

American Apparel

Making A Bold Fashion Statement with RFID

“With mounting competition and consumer expectations, retailers must tap into the next generation of store-level technologies to deliver an exceptional customer experience at the store. Xterprise’s Clarity ARS Advanced Retail System solution, using Microsoft BizTalk RFID, will help American Apparel optimize inventory availability on the selling floor and respond more effectively to shoppers wants and needs in a way that will differentiate their experience at the local level.”

David Gruehn
U.S. Retail Industry Director
Microsoft Corporation

American Apparel™ **aa**



See. Understand. Execute.

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Retail sales are tough enough. But when retailers face a declining general economy and downward pressure on consumer spending, they must squeeze as much efficiency as possible out of their vital supply chains.

For one international clothing seller, that means finding more efficient, automated methods to quickly and reliably replenish merchandise on store shelves.

American Apparel tested and deployed an item level RFID-based system that allowed store managers to track the movement of clothing items from ASN receiving, to back room put away, through restock staging and retail sales floor cycle counts and on to the point-of-sale execution. By leveraging this advanced RFID solution from Xterprise, American Apparel reduced both labor costs and out-of-stocks, while driving improve sales and same-store performance.

A Restocking Challenge

Headquartered in Los Angeles, California, American Apparel manufactures, distributes and sells basic fashion clothing for men, women and children. The company sells t-shirts, denim, sweaters, jackets and other casual wear at 260 retail outlets in the U.S., Canada, Mexico, Europe and Asia, and also markets clothing wholesale and through on-line sales. The company produces some 1.5 million pieces of clothing a week, and generated more than \$545 million in revenue in 2008.

American Apparel utilizes a vertically-integrated business model that minimizes the use of sub-contractors and off-shore labor, and that relies heavily on a very efficient, repeatable and scalable store item-level inventory management approach. Under that demanding inventory model, each company store stocks an average of 12,000 SKUs, but keeps just a single copy of each item on the retail sales floor and replenishing those products from a backroom stock of 26,000 items once the item is sold.

The company had previously used a barcode scanning system at the point of sale to trigger the transfer of inventory from the stock room. But this manual paper based system requiring store personnel to perform twice-weekly physical counts to confirm overall store inventories.

Those manual counts were time-consuming and costly, typically requiring 240 man hours a month. The system was also prone to errors and miscounts, revealing anywhere from 100 to 300 missing inventory items during each cycle count.

To compete and succeed in today's demanding retail environment, American Apparel needed a better way. The company wanted a replenishment system that would streamline the process of moving merchandise through backroom storage, staging, store shelves and sales – and that would reduce the time and cost of those critical inventory functions.

That's when American Apparel took a hard look at RFID-based technology from Xterprise.

High Definition Replenishment

To address the cost and inefficiency of its in-store replenishment, and to reduce potential lost sales due to out-of-stocks, American Apparel chose to evaluate an RFID based system to track and manage in-store inventory.

The company began with a pilot program testing UHF Gen 2 RFID technology in a single New York area retail outlet. The test involved the manual tagging of all store inventory, and the use of fixed RFID readers in the store room, the retail floor and the point-of-sale. As a vertically integrated manufacturer, American Apparel has the option of tagging and commissioning to associate each item of merchandise with a tag at the factory, or tagging manually at the store.

The Clarity Advanced Retail Solution (ARS) Store Inventory Management solution from Xterprise gives retailers a



broader, more granular and up-to-the-minute perspective on the flow of merchandise through their operations. That information enables retail managers to make smarter and more effective decisions. It allows them to spot, understand and respond to developing trends in consumer behavior. RFID technology can be the catalyst that drives lower costs, enhanced supply chain productivity and greater customer satisfaction.

The solution deployed for American Apparel utilizes Microsoft BizTalk Server 2006 R2 and its BizTalk RFID capabilities, providing enterprise-class scalability at a low total cost of ownership.

