



Internet of Things SL
Sensing Assets

MANUFACTURING AND DISTRIBUTION

AN RFID USE CASE

LANDSCAPE

- Integrated manufacturing and distribution facility
- Multiple inventory files from existing IT systems (ERP, MES)
- Highly competitive market environment

BUSINESS DRIVERS

- Reduce order fulfillment time
- Reduce time required for inventory cycle counting
- Reduce "replacement requests" for SKUs that could not be found
- Improve productivity of picking operation
- Reduce labour costs

CHALLENGES

- A large number of SKUs
- Significant investment in existing IT systems that must be preserved
- Various internal stakeholders in existing infrastructure

A leading manufacturer of high-power LEDs for automotive lighting, computer displays, LCD televisions, signage, signaling and general lighting needs significantly faster order fulfillment in this highly competitive market. With over 500,000 SKUs, locating precise components in a timely manner is critical. With the ERP system showing one version of inventory and the MES system showing another, "true" inventory visibility is not possible. Furthermore, in the weeks required to complete an inventory cycle count, the inventory levels would have changed completely.



HIGHLIGHTS

With RFID deployed at the item level to cover 100% of the SKUs needed to complete order fulfillment, smart processes are introduced that leverage the picking process of the ERP system, as well as the recipe process of the recipe system, to provide a single version of the inventory at all points in time. Furthermore, inventory cycle counts, when necessary, can now be completed in a matter of hours instead of days/weeks.

As important as knowing exactly what is available, it is equally important to know exactly where it is. Using RFID handheld scanners, users can select an item of interest and be shown the quantity and storage location. Once at the storage location, the RFID handheld can operate as a Geiger counter to hone in on exactly where the desired item is placed.

Strategically placed RFID readers throughout the distribution centre provide real time visibility of inventory movement throughout the facility – from manufacturing, to the shelf, to packaging and shipping. This enables order fulfillment to be accomplished as much as 86% faster with a 2x improvement in picking productivity, resulting in an increase in revenue due to shorter sales and payment cycles.

OUTCOME

Management sees the value derived from the deployment of RFID enabled processes within their respective companies. The visibility to inventory on-hand and the operational efficiency in order fulfillment is critical to continued growth and profitability. Objectives are fully achieved thus enabling companies to explore broader uses of RFID.

