

May, 2008

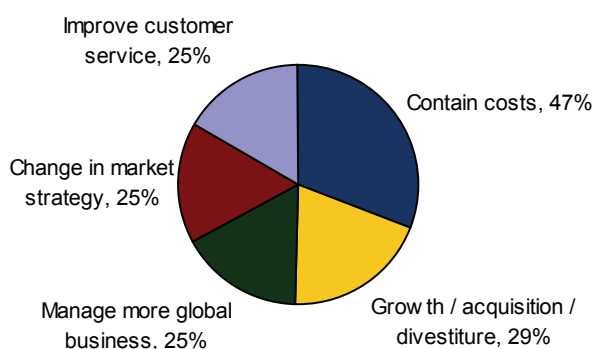
Real-World RFID in Retail: "Custom-Tailored" Solutions Deliver Benefits to Apparel Retailers

Aberdeen research indicates that companies with current or planned Radio Frequency Identification (RFID) deployments are pursuing and achieving significant business benefits. "RFID-enabled" vendors and their industry partners, meanwhile, are helping leading apparel retailers achieve key business goals with RFID.

Business Context

For *The 2008 Aberdeen Report*, Aberdeen surveyed more than 1,100 end-user organizations about their RFID adoption plans. Those companies are focusing intently on their supply chain processes and logistics operations. Reasons cited most frequently by survey respondents include the need to be more competitive by containing supply chain costs and dynamic requirements created by business growth, acquisition, and divestiture strategies. Changes in market strategies, demands to manage more global business and escalating customer service demands were among other top drivers of this focus, as shown in Figure 1.

Figure 1: Drivers of Supply Chain Focus for Companies with RFID Plans



Source: Aberdeen Group, February 2008

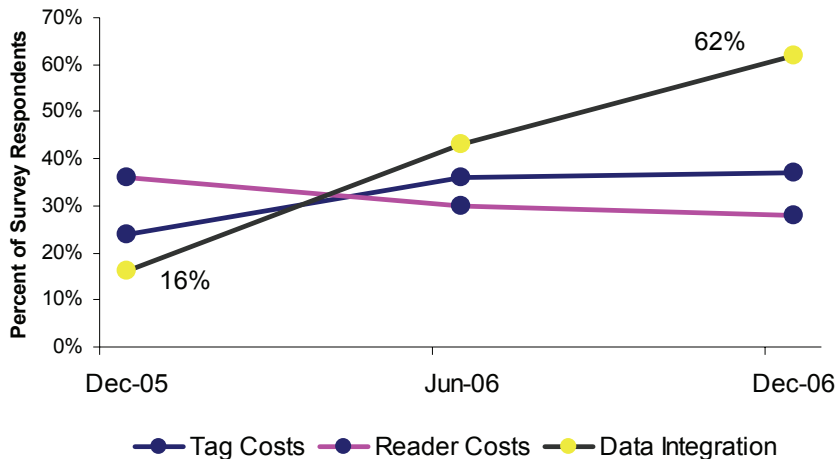
Moreover, Aberdeen research indicates that Best-in-Class enterprises using RFID are expanding the focus of those deployments. Those enterprises are moving beyond mandate-driven or "slap and ship" approaches, and are using or planning to use RFID to optimize business performance in areas ranging from Business Intelligence (BI) to customer care.

Sector Insight

Aberdeen's Sector Insights provide strategic introspective and analysis of primary research results by industry, market segment, or geography

One indicator of this trend is a shift in users' cost concerns regarding RFID. In the January 2007 Benchmark Report, [Can RFID Deliver the Goods?](#), Aberdeen surveyed more than 150 manufacturers using or planning to adopt RFID. That study found that in the preceding year, RFID cost concerns had shifted away from a focus on tags and readers, and towards issues related to data integration, as shown in Figure 2.

Figure 2: Changing Cost Concerns



Source: Aberdeen Group, January 2007

The use of RFID across multiple industries is evolving as well. In retail, for example, case- and pallet-level RFID tagging is increasingly being joined by item-level tagging. Falling tag and reader costs, steadily improving read rate accuracy, and high-profile industry mandates are all contributing to this trend, according to Aberdeen research.

For the March 2008 report [RFID in Retail: The Truth Behind the Hype](#), Aberdeen examined the use, perceptions, and intentions of more than 150 enterprises using and considering RFID in a diverse set of retail enterprises. Survey respondents indicated that the top pressures driving RFID implementations are the need to improve in-store asset tracking efficiency and to reduce the cost and time associated with inventory turns (Figure 3). Close behind these pressures is the need to reduce customer wait time, revealing that while the focus of RFID use is still on inventory tracking and replenishment, customer service is an important component driving RFID adoption.

