Internal Inventory Management: Analysis and Improvement for a CPG Company



Jorge Moreno Sánchez



Konstantinos Lalos





Agenda

- Introduction
- Motivation
- Methodology
- Model
- Results
- Takeaways
- Q&A





Introduction

- Sponsor Company
 - CPG leader enterprise
 - Hair care family in Mexico
 - Inventory management for FG at DC and RPM at production warehouse





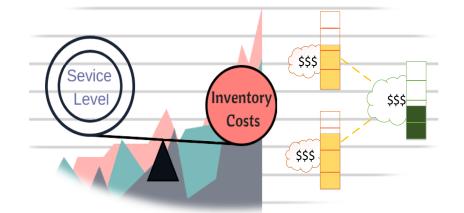
Motivation

CPG Companies

- Growth requires capital investment
- Reduce working capital
- Maintain or improve service levels
- Increase flexibility

Sponsor company

- High degree of variation in the supply chain both upstream and downstream
- Single-echelon inventory management

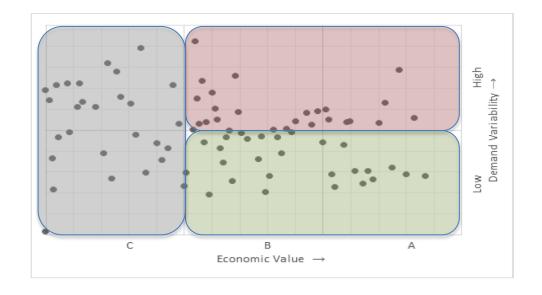






Methodology

- Data reduction
- Segmentation
 - Finished Goods
 - Sales value ABC & Demand variance
 - Raw and Pack Materials
 - Type & Criticality



- Pooling variability from final demand to upstream stages.
- Simulation and Validation data sets

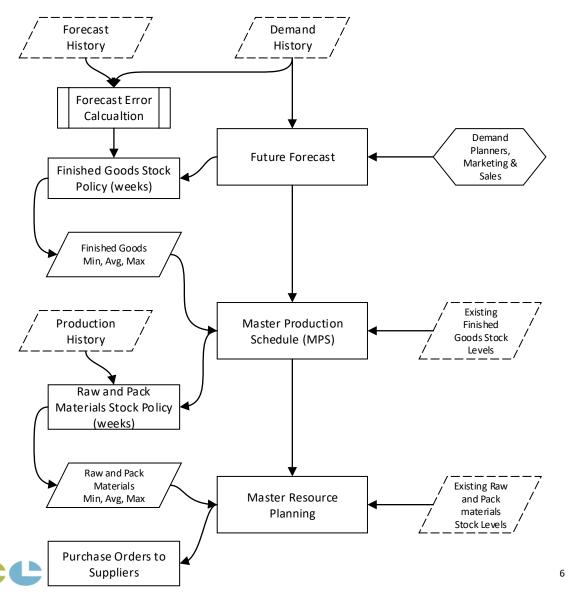


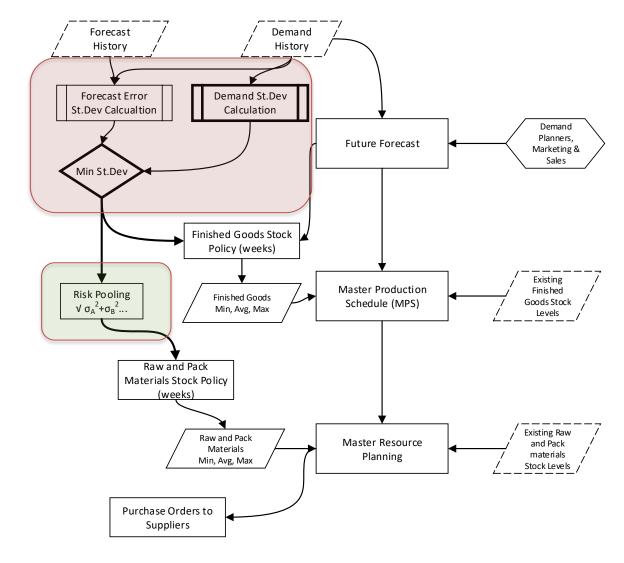


Currently Used

Models

Proposed

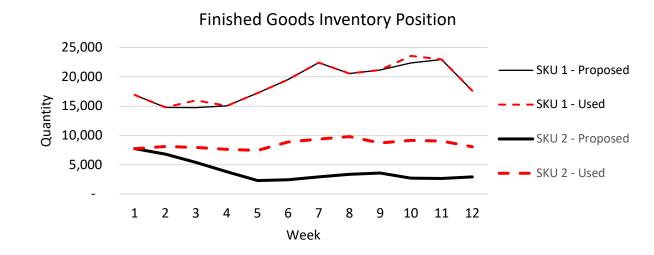


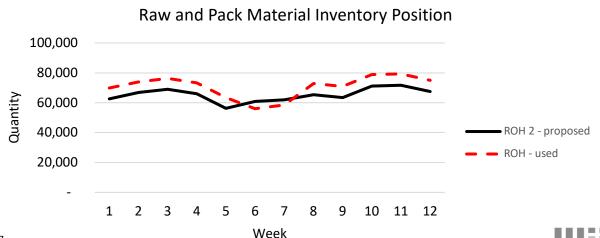




Results

- Total 11% inventory reduction
 - Finished Goods
 - Inventory reduction 8%
 - Service level 95%*
 - Raw and Pack materials
 - Inventory reduction 13%
 - Service level 97%









Take away

- One model does not fit all (FG & RPM)
- Pool demand and variation directly from final demand to upstream stages
- Build collaborative multi-echelon inventory policies and forecasts with suppliers, manufacturers and customers based on the actual consumer facing demand.





Q&A

Thank you!



