



American Apparel Finds the Right Fit with Motorola RFID



As a fast-growing manufacturer, distributor and retailer serving young, urbanite consumers, American Apparel is in an excellent position to take full advantage of the benefits of an integrated item-level RFID inventory control process.

Company overview

American Apparel is a manufacturer, distributor, and retailer of branded fashion apparel based in Los Angeles. The company started in 1989 as a wholesaler of t-shirts and opened its first retail outlets in 2003. As of mid 2008, American Apparel operates over 200 retail stores in 18 countries and the chain is still growing rapidly.

All of American Apparel's products are manufactured in the United States; its wholesale business supplies its cotton-based casual wear to distributors and screen printers. The company is a vertically integrated operation and conducts its own knitting, dying, cutting and sewing, and design out of its headquarters in downtown Los Angeles. American Apparel's young, metropolitan customers are very loyal to the brand.

The challenge: improve business processes and reduce lost sales attributable to out-of-stocks

American Apparel retail stores operate boutique-style, stocking only one item of each style, color and size on the floor at any time. Inventory turnover is quick and traffic between the stock room and the sales floor is high, particularly during busy hours. With more than 26,000 SKU items to manage, maintaining accurate inventory counts and a 100% stock mix on the floor consumed significant time and labor. However, both were considered critical to the chain's success, since inventory errors and stocking delays translated directly into lost sales.

The potential benefits of reducing labor and increasing sales from deploying an item-level RFID operation at American Apparel were clear. And given the control it has over its manufacturing, distribution and retail operations, American Apparel's plan was not only to reap the benefits of RFID on the retail floor, but throughout its closed loop supply chain. The company was eager to test the current capabilities of RFID for accuracy, performance and adaptability to American Apparel's business processes, with four clear goals for process improvements:

- Increased stock visibility
- Improved accuracy/reliability of inventory counts
- Decreased labor costs and human errors associated with inventory
- Sales floor stock levels maintained at virtually 100%

Customer Profile

American Apparel®

Company

American Apparel

Location

Los Angeles, California

Industry

Retail Apparel

Motorola Products

Motorola MC9090-G RFID handheld readers

Motorola XR440 fixed RFID readers with AN400 antennas

Application

Vue Technology, TrueVUE Platform

Partner

Software

Vue Technology

Lake Forest, California

RFID Tags

Avery Dennison Corporation

Pasadena, California

Benefits

- Increased stock visibility for improved customer service, higher customer satisfaction and improved sales
- Reduction in labor involvement and human errors associated with inventory control for lower costs
- Increased accuracy of more frequent inventory counts for improved stock management
- Reduction in sales floor out-of-stocks and associated lost sales

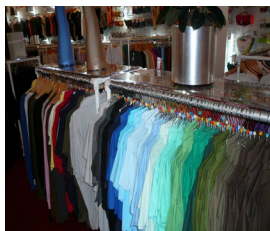


Before the RFID system was implemented, employees periodically took sales lists from the point-of-sale system to the stock room, where they would search for each item in the store's inventory to replenish the floor stock.

Planning the pilot: the right location and the right partners to test the potential of item-level RFID

American Apparel gave careful consideration to its choice of store for the pilot. They were looking for a store that had average sales and a dedicated staff that would embrace the technology and a new process for inventory management. In addition, they wanted a location with good traffic flow that was centrally located to other area stores, to facilitate a regional roll-out if the single store pilot proved successful. Ultimately, the store chosen was the Columbia University area store in New York City, which also serves as the returns center for all the American Apparel New York City stores.

Equal consideration was given to the technology partners who would support the pilot. To give item-level RFID a legitimate test in a real-world retail environment, American Apparel wanted to start with proven and universally-deployed hardware and software. Based on their market leadership and technology innovation, American Apparel chose Motorola MC9090-G RFID handheld readers for product commissioning and cycle counting. Motorola XR440 fixed readers with AN400 antennas were deployed to track stock moving from the backroom to the sales floor, and also at the point of sale to indicate a sale, decrement inventory, and trigger a product replenish. The retailer also used tags from Avery Dennison's Retail Information Services combined with Vue Technologies' TrueVUE Platform. The TrueVUE platform offers retailers a streamlined, scalable platform that offers increased visibility into inventory levels, location and authenticity.



Item-level RFID tagging can help find misplaced items – in the stock room, fitting rooms or misplaced on the sales floor. Associates can use a handheld's "find" function to locate merchandise – they just scan an item's associated barcode or input specifics on a handheld reader and follow the beeps, like a Geiger counter, right to the item.

The initial deployment of American Apparel's pilot system placed RFID tags on each item of clothing and merchandise within American Apparel's Columbia University area store in New York City. As the tags were affixed to product, the tags were associated with the particular SKU in the TrueVUE software platform. From then on, mobile and fixed RFID readers were used by store associates to stock, inventory and replenish its 40,000 piece pilot store inventory. Fixed and mobile RFID readers were then used by store personnel to check inventory on a real-time basis.

