Achieve near 100% inventory accuracy with the Intel® RFID Sensor Platform

In an era of online shopping, big data, and the accelerated pace of change spurred by social media and the Internet, brick-and-mortar retailers face new challenges and new opportunities. And when giving customers “what they want, when they want it” is key to satisfying customers and building loyalty, inventory management takes on a critical role.

The bottom line consequences of limited inventory visibility are significant. Inventory distortion—in the form of overstock, stock-outs, and shrinkage—represents a nearly $1 trillion issue for retailers worldwide.¹ Inventory shrinkage alone is a $42 billion problem for retailers in the U.S., a number that represents nearly 1.5 percent of total retail sales.²

Unlock the Value in Retail Data

Now, there is a solution designed for retailers than can deliver near 100% inventory accuracy. It’s affordable, simple to install and manage, and works with familiar retail applications. The Intel® RFID Sensor Platform can help retailers delight customers, increase sales staff efficiency, and save costs. It provides the near-real-time insight to help optimize store layouts, respond to evolving demands and trends, and increase sales.

Choose an integrated solution, built with the flexibility and scalability retail environments require.

- **Deploy quickly and cost-effectively** in one store or across an entire chain
- **Customize** to align with corporate strategy and processes, or store location(s)
- **Rely on the performance, scalability, reliability, and manageability** of Intel®-based solutions, from sensors and gateways to cloud-based analytics
- **Utilize Intel® RSP** to gather data on inventory in store, tracking item location and availability in near real time
- **Protect customer privacy and data** and meet industry compliance requirements with the help of Intel® Security technologies
- **Prepare for new experiences**, from digital dressing rooms to omni-channel outreach
Key Usage Models

Ensure merchandise is available to meet fluctuating in-store demands, while significantly reducing losses from overstocked, out-of-stock, or misplaced items and shrink.

<table>
<thead>
<tr>
<th>Inventory accuracy</th>
<th>Enables retailers to know exactly what inventory they have in-store with near 100% accuracy and where it’s located (i.e., front of store vs. back stock)</th>
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<tbody>
<tr>
<td>Replenishment</td>
<td>Get replenishment alerts when inventories are low at a subcategory level (size, color, etc.) at designated locations in the store</td>
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<tr>
<td>Misplaced items</td>
<td>Maintain inventory in the appropriate location according to the planned store layout</td>
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<tr>
<td>Item consideration and path to purchase</td>
<td>Understand what items are touched, tried on, and eventually sold in the store; gain insight into how inventory moves as part of the customer journey</td>
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<td>Anonymous customer path mapping</td>
<td>Overlay customer path and heat maps to inventory movement</td>
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<tr>
<td>Layout optimization</td>
<td>Optimize store layout and product placement</td>
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Levi Strauss & Company: A Success Story

This new solution has been piloted with great success at the Levi Strauss & Company flagship store in its California headquarters. By working together with Intel, Levi’s was able to get a viable pilot running in just a few months. The retailer sees technology as a key ingredient for its agility and growth. Says Senior Vice President Noah Treshnell, “We’re interested in technology that’s going to enhance and improve the consumer experience in our stores. We’re bringing that to life through accuracy and inventory visibility, so that when consumers come into our stores they find what they want. They find it in their size, on the shelf, and it’s available. And as important, we’re empowering our stylists with the right tools to deliver superior customer service.”

Watch the video: youtube.com/watch?v=Z-23_6VNB1I

How it Works

The Intel® RSP includes core integrated technologies that work together seamlessly to provide actionable insight. The solution anonymously tracks items through RFID tags, preserving customer privacy, while keeping sales staff informed on inventory, stocking, customer traffic, and local demand. RFID data can also be combined with other data, such as video, and quickly analyzed to provide a cohesive, near-real-time portrait of store activity and customer preferences.

Intel® RSP components are easy to integrate with existing store systems and applications, and the resulting analytics can be viewed on computers and devices located in stores and at company headquarters.
Reinventing Retail with the Intel® RFID Sensor Platform

Key Components

The Intel® RFID Sensor Platform (Intel® RSP) collects real time inventory information to drive actionable insights, improvements in top and bottom line, and better customer experience. Solution components include:

- **Intel® RFID Sensor Platform**: Low-cost, low-power integrated sensors with RFID capability and an expandable sensor suite that allows for the inclusion of additional sensors in a seamless and future-proof way

- **Intel® RFID Sensor Platform Software Toolkit**: Market Ready Java Application reference design--jumpstart your deployment with a robust foundation and build your own application to deliver insights from basic RFID event data. The Intel® RSP SW toolkit sits on top of general Window or Linux based Edge Compute and simplifies communication & coordination with the Intel® RSP.

The Retail Brick-and-Mortar Store—Reimagined for the Digital Age

The data inherent in online retail is now informing the in-store experience—transforming brick-and-mortar locations into data-driven operations that boost sales. The Intel® RFID Sensor Platform can help retailers get more value from inventory data, as well as delight customers and prepare retailers for new service experiences.

With this platform, retailers will be better equipped to respond to their customers’ needs in real-time, giving them the opportunity to purchase what they want—both when and how they choose.

For more information, visit intel.com/retail.