§sas
THE POWER TO KNOW

Business Impact

"The ability to automatically generate accurate and reliable forecasting models translates into time savings and is a determining factor in the event of a nomination frequency increase."

– Natale Maiocchi,
CIO, Snam Rete Gas

Challenges

- **Lack of skilled forecasters.** Some in forecasting roles lack formal training, have insufficient experience or may not be using the most appropriate forecasting methods.

- **Limitations of forecasting software.** Current software lags behind on ability to scale to larger quantities of forecasts or lacks the automation to handle custom-built models.

- **Inadequate capabilities for forecasting behaviors.** Current software provides only a limited number of models that are not always suitable for the variety of behavior patterns being forecast.

- **Maximized investments in ERP/SCM systems.** Despite huge investments in ERP/SCM systems, operational performance (e.g., inventory levels, customer service) and financial performance have not improved.

- **Data standardization.** Data needed to create forecasts is scattered across the organization, residing in different systems – from legacy systems to spreadsheets on personal computers.

How can we deliver the right quantity of product to the right customer at the right time to ensure profitability?

YOUR GOAL: Improve demand forecasting for refining and distribution

Refining companies have struggled for decades to produce decent returns on their assets given oversupply conditions in the marketplace. But in recent years, global economic growth has served to bring supply and demand closer to equilibrium, and oil and gas companies continue to view their refining assets as opportunities to generate revenue, stabilize cash flow and earnings, and directly create bridges to end-use markets and customers. And most importantly, since refining is a secure outlet for crude oil and natural gas, ensuring visibility of demand for exploration and production operations drives improved margins.

In this environment, refiners must balance refining supply with end-use demand, and add adaptability to their operations, so that any disruptions – or spikes in demand – are handled appropriately. Refiners are increasingly seeing the value of implementing demand forecasting technologies to understand the demand for gasoline and chemicals in regional, national and international markets. Forecasting demand can help them address the pressures on profit that come from kinks in the supply chain and subsequently keep profit margins at acceptable levels.

OUR APPROACH

Refining companies can achieve better ROI on legacy IT investments by maximizing the use of data. We approach the problem by providing software and services to help you:

- **Perform accurate, demand-driven forecasts at any hierarchical level.** Using a wide range of forecasting models within our patented forecast engine, you'll get a true picture of demand that relies not only on historical demand data, but also includes consumption data and market indicators such as price, promotions and weather.

- **Find correct and complete data when you need it from any system in any format.** Data management tools access all types of data, including downstream POS data and upstream supplier data, then automatically transform and cleanse the data to get it ready for analysis.

- **Determine optimal demand-shaping options.** Test various scenarios and conduct what-if analyses to gauge the impact of changes in your marketing strategies or product mix on demand and profitability.

- **Measure forecast performance against KPIs.** Interactive dashboards let you monitor, track, alert and report forecast performance metrics.

- **Seamlessly integrate robust forecasting within your planning environment.** Access SAS® forecasts directly from the SAP APO demand-planning module, improving the accuracy of your forecast without ever leaving your familiar planning environment.

SAS provides forecasts that reflect the realities of the refining business, improving your ability to plan future events with confidence.

THE SAS® DIFFERENCE: Create consistent, accurate forecasts of demand

Improving profit margins in the highly competitive refining industry resides in your ability to create consistent, accurate forecasts of demand over time using analytics-based modeling. SAS helps you achieve this with:

- **Comprehensive data integration.** Because other forecasting systems do not have integrated data management and data cleansing capabilities, those forecasts will deteriorate over time as data quality erodes. SAS provides a complete portfolio of data integration capabilities to ensure data quality and integrity, enabling you to maintain forecast accuracy.

- **What-if analyses.** Maximize profitability with the ability to understand the financial impact of changes in the product and marketing mix.

- **True business intelligence at your fingertips.** SAS offers an integrated business intelligence platform that provides intuitive self-service query and reporting capabilities, pulling data from SAS or other systems. You'll spend less time looking for information and more time driving strategic decisions.

- **Tailored to fit your business.** With other vendors, you either change your processes to fit their solutions or spend lots of money reconfiguring their solutions to fit your processes – in effect, paying twice. SAS solutions are flexible enough to fit your business and deliver rapid ROI.

CASE STUDY: SNAM RETE GAS

◼ Situation

This major Italian gas provider needed to ensure the proper allocation of nominated quantities at more than 7,000 delivery points. To meet this objective and comply with regulatory changes and customer service requirements, Snam Rete Gas needed to improve their operating processes and replace their current dispatching application base. A key component of these operations is accurate and detailed demand forecasting.

◼ Solution

- Replace obsolete technology and models that no longer meet current business needs.
- Deliver accurate, scalable forecasts of demand at delivery-point level.
- Segment forecasts in a more granular fashion – by geographic areas and consumer type.
- Anticipate future scenarios involving an increase of nomination frequency.

◼ Result

- Drastically accelerated the speed of the forecasting process.
- Improved customer service levels by ensuring the correct stock at the correct time.
- Increased ease-of-use through an intuitive reporting interface that translates into a simpler distribution of forecasting results within the company.

◼ What if you could ...

- Develop more accurate forecast models for demand?
- Add forecasting capabilities to your existing planning solutions?
- Collect data from multiple systems for use in analysis?
- Reduce your days in inventory?
- Optimize your transport schedules based on demand?
- Correlate accurate demand data to the economic viability of executing a contract?
- Use demand forecasts to meet performance markers?
- Link your production more closely to expected sales?

◼ You can. SAS gives you THE POWER TO KNOW®.

SAS FACTS

- SAS has been in business since 1976 and today has customers at more than 50,000 sites worldwide.
- SAS has more 90 customers in the oil and gas industry.
- Forrester named SAS a leader in predictive analytics.

Learn more about SAS software and services for oil and gas at: www.sas.com/industry/oilgas

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