The result: proven effectiveness

American Apparel quickly saw that its new pilot RFID system contributed to a well-stocked store, increased sales, and allowed immediate and accurate responses to consumers' requested design, size and color of in-store merchandise. The technology also allowed the retailer to better determine real-time

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An item-level RFID system lets American Apparel consistently stock merchandise in every size and color on store floors at all times, making it easier to serve customers looking for a particular item.

buying behaviors and adjust inventory accordingly, making items easier for customers to find and for employees to replenish. In fact, the new system has reduced the number of “missing” items (that is, an item color or size that is not on the floor) from an average of 80 missing items on the floor at any time to fewer than eight – which were subsequently found misplaced on the selling floor.

Item-level tagging also allowed inventory to be taken more accurately, in less time, enabling staff to spend more time on the sales floor assisting customers and making sales rather than restocking merchandise. For example, what used to take 6-8 people 6-8 hours to accomplish now takes two people 2.5 hours to accomplish – with better accuracy. American Apparel is now able to fulfill its vision of consistently offering merchandise in every size and color on store floors at all times, creating a more rewarding customer experience and simplifying the inventory process for in-store staff.

“The RFID system at American Apparel was born from the retailer’s vision to further improve business processes, enhance customer service, increase sales and improve associate productivity,” said Tom Racette, Director of RFID Market Development for Motorola’s Enterprise Mobility business. “Motorola’s Enterprise Mobility business is very pleased to be working with American Apparel as we see this as the beginning of a new trend for retailers worldwide. Utilizing RFID technology at the item-level will consistently provide always-stocked shelves and merchandise, ultimately improving the shopping experience.”

Solution proven: the national roll-out

American Apparel has already begun to roll-out its RFID inventory system across each of its 17 stores in the New York metropolitan area as well as its Santa Monica, California, store. By deploying the technology in additional stores, American Apparel expects to increase sales and customer service by having real-time visibility into product at nearby stores, enhancing the intra-store transfer process to balance stock. Furthermore, the retailer will be able to better understand customers’ choices by using RFID to record and report on purchases, not only within one location, but across a region of stores.

For the pilot, employees at the New York testbed store used a pool of tags, attaching them to items of clothing as they were received from its manufacturing center in Los Angeles. But as the company rolls out the system, item-level tagging will be applied and centrally managed at the Los Angeles manufacturing facility as each item of clothing is packaged.

As shipments leave the manufacturing center, Motorola XR440 fixed readers at the dock doors will read an RFID shipping label attached to each case of items, which will then be associated with electronic product codes (EPCs) on all item tags within that case. Recorded data includes the case and item EPC numbers, and all read events showing timestamps and reader locations.

When the tagged cases are received at a retail store, another Motorola XR440 fixed reader will collect the data and send it to Vue’s TrueVue software, which will reconcile the received goods with the advance shipment notice that was sent by the factory. The Vue software will then add the goods to the store inventory. Employees will then use Motorola’s MC9090-G RFID handheld readers to take periodic inventories of all items on the sales floor, as they did during the initial store pilot.

In the near future, the clothing outfitter intends to implement the RFID technology solution nationally to all U.S. national store locations.

“American Apparel takes pride in being a vertically-integrated manufacturer, distributor and retailer of comfortable, classic and diverse styles and we value any technology that allows us to further realize our vision and better serve our customers,” said Zander Livingston, American Apparel’s Director of RFID Technology. “We are consistently documenting our experience and learning as we progress. We look forward to deploying the technology on a larger scale so that our entire organization can leverage the value of RFID to improve overall inventory management processes and our customers’ shopping experience.”

For more information about how Motorola’s RFID solutions can help your company achieve a competitive advantage, contact your Motorola representative or visit www.motorola.com/rfid.



About our partner

Vue Technology is the leading provider of item-level RFID solutions, offering breakthrough RFID infrastructure components and a powerful software suite that delivers the most scalable, reliable, and ROI-driven RFID solutions on the market. Vue's TrueVUE™ RFID Platform provides the industry's only unified RFID infrastructure that allows customers to manage dock doors, portals, mobile devices, smart surfaces and smart shelves to achieve RFID visibility down to the item-level.

With its patented RF Networking devices and UHF enabled VUEPoints™, Vue allows standard readers to network across thousands of antennas, exponentially increasing the number of zones that readers can support and dramatically reducing the cost barriers previously associated with item-level RFID roll-outs. Combined with an integrated software suite for device and network management, EPC commissioning, and RFID workflows, the TrueVUE™ RFID Platform is uniquely able to deliver significant and measurable ROI to its customers. For more information, visit www.vuetechnology.com.



About our partner

Thanks to their expertise in advanced research, electronics and roll-to-roll manufacturing, Avery Dennison was the first to develop a high-volume, high-yield process for delivering RFID inlays. This process typically yields throughputs 10 times higher than conventional assembly techniques.

Avery Dennison is also a leading innovator in the emerging area of passive RFID inlays and labels. Their capability begins with designing antennas. They carefully match an antenna's design to the requirements of the product on which it will be used to ensure optimum device performance.

The company's experience includes developing orientation-insensitive designs – where the device must work regardless of its position in the RF field – to designs that work in the proximity of, or even under, water. Avery Dennison produces antennas from aluminum and copper – even printed silver. In addition, their high-speed proprietary assembly technology combines antennas with silicon RFID chips to make functional devices. Other capabilities include in-line testing and infrastructure support.



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