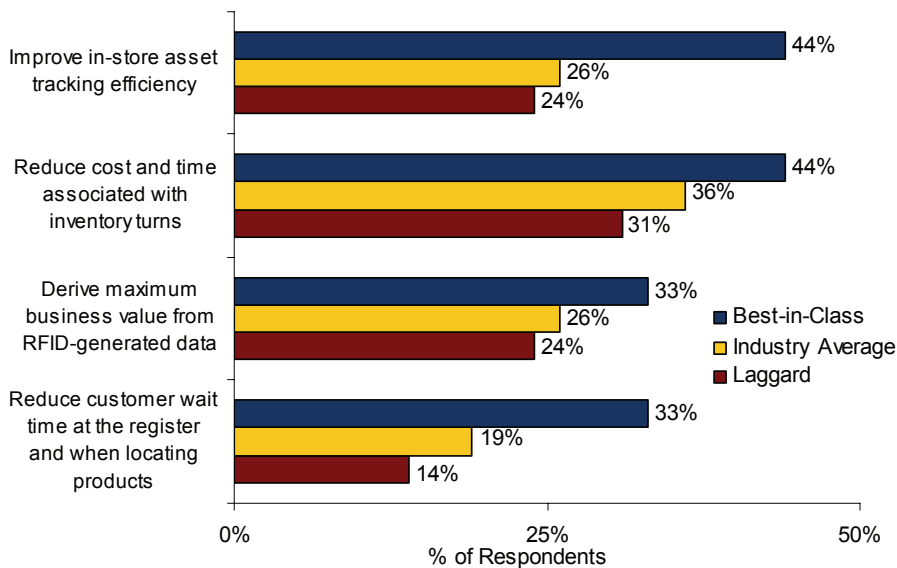
Study Focus: RFID in Retail

Responding retail executives completed an online survey that included questions designed to determine the following:

- ✓ The degree to which RFID is currently deployed in their in-store retail operations
- ✓ The structure of existing RFID implementations
- ✓ Current and planned use of RFID and its components
- ✓ The benefits, if any, that have been derived from RFID initiatives
- ✓ Anticipated challenges to RFID implementation

The study aimed to identify emerging best practices of RFID usage in retail, perceptions of RFID, and to provide a framework by which readers could assess their own management capabilities.

Figure 3: Top Pressures Driving Implementation of RFID in Retail



Source: Aberdeen Group, March 2008

"Our item level RFID tagged garments have a 99.7% inventory accuracy rate, which is great compared to manual inventory counts. Historically, we would conduct inventory counts only once a year so inventory was way off. Using RFID makes a tremendous difference for automatic replenishment; it takes two months worth of stock out of every store and links replenishment back upstream."

~ Enterprise Architect,
US Apparel Retailer and
Manufacturer

Retailers are now leveraging RFID for inventory visibility, loss prevention, and improved customer experience. And Best-in-Class companies among those retailers are increasingly pursuing item-level RFID tagging to achieve these and other business goals.

Cases in Point: Falabella and American Apparel

Two companies looking to RFID to realize these benefits are Falabella, a \$7.5-billion, 118-year-old retailer in South America, and American Apparel, a manufacturer, distributor, and retailer of branded "fashion basic apparel" headquartered in Los Angeles, CA.

Falabella: Item-Level Tagging Yields "Made-to-Order" Business Benefits

Falabella employs some 53,000 workers in department stores, home improvement stores, supermarkets, a travel agency, insurance agency, and a bank with its own credit card business throughout Argentina, Chile, Colombia, and Peru. After an initial evaluation of so-called "Gen2" (second-generation) RFID technologies, Falabella embarked upon its own pilot in 2006.

The pilot, conducted at a Santiago, Chile department store and focused on high-value men's clothing items, had three goals:

- Conduct a daily inventory count
- Achieve at least 98% reliability of RFID tag readability and data accuracy
- Identify and measure costs and benefits

Some 7,000 items were tagged with RFID labels and entered into inventory upon arrival at the store. An additional 2,500 items already in the store were also RFID-tagged. Tags were removed at the point of sale.

Falabella spent nearly four months selecting appropriate vendors and technologies. At the heart of the pilot solution were RFID solutions from Motorola's Enterprise Mobility business. (The unit arose from Motorola's acquisition of Symbol Technologies, which was completed in January 2007.) Motorola had the broadest suite of RFID readers, from fixed and handheld readers to a one-of-a-kind mobile reader, a hybrid reader incorporating the best features of a fixed and handheld reader.

Falabella also incorporated technologies from several Motorola partners. Paxar, an RFID company acquired by Avery Dennison in June 2007, supplied the tags and mobile RFID-enabled carts. OATSystems provided the integrating software, while IBM supplied business process consulting and integration.

The pilot RFID solution improved inventory visibility, in-stock product status and display management, while reducing shrink, staffing requirements for inventory counts, and markdowns. The pilot also produced significant process gains:

- Out-of-stock occurrences reduced by 25%
- Shrinkage reduced by 20%
- Inventory accuracy improved to 98.4%, then to 99.4% thanks to improvements in business processes

The company was also able to perform a cycle count each day before the store opened, a task that previously took up to 50 employees up to two nights while the store was closed.

