IGSA Labs

INTEGRATED GENERAL SYSTEMS ANALYSIS
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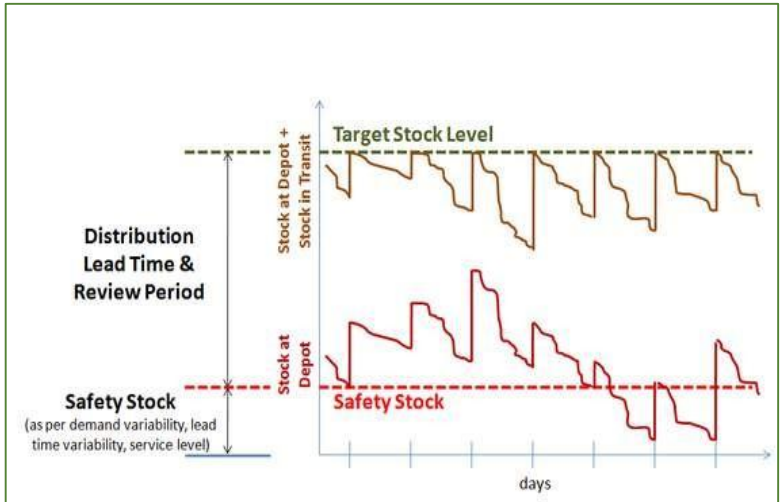
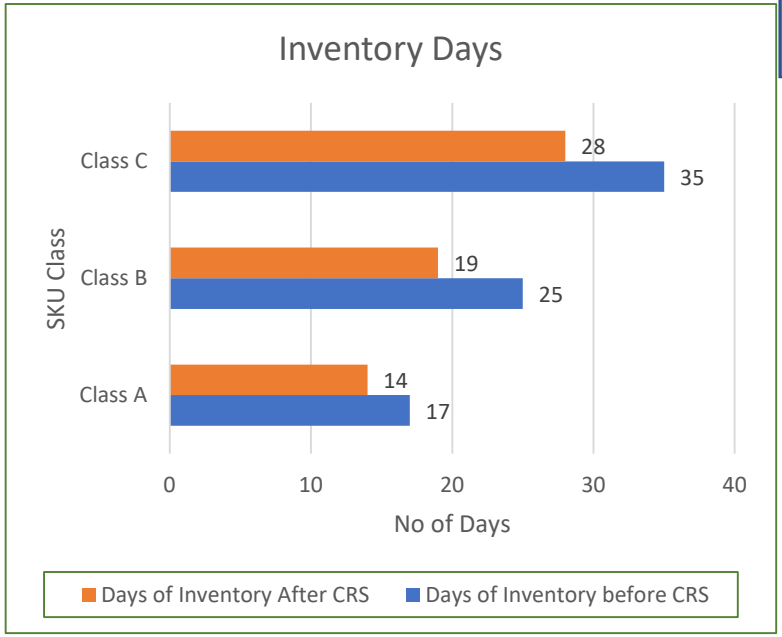
Inventory Planning Case Study

Maximize Contribution / Minimize Total Cost to Serve with IGSA Optimization Platform

IGSA

Case study : Improve Service Levels and Inventory Turnover with Optimal Inventory Replenishment and Order Generation





Challenge

A Large FMCG company selling more than 400 SKU and approx. 6000 dealer/distributor network with around 100 serving depot. The challenge was to determine the optimal inventory replenishment norms (i.e., safety stock level, re-order point, re-order quantity) of every SKU and every depot.

The large number of SKUs frequently experiencing the stock out/excess inventory at depot. This enable the challenge of minimized stock-outs, controlled inventory levels, and simultaneously maintain the service level with to various real-world constraints such as transport MOQ requirement and depot serviceability etc.

Solution

This proposed system is based on the forecasted demand determines & optimal inventory replenishment norms based on SKU class, fill rate, Average Daily Demand Forecast, demand variability, supply lead time their variability and generates orders based on them. IGSA team automated the process of data synchronization with ERP(SAP), model execution and order generation and KPI (key performance indicators) report generation.

Result

The benefits of demand planning and replenishment solution were multi-fold. At the outset, average inventory levels were reduced by about 20 - 25% without compromising the service levels. The system replaced ad-hoc methods, resulting in greater streamlining, transparency among stakeholders.