

# Supply & Demand Planning Optimization for Retail

## What is it?

### Demand Planning and Optimization for Retail

SAS provides a highly automated, fully integrated demand and supply planning solution that breaks down traditional barriers between planning steps, transforming planning into a continuous, flexible process with an integrated and modular suite of products that enable **Demand Driven** Integrated Business Planning (IBP) process. It includes advanced omni-channel analytics for demand forecasting, demand planning, optional merchandise planning and consensus management, **new product forecasting**, inventory optimization, **assortment planning**, size optimization for apparel and advanced dashboards and reporting including SAS's Visual Analytics. Data access engines and provide data quality to manage your source data to ensure dependable results. Key Differentiators are the ability to perform demand sensing, **demand shaping** (what if) using data like price and promotion, demand shifting, and supply (inventory) scenarios.

**Forecast Accuracy** is the key to supply chain success. Poor forecast accuracy leads to excess inventory or lost sales, obsolescence, excessive transportation expenses, and poor marketing decisions. While you hear a lot about AI and ML (Artificial Intelligence and Machine Learning), SAS actually has deployed these concepts in thousands of companies. Patents for AI and ML in Omni-Channel Forecasting demand include **automation**, which allows clients to deploy advanced models (ex: causal models) without statistical knowledge. This combined with **scalability**, allows millions of forecast combinations to be deployed quickly and seamlessly with a greater degree of accuracy providing less human intervention for demand/supply overrides – leading to greater trust and **productivity**. Furthermore, scenario planning (what -if) provides simulations needed you need to better product availability at a lower cost. SAS advanced forecasting models provide capability to report on demand drivers for things like promotion and price elasticity for eventual demand sensing and shaping (what if) including price and promotion optimization at location and regional levels.

#### QUICK FACTS

- > Advanced Demand Sensing for Improved Forecast Accuracy
- > Monitor forecast performance to understand value added or lost at each step
- > Predictive modeling and what-if analysis to find out how different variables will affect the supply/demand balance
- > Measure the effect of sales and marketing strategies on consumer demand using multitiered causal analysis
- > Visually analyze demand data to spot patterns and insights related to sales, shipments, pricing, promotions
- > Revenue, Profit, Promotion, and Price Optimization and Financial and Profit Planning
- > New Product/Location Forecasting and Interchanges

**Consensus Planning** integrates and deploys, with workflow, the Demand, Merchandise, and Marketing Plans in a friendly workbench environment. This allows demand planners and market planners to coordinate their efforts to enable IBP and merchandise planning processes. The ability to integrate Customer stores, Suppliers, Merchandise Plans and POS data with forecasts with your upstream suppliers is also supported. Demand - Supply plans can be expressed with different unit of measures, be converted to financial plans in different currencies, provide comprehensive reconciliations, and integrate profit and revenue planning as well as price optimization. **Forecast Value Add** guides demand planning with optimal collaboration.

**Inventory (Supply)** uses SAS's award-winning Multi Echelon optimizer to ensure optimized supply (Inventory) based on input parameters and constraints such as forecast variance, lead time, various costs, shelf life, shelf space, etc. Included is what-if analysis and replenishment on complex configurations including internal and external nodes including store-product, distribution centers, suppliers and manufacturing.

**Visual Analytics** provides ability to visually analyze demand data to spot patterns and insights related to sales, shipments, pricing, promotions, etc.

**Data Access and Data Quality** is often the keystone to the project's success. Therefore, included in the product is your choice of access engines (SAP, Oracle, etc.) and data quality products to flag/impute missing values, duplicates, time stamps.

## Who uses the proposed Solution?

95% of fortune 1,000 companies rely on SAS for analytics and especially forecasting to better their supply chain results. These include some of the largest and well-known companies such as Carrefour and Nestlé.

## The Power of the PARTNER

 **CT Global Solutions** is a strategic SAS partner that helps turn your data into profits. A Gold SAS alliance partner for 15 years, CT Global has demonstrated domain expertise in profit analytics, financial management, demand planning and decision optimization. CT Global puts SAS to work and amplifies its value to MAKE EVERY DECISION COUNT.

**SAS** is the leader in analytics. Through innovative software and services, SAS empowers and inspires customers around the world to transform data into intelligence. SAS gives you THE POWER TO KNOW®. 92 of the top 100 companies on the 2018 Fortune Global 1000® use SAS customers, [see their stories here](#). Creating an enterprise analytics platform culture with an emphasis on forecasting leveraging time-series, machine learning, deep learning algorithms, and causal factors, should be #1 in corporate IT Priorities. SAS & CT will get you there. Creating an enterprise analytics platform culture with an emphasis on forecasting leveraging time-series, machine learning, deep learning algorithms, and causal factors, should be #1 in corporate IT priorities. SAS & CT will get you there.

### Customer Validation

- > Omni Channel Clothing Manufacturer and Retailer Optimizes inventory for 10M+ location-sku combinations
- > Global Supermarket Retailer managing over 20M products and locations using advanced AI
- > Pharma Retail reduced inventory while managing and optimizes promotions.
- > Integrated Merchandise and Space Planning
- > Clients Average 10% inventory reduction with increased availability
- > Expiry date tracking decreased Obsolescence and improved inventory turn



To talk with a CT Global specialist, please contact us at [info@ctglobalsolutions.com](mailto:info@ctglobalsolutions.com)