



Client Success Story:

Forecast Accuracy Improvements Refinement of Forecast Process Implementation and Integration

Client:

\$700 MM Publicly traded manufacturer and distributor of consumer products. Company has operations across the United States, Latin America, and China.

Situation:

This company is a diversified distributor and marketer of a wide range of small appliances for use in and outside the home. It markets products under licensed brand names, company-owned brand names, and private label brand names primarily in North America, Latin America and the Caribbean.

- **Need to Provide Forecasting Foundation.** Short customer order lead-times with long manufacturing/sourcing lead-times dictate a make-to-stock environment, thereby creating dependence on reasonable forecast accuracy. Their Field Sales resources were responsible for this crucial estimate of demand that drives production requirements, without a standardized forecast methodology or statistical forecasts.
- **Need to Account for “Causal Factors”.** Promotions and other factors that significantly increased or decreased demand were not captured within the forecast solution, requiring the user to remember these events when manually creating the forecast.
- **Need to Improve Forecast Accountability.** Forecast accuracy was managed on an ad-hoc basis using manual analysis to generate forecast reports. Forecast reports were not directly tied to each Field Sales resource resulting in aggregate forecasts with no individual accountability.

Inaccurate forecasts resulted in lower order fill-rates, additional inbound and outbound expedited freight costs, vendor compliance penalties, excess inventory for most items, and reactive focus of Field Sales and Supply Chain resources. When factoring these explicit costs as well as subsequent account management issues, it became obvious – a new solution was needed.

Solution:

This client partnered with Auxis Management & Technology Solutions (Auxis) to select and implement a new IT infrastructure based on business strategy, future state processes and business requirements. Auxis developed a quantitative business case for improving forecast accuracy as a part of the overall core systems replacement and operational improvement business case known as “Vision ‘05”. The team conducted a thorough evaluation of forecast solutions and selected Demantra Spectrum™ due to its fit with the envisioned process and forecast requirements.

- **Statistical Forecast Foundation.** Given historical demand patterns, the Demantra Demand Planning engine generates statistical forecasting using a Bayesian Method to blend multiple forecast algorithms. The statistical forecast includes a seasonality and trend component, thereby eliminating the need to manually estimate these variables. In addition, the system generates forecasts from Point-of-Sale data to estimate *end-consumer* demand with visibility to retail inventory, not just *retail customer* demand (orders and shipments).
- **Inclusion of “Causal Factors”.** Demand is influenced by planned and unplanned circumstances. The forecast solution captures historical and future promotions to account for promotional lift. In addition, the system allows the historical demand to be adjusted when historical anomalies occurs. Thus, statistical forecasts will be generated from “meaningful” history.
- **Drive Budgeting and Longer-Term Planning.** Sales Resources create and manage forecasts by account by item for a rolling 78 week timeframe. The solution has been implemented with a roll-up by the Sales Hierarchy as well as the Product Hierarchy; thus, Sales, Marketing and senior management have visibility to the financial direction of the business. Additionally, a sales budget is created with this forecast foundation on an annual basis. The budget defines sales objectives and is used to compare actual performance to plan.

- **Formal Process with Forecast Accuracy Reporting.** The forecast process was redesigned with more structure, a keen focus on exception management and enhanced forecast reporting that can be summarized by account and by the forecast owners.
- **Automated Inbound and Outbound Integration.** Auxis managed the implementation and developed a closed-loop integration to systematically load demand history, pricing and master file data into the forecast solution, and then export the approved forecasts to the planning system.

Benefits:

Manufacturing and distribution companies know that accurate forecasts have a direct impact to the bottom line and long-term account relationships. For this client the result of implementing the forecast solution streamlined the business process and created a bottom line, cascading effect throughout the organization.

- **Increased Order Fill-Rates.** The most challenging component of inventory management is estimating demand. With increased forecast accuracy, the right products are in stock at the right time, resulting in improved order fill rates.
- **Reduced Overall Inventory.** With more accurate forecasts, less safety stock is required to account for demand variability. Excess inventory is reduced with formal forecast measurement and statistically-based forecasts.
- **Improved Sales.** A direct consequence of increasing fill-rates is increased revenue. As a secondary, long-term benefit to superior fulfillment performance, opportunities become available to gain distribution for additional products.
- **Cost Savings.** Increased forecast and planning accuracy reduces the need to expedite inbound and outbound freight. In addition, there are lower vendor compliance penalties. Finally, the organization is able to provide additional focus on sales and planning activities rather than reacting to fulfillment issues.