Optimizing operations and customer service across a worldwide supply chain while identifying pain points and limiting required stock investment



\$300M Electronics Manufacturing Business Challenged with long lead times, erratic orders & poor customer service

Make to order policy making CSL difficult to manage Improved planning and operational execution on BOM and FG



Background

- Our client was a specialist manufacturer with most production in Asia but with majority of its customer in N America and Europe
- Each item was calibrated and built based on specific customer requirements which historically had led to a make-to-order service
- Component lead times and a changing supply chain, led to significant delays between final delivery and actual orders

The Challenge – order variability, lead times & CSL

- Customer specialization and component variability was increasingly creating planning and production challenges
- A make-to-order setup compounded with long lead times, meant that final delivery could be over 12+ months, leading to challenges in customer order behavior and change orders
- Smaller production runs to deliver customer orders, compounded by excess BOM inventory levels since minimum orders were often above requirements affected overall operational efficiency
- Could a focus on key BOM components and FG with some inventory investment optimize and streamline the operation?

The advanced analytics journey

- Inventory Diagnostic Tool. ERP order level consumption & BOM production order data was ingested into our operations inventory optimizer engine to diagnose production orders and delivery performance
- Value Identification. As a make-to-order business the options were limited, investing in stock given lead times and min order value was a nonstarter. Instead, the diagnostic identified a core set of components that could service the key Repeater A products that would service key customers with a well-defined operations strategy
- Actionable strategies. Several scenarios and impact analyses highlighted how to improve operations, planning to deliver better service levels with minimum inventory investment.
- Identified key components required to stock for regular cadence production
- ✓ Improved production planning for key SKUs with fewer short runs and ad-hoc order behavior.
- Small inventory investment in strategic DCs to improve CSL for key SKUs and shortened lead times
- Identified and changed T&C's for more volatile order behavior
- Identified suppliers to target for changes in min orders and lead times

The results journey

- Improved Operations & Production Planning. Reduction in production inefficacies, less fire fighting and better cadence from improved planning
- CSL improvement Significant reduction in lead times and OTD performance gains
- Investment Optimized inventory investment needed to secure risk of customer churn where it mattered most while securing a more efficient make-to-order process for Repeaters and Strangers challenged SKU to transform operational efficiency



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