

# Case Study: Optimizing inventory in a changing market and supply chain environment releasing 10% of net inventory over-stocking, and improved customer service



*\$10B holding company,  
100s of specialty  
engineering businesses*

*Subsidiary challenge with  
Increasing inventory &  
deteriorating CSL*

*Variability in supply  
chain making ERP stock  
settings unreliable*

*>10% reduction  
in inventory &  
improved CSL*



## Background

- Our client is part of a large industrial holdings company with specialist engineering capability & solutions across a multitude of sectors
- Within the aftermarket of our clients food equipment technology, the business prospects were deteriorating quickly with lower client order demand and a difficult supply chain
- Reliability of its clients, suppliers and changing lead times were taking significant time to get to grips with

## The Challenge – declining orders & over stocking

- Despite reduced client orders and significantly increased inventory, clients were complaining about service levels that continued to deteriorate.
- Changing supplier reliability and lead times aggravated the challenge where day-to-day operational fire-fighting to produce and deliver became the norm.
- Managing the ERP setting for inventory management became unreliable and frustrated the process further
- Lack of visibility where to focus and what specific actions to take led to serious concerns about financial delivery

#valuethroughdata

## The advanced analytics journey

- Inventory Diagnostic Tool.** ERP order level consumption data was ingested into our inventory engine to identify, calibrate and model client and product usage profiles and required inventory. A variety of performance criteria were set in the model to calculate optimal profiles.
- Value Identification.** For optimal inventory evaluation the tool established inventory & CSL from both an order variability (CoV) and volume threshold perspective (Runners, Repeaters, Strangers). In addition a detailed diagnostic on both client & product pareto profiles while understanding the profit risk impact allowed for specific priority actions and performance improvement.
- Actionable strategies.** Optimal scenarios were modelled to determine where inventory should be reduced or increased and where actual CSL should be improved or reduced.
  - Complete SKU assessment of required inventory by warehouse location
  - Optimal CSL strategies depending on client/product profit importance
  - Backward in time re-engineered inventory profiles to identify where, when and what SKUs were responsible for over-stocking.
  - Reassessment of operational practices for those SKUs that most impacted the over-stock challenge

## The results journey

- Inventory reduction.** A net 10% reduction in inventory but with some understocked and at risk SKU requiring more inventory
- CSL improvement** Clear improvement in service levels, especially for core customers leading to gradual improvement in order demand
- Operational** Evaluation of complete inventory process of most challenged SKU to transform operational efficiency

