

Cloud & Internet of Things (IoT)-Driven Flexibility and Agility

Success Story

SMART Manufacturing

Batch Traceability in the Apparel Supply Chain

For a leading e-commerce fashion retailer

Strategy & Objectives

Faster and more predictable manufacturing cycles

Obtain real-time visibility into current manufacturing orders

Track multiple factories to ascertain output from each

Avoid delays by sending shop-floor insights (on efficiency, possible downtimes, etc.) and feedback to factory managers

Collate manufacturing data (efficiency, capacity, work-in-progress updates, order status, etc.) from a manufacturing unit to decide allocation of future orders based on the insights

Trace apparel in outlets back to the fabric where it was created

Solution

Developed a ThingWorx (IoT-based) Cloud application

Identified the best-suited gateway for the client and developed appropriate edge software

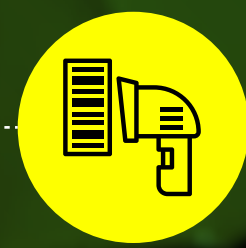
Developed a production monitoring application to facilitate data-driven decision making: Order allocation to the most appropriate manufacturing facility based on capacity and efficiency trends/rating of each facility

Enhanced manufacturing capabilities, enabling the supply chain to operate on lower inventory

Enabled efficiency calculation of units based on time taken from purchase order (PO) generation to order completion



Garment Rolls



Barcode Scanner (BS01)

WiFi



Intel Gateway

3G/4G/WAN

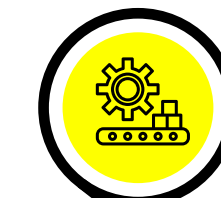


PTC Thingworx IoT Platform



Production Monitoring Application

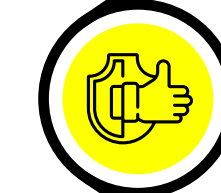
Effective Supply-Chain Management



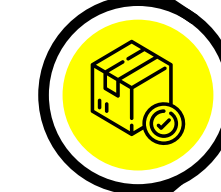
100% real-time visibility into the manufacturing process



Reverse supply chain using backward traceability



Higher productivity and increased reliability due to end-to-end tracking via the Cloud platform



Reduced loss on order completions



Complete process automation, enabling faster go-to market, and timely & actionable sales



Cloud migration framework with minimal disruption to business



Reduced capital and operational expenditures



Ability to track defective apparel back to the fabric code and fabric manufacturer via packaging barcode and RFID tags