



# Retail Inventory Management Simplified with IoT

White Paper

## Introduction

Efficient inventory management is the key to retail success. Efficiency means having just the right amount of inventory — not too much and not too little. Inventory adequacy is of utmost importance in the era of omnichannel commerce, which is the future of retail. Omnichannel allows customers to view an item online, and then proceed to the nearest store to pick them up. They can later check for the best available deals on their mobile phones.

In order to capitalize on this opportunity, more and more stores now offer 'buy online and pick up in-store' options. As a result of this, the actual sale happens in-store or online, and retailers need to be prepared for both scenarios.

## The Challenges

Lack of visibility into real-time inventory poses a problem for not only your customer but for your business as well. When shoppers add an item to their cart and find that it is out of stock at checkout, they abandon their cart and be annoyed with your store. In such a case, the customer experience is ruined.

To prevent this, online retailers need to show shoppers the stock availability for each product. You have an added advantage here – shoppers tend to quickly snap up a product if they find that it's going out of stock. On the other hand, if you are out of stock, real-time inventory visibility makes it possible for you to tell your customers how soon they can expect the product to be available again.

## How IoT Helps Connect the Dots in Retail Inventory Management

A study by Zebra Technologies states that 72% retailers plan to reinvent their

supply chain with real-time visibility enabled by automation, sensors, and analytics based on IoT technologies. The same study claims that “nearly 96% of retail decision makers are ready to make changes required to adopt IoT” and “67% of respondents have already implemented IoT, and another 26% are planning to deploy within a year.”

According to the RFIDJournal, industry inventory accuracy hovers at about 65%. This percentage needs to be higher, in order to achieve success in retail. Utilizing RFID platforms can “boost inventory accuracy to 95%, while out-of-stocks can be reduced by 60% to 80% with item-level RFID tagging”. RFID tagging also has the added benefit of being an efficient anti-theft mechanism. With their pulse on the future, stores like Target and Macys have already begun investing heavily into RFID.

## Inventory Optimization

IoT offers better visibility of inventory, and managers are more likely to have the right items, in the right place, at the right time. With real-time data about the quantity and the location of items, manufacturers can now lower the amount of inventory in hand without failing to meet the needs of the customers.

## Inventory Analytics: A Cloud-Based Solution

IoT offers a lot more than just RFID and beacons. It brings with it a gamut of real-time analytical capabilities. Data gathered from sensors, devices and even social media can be integrated with cloud-based BI systems.

This helps retailers gain deep insights into customer behavior in real-time. Putting inventory analytics and insights in action, your business can move forward from tracking erroneous inventory management decisions to

foreseeing inventory issues before they turn into major problems. Moreover, Inventory Analytics can be used to enhance Material Resource Planning Systems by turning them into proactive tools. Since Inventory Analytics is a cloud-based solution, you will find it more affordable and rapidly executable.

## Looking into the Future with IoT

It is estimated that IoT powered real-time inventory management systems can soon help retailers identify:

- Products that are in high-demand and likely to stock out
- Sizes and color that would sell faster
- Styles are most in demand with a high degree of localization
- The exact loss of revenue due to overdue orders
- Suppliers who will be quick to respond with replenishments
- Each day's real optimum replenishment time
- Ways to prevent loss in revenue because of shoplifting

## About Applexus

Applexus Technologies (Applexus) is the global technology leader offering business consulting and SAP services to transform customers through digital innovation. We specialize in advisory, migration, implementation, and management of SAP S/4HANA and BW/4HANA solutions. Applexus delivers transformational business solutions for a marquee list of clients spanning retail, fashion, and consumer products industries. Applexus operates out of centers in North America, the United Kingdom, the Middle East, and India. For more information, visit us online at [www.applexus.com](http://www.applexus.com).

### Sources:

[www.sap.com](http://www.sap.com)

[blogs.sap.com](http://blogs.sap.com)

[www.applexus.com](http://www.applexus.com)

[www.alliedmarketresearch.com](http://www.alliedmarketresearch.com)

[www.itelligencegroup.com](http://www.itelligencegroup.com)

[www.gartner.com](http://www.gartner.com)

[www.thebalance.com](http://www.thebalance.com)

[www.nrf.com](http://www.nrf.com)

[www.statista.com](http://www.statista.com)

[www.mckinsey.com](http://www.mckinsey.com)