Falabella had also developed new Key Performance Indicators (KPIs) for measuring shrinkage and how long inventory remains in the "back room," on the sales floor, or in between the two. The company is also looking carefully at how best to build upon the successes of its RFID pilot deployment.

American Apparel: Item-Level Tagging Rolls Out in LA

American Apparel is best known for its edgy advertising and product branding, especially, but not exclusively among young adults. The company is also well known for its vertically integrated business model, under which all aspects of design, manufacture, distribution, and marketing are conducted at its LA facilities. The company employs nearly 7,000 people and operates more than 180 retail stores in 13 countries around the world.

The company began its exploration of item-level RFID tagging in its store near Columbia University in New York City. Some 40,000 items of clothing and merchandise were tagged. The company chose RFID readers and antennas from Motorola's Enterprise Mobility business, along with tags from Avery Dennison Retail Information Services and Vue Technology's TrueVUE Platform software for integration.

Business benefits were quick to appear. Inventory and restocking tasks that previously took six to eight people six to eight hours now require only two people and 2.5-hours. This enables American Apparel staff to spend more time helping customers and making sales. Its RFID system has also reduced the average number of items "missing" from the store sales floor from approximately 80 to fewer than eight. RFID is making items easier for customers to find and for employees to replenish, while helping the company to track consumer trends more closely.

The retailer plans to roll out its RFID inventory system across each of its 17 stores in the New York metropolitan area. American Apparel then intends to implement the solution in all 100 of its US stores and in 28 additional stores in Canada. Expansion of its RFID deployment will help the company to improve customer service by providing real-time information about product availability at nearby stores and improving intra-store inventory transfer. Expanded RFID use will also help American Apparel to respond to and model market behavior more effectively, by providing regional as well as single-store data.

Key Takeaways

Retailers currently using or planning RFID deployments and pursuing strategies for increased globalization should take a truly global view of opportunities for RFID and its business benefits. Based on surveys and interviews conducted with business and IT decision-makers, specific actions and considerations should include the following:

- **Find and go after opportunities now.** RFID adoption is rising while costs fall and integration eases, compelling those retailers not yet pursuing RFID opportunities to get off the sidelines and into the game. Best-in-Class retailers deploying RFID have seen customer satisfaction increase an average of 12% during the past two years, according to Aberdeen research. In addition, 74% increased inventory turns by an average of 5.4%. If those retailers follow through on their declared implementation plans, more than two-thirds will be measuring, tracking, and linking all information upstream to their supply chain partners by the beginning of 2009.
- **Centralize RFID and other data.** To achieve the "one version of the truth" essential to business success, companies must start enabling consolidated, actionable information views, tailored to user roles. Retailers should also maximize the business value of RFID-generated data via integration with key business analysis, intelligence and operations applications. In its recent study of RFID in retail, Aberdeen found that Best-in-Class retailers are 11-times as likely as Laggards to enable customers to access current inventory levels and detailed product descriptions, features that depend upon accurate, consistent, and timely information for their business value.
- **Be open to change and risk.** As the aphorism goes, "no risk, no reward." Innovations such as RFID provide both challenges and

"We've noticed an increasing trend among retailers that are considering or beginning to implement RFID at the item-level, and American Apparel is a prime example of a retailer on the forefront of this trend. We are working with technology partners to provide American Apparel with the tools it needs to gain a clear understanding of shoppers' purchasing habits, helping to ensure that future clothing designs and offerings fall in line with its customers' taste and needs."

~ Dr. Bill Hardgrave, PhD,
Associate Professor of
Computer Information
Systems and Executive
Director of the Information
Technology Research Center
at the University of Arkansas

opportunities never seen before, but only to those retailers willing to take on the challenges and seize the opportunities. Best-in-Class retailers are 80% more likely than Industry Average and 3.6-times more likely than Laggard companies to have adaptable organizational cultures that embrace innovation, according to Aberdeen research.

- **Choose vendor partners wisely.** Partner with RFID solution providers that offer proven and application-appropriate readers and devices for data capture. Ensure that those providers also have partners in key geographies, retail- and RFID-specific knowledge and experience and proven abilities to support and leverage advanced technologies and evolving industry standards. Among *The 2008 Aberdeen Report* survey respondents to RFID questions, nearly one-quarter cited domain or industry expertise (24%) and market-specific knowledge or experience (23%) as top vendor selection criteria, ahead of reputation (21%).

For more information on this or other research topics, please visit www.aberdeen.com.

Related Research	
<i>Winning RFID Strategies for 2008</i>; December 2007	<i>RFID Without Borders: Worldwide Innovation</i>; February 2008
<i>Is Your Infrastructure Ready to Win with RFID in 2008?</i>; January 2008	<i>RFID in Retail: The Truth Behind the Hype</i>; March 2008
<i>Item-Level RFID Use in Retail: What's Your View?</i>; January 2008	<i>The 2008 Aberdeen Report</i>; May 2008
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