. "We have \$10,000 coats for sale here. You don't want those just disappearing from inventory without knowing what happened," she explains.

In addition, the accurate real-time data the store receives from its item-level RFID program means it no longer has to close the store for a full day in order to do an inventory audit. "We have total control on a daily basis," Johnston says. "I know at any given moment the placement of all of my inventory." ■

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