Foresight is 20/20
Improving Forecast Accuracy Through Demand Sensing

Motivation / Background

- "We must constantly strive to reduce our cost in order to maintain reasonable prices. Customers' orders must be serviced promptly and accurately." – Lines 3 and 4 of the J&J Credo
- J&J Vision is the contact lens global leader by market share but faces competition from other large companies and disruptive entrants.
- Driven to continuously improve forecast accuracy and capitalize on lower inventory costs and higher service levels.
- Demand sensing is an approach to leverage data to continuously adjust forecasts based on shifts in key signals within the system.

Key Question
Can J&J Vision improve its forecast accuracy by using demand sensing?

Methodology

Phase One – Setup & Diagnosis
- Data collection
- Literature Review
- Diagnosis of current forecasting model

Phase Two – Modeling & Analysis
- Variable selection
- Regression Model design
- Multivariate Significance analysis
- Model fit testing

Data Sources
- External Supply Chain Data
- Shipment & Forecast Data
- Downstream Supply Chain Data

Our Approach to Demand Sensing
- Forecast adjustment based on internal/external data
- Distributor
- Factory / DC
- Forecasting Data
- Downstream Supply Chain Data
- End Market
- External Supply Chain Data

Expected Contribution
- Explore J&J Vision’s current forecasting process and data and evaluate alternative methods.
- Identify key variables that drive and influence demand.
- Assess the potential impact in forecast accuracy of a demand sensing model.

Relevant Literature