Retailers can leverage this High Definition approach to achieve:

- Factory or DC garment tagging
- Box packing and ASN creation at the factory or DC
- Store item-level inventory management
 - Tagging
 - Receiving
 - Transfers
 - Returns
- Optimized event-driven back stock to sales floor fulfillment
- Mobile hand held reader inventory and cycle counting
- Management and operational dashboards with key performance metrics
- Automatic alerting of key inventory events
- RMS POS integration for rapid checkout
- RMS receiving integration for accurate receiving

Utilizing RFID-based technology, American Apparel now receives an alert from the POS that an item has been sold. Store room employees then pick the item from inventory, and then read the item's RFID tag to confirm the movement of merchandise from backroom to a staging area. Once a sufficient number of items have been staged, they are moved to the retail sales floor where another RFID reader gathers the data needed to confirm that movement. The system then automatically updates the retail sales floor and backroom inventory counts.

The initial deployment included factory box packing and ASN generation, in-store tagging, fixed readers in the: receiving area, back room, area between backroom and retail sales floor and POS locations, support equipment and installation, software, and staff training. To affect this implementation, the company made several adjustments, including changes in inventory processes, training of retail employees, and the positioning of RFID readers at key locations within each store. Because the company operated multiple stores – in various geographical locations and often with unique sizes, traffic patterns and assortments of merchandise – the company wanted to test the RFID system in a number of locations.

American Apparel worked with Xterprise to implement this RFID solution, including hardware installation, centralized software provisioning and updates, staff training and the handling of early-stage support calls.

Faster, Cheaper Replenishment

This RFID-based approach has given American Apparel a more efficient and cost-effective way to replenish store shelves.

Following the roll-out of this RFID-based inventory system to eight stores, American Apparel analyzed the performance of this deployment. The company measured a sales-per-store increased of 14%, thanks mainly to a reduction in out-of-stocks and the increased availability of store personnel to assist consumers.

Each store saved over 188 hours a month in labor, and an estimated \$27,072 per month, due primarily to reduced cycle counting and store room searches. A statistical evaluation revealed an average payback of about 4.5 months per store for this RFID inventory system investment.

Business Challenge

- A manually intensive, time-consuming in-store replenishment system
- Loss of sales, revenue and profits due to out-of-stock inventory items
- Needed: an automated, centrally controlled, efficient way to manage and replenish merchandise

Xterprise Solution

- An RFID-based Clarity Advanced Retail System (ARS) retail store inventory management and replenishment system
- The ability to monitor and manage merchandise from store room, through retail floor and through point-of-sale
- Automated work queues and notifications when an item is sold and must be replenished

Results/Benefits

- A projected per-store payback of 4.5 months or less
- Increased same store sales from fewer out-of-stocks
- Improved inventory accuracy and reduced labor costs
- More efficient inventory searches and weekly cycle counts
- More complete product offerings available on the retail floor at all times
- Based on the success of the initial pilot program, American Apparel plans to roll the Xterprise Clarity ARS solution out to all of its 260 stores

About Xterprise

Xterprise was founded in 2002 as a provider of turnkey and custom RFID (Radio Frequency Identification) solutions. Today our widely deployed Solutions for the High Definition Enterprise™ combine Microsoft platform technology, lean and continuous process improvement expertise, enterprise systems integration along with RFID and other Sensor technologies.

We take great pride in our client's success and have delivered previously unachievable levels of visibility, assurance, accuracy, product integrity, safety, process improvement and value to our clients. Our solutions are deployed around the globe, many in production for over four years in some of the most demanding operational environments. Our growing list of clients includes American Apparel, Allentown, Inc., The Libman Company, Nokia, Toyota Motors, Bank of America, Boeing, Cytec Engineered Materials, Continental Automotive Systems, Dade Behring, Dairy Fresh, Daisy Brand, National Dairy Holdings, Harvard University, J&J Cordis de Mexico, ExxonMobile, PepsiCo, Intel, Wells Fargo Bank, Sotheby's, TIMCO Aviation Services, TNT Express, The US Department of Veterans Affairs, Schoeller Arca Systems, The Microsoft Retail Experience Center, and many others.

To learn more about how our Clarity solutions can be used in your organization, call +1 (972)-690-9460, email us at info@xterprise.com, or visit us on the web at www.xterprise.com.



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