



Impact

Using SAS for forecasting and demand planning, a global pharmaceutical industry supplier was able to **reduce expedited shipments by 26 percent.**

Challenges

- **Inefficient processes.** Disjointed, siloed planning causes confusion and inefficiency.
- **Insufficient tools.** No matter how good processes are, if you lack the right tools, you won't get reliable results.
- **Lack of management buy-in.** Many senior managers are unaware of the competitive advantages of advanced analytics and won't throw support behind something they don't believe in.
- **Disjointed systems.** Relevant data is often scattered throughout siloed business units.
- **Inaccurate demand forecasts.** Forecasts derived from incomplete or contradictory data using simplistic forecasting tools can't be trusted.
- **Inconsistent goals.** Different departments are driven by different metrics (e.g. sales driven to increase revenue; finance driven to increase profit margin; etc.), resulting in mismatched goals and plans.
- **Judgment overrides.** Personal biases and limited domain expertise corrupt demand planning processes.



**THE
POWER
TO KNOW®**

How can we profitably balance supply and demand to meet targeted customer service levels ?

YOUR GOAL: Drive greater profitability and improve customer satisfaction

The proliferation of products, channels and outlets means more choices than ever for today's consumers, who make buying decisions based on availability, selection and price. In response, many companies have turned to demand planning activities to become more customer-driven. There's a popular misconception, though, that demand planning is possible with legacy ERP/SCM solutions. In reality, such solutions are workflow based with little emphasis on analytics. Associated processes are driven primarily by domain knowledge and biased judgment, not real data, and the resulting forecasts are unreliable. The consequences? Either too much inventory, which may lead to higher carrying costs and forced markdowns; or too little, which may lead to stockouts and backorders that can frustrate customers.

Being truly "demand-driven" entails the immediate sensing of customer demand and an instant supply chain response. While a lot of companies have embraced demand planning as part of S&OP, most aren't realizing its full potential. A 2007 study by AMR Research, "DDSN for Discrete Organizations, Part 2: S&OP and Forecasting," revealed that among those companies "using an S&OP process for 100% of their business, forecast error ranges all the way from 2% to 52%. ..." When done right, S&OP gives organizations the opportunity to shape demand, allocate resources in the most profitable way and refine supply chain activities to produce a profitable demand response.

OUR APPROACH

The ability to generate consistently accurate forecasts over time with an analytics-based solution is critical to maintaining profitability. SAS approaches the problem by delivering software and services to help you:

- **Get data that is correct, complete and available when you need it** with data management tools that can access data from any system in any format, then automatically transform and cleanse the data to get it ready for analysis.
- **Generate accurate demand-driven forecasts** using the right methods and models at any hierarchical level with a patented forecast engine and flexible data modeling.
- **Determine optimal demand-shaping actions** via a user-friendly interface to advanced analytics that let you test various scenarios and conduct "what if" analyses to gauge the financial impact of changes in your marketing or product mix.
- **Measure forecast performance against KPIs** with an interactive dashboard that lets you monitor, track, report and surface alerts on forecast performance metrics.
- **Proactively drive S&OP processes** with an advanced consensus forecasting planner workbench that delivers automated, statistically driven, weighted consensus forecasts and workflows that facilitate the consensus forecasting process.
- **Share information companywide** via a self-service Web interface that lets users interact with and drill down through reports as needed.

Advanced forecasting technology and processes can enhance your S&OP processes and address related challenges for greatly improved demand and supply alignment and a profitable demand response.

THE SAS® DIFFERENCE: Completely integrated and tailored to fit your business

SAS optimally integrates individual technology components within your existing IT infrastructure into a single, unified system. The result is an information flow that transcends organizational silos, diverse computing platforms and niche tools.

Only SAS offers a comprehensive, integrated business intelligence platform that provides:

- **Consistent, accurate information** based on a comprehensive view of the business.
- **A suite of intuitive interfaces and self-service query and reporting capabilities** that enable decision makers across the enterprise to spend less time looking for information and more time driving strategic decisions.

With other vendors' solutions, you have to either change your processes to fit the solution or spend a lot of money reconfiguring the solution to fit your processes—in effect, paying for it twice. SAS tailors the solution to fit your business like a glove, getting you on the road to rapid ROI in six months or less.

CASE STUDY: A global supplier to the pharmaceutical industry

■ Situation

The company was having trouble developing high-quality, easy-to-understand forecasts for its 7,000-plus unique SKUs. Inaccurate forecasts were taking their toll in the form of last-minute, expensive air shipments to meet customer demands. The implementation of a new ERP system was complicating matters further, as the system wasn't compatible with the company's forecasting engine.

■ Solution

SAS provided a solution to enable demand planning and increase forecasting accuracy with:

- A high-performance forecasting engine.
- More accurate, trustworthy, statistically generated forecasts.
- Optimized inventory replenishment policies.

■ Results

- A 26 percent reduction in air shipping (resulting in an annual savings of \$633,330).
- Reduced inventory levels and lower associated inventory costs.
- Reduced overseas market share losses.
- Improved product lead times.



SAS Institute Inc. World Headquarters +1 919 677 8000

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■ The vision

Comprehensive data management

What if all the data necessary for accurate forecasting was clean, complete and available when you needed it?

Accurate forecasting

What if you could balance demand and supply in such a way that reduced out-of-stocks and overstocks and led to greater profitability?

Advanced analytics

What if you could determine the financial impact of different scenarios—including realistic, optimistic and pessimistic projections—surrounding events such as new product, location and channel introductions?

Performance monitoring

What if you could measure and track forecast performance and share reports companywide, and then incorporate that information back into your S&OP process?

Forecasting planner workbench

What if you could drive your S&OP process with weighted consensus forecasts and gap reports that influence downstream planning functions and systems?

Self-service reporting

What if key personnel had self-service access to forecasts and reports in whatever format works best for them?

SAS FACTS

- The patent-pending SAS® Forecast Server was named one of the "Trend-Setting Products of the Year for 2005" by *KMWorld* magazine and earned a 2006 Product of the Year award from Technology Marketing Corporation's *Communications Solutions* magazine.
- SAS was ranked No. 1 in the "Business Performance" category of *Manufacturing Business Technology's* Global 100 list.

Learn more about SAS® software and services for manufacturing at: www.sas.com/industry/mfg