What does SAS® New Product Forecasting do?
SAS New Product Forecasting provides an objective basis for predicting new product demand. A patent-pending process assembles and mines your historical data, combining statistical analysis with your business expertise.

Why is SAS® New Product Forecasting important?
While using judgment based on past experience is necessary in new product forecasting, it has its disadvantages as well. Too often, personal judgment and biases affect the accuracy of predicting the success of new products. SAS can provide the unbiased view you need to make sound decisions.

For whom is SAS® New Product Forecasting designed?
The product is designed for forecast analysts, business planners and senior-level managers who are all responsible for creating new product sales forecasts to be used in the consensus forecasting process.

SAS® New Product Forecasting
Predict demand for new products with analytics and sound business judgment

New product forecasting (NPF) is a recurring challenge for consumer goods manufacturers and retailers. Here are some of NPF situations you can encounter:

- Entirely new types of products.
- New markets for existing products (such as expanding a regional brand nationally or globally).
- Refinements of existing products (such as new and improved versions or packaging changes).

There are many NPF approaches. Some of the common ones include:

- Executive opinion – top management provides the forecast.
- Sales roll-up – a bottom-up poll of the sales force.
- Delphi method – a structured formal process for anonymously gathering forecasts and building a consensus.
- Prediction market – anonymous wagering used to gather group opinion.

All of these methods use judgment to varying degrees and with varying success.

The SAS new product forecasting process is different. It builds a forecast using the historical data of groups of existing products with similar attributes. The patent-pending process helps validate user judgment and allows for the elimination of outliers to produce a better historical set of data for the new product.

Benefits

- **Develop structured analogies.** Our approach to NPF combines analogies with sound judgment. This helps the forecaster realize the risks, uncertainties and variability in new product behavior so that the organization can make the appropriate decisions based on these uncertainties.
- **Integrate with other SAS forecasting solutions.** SAS has incorporated high-performance forecasting and optimization analytics into our user-oriented forecasting and planning workbenches and integrated them into a smoothly functioning suite of supply-chain management tools.
- **Create effective NPF workflows.** This means you have a more structured process using data, analytics and domain knowledge that can increase forecast accuracy up to 15 percent – and do it faster. This gives you the ability to create multiple new product forecasting in hours versus days. And you can integrate workflows with your business hierarchy to develop the most complete assessment possible for new product launches.
Overview

SAS New Product Forecasting provides an objective basis for predicting new product demand with SAS’ patent-pending structured judgment methodology, which gives you the ability to integrate new product forecasts with the planning process. This structured analogy approach helps automate the selection of analogous products (like items) and facilitates review and clustering of past new product introductions to generate statistical forecasts.

This approach helps you overcome demand forecasting challenges for a new product, such as a lack of product history or an uncertain product life cycle. Users can manually override the statistical forecasts. Also, you get a better sense of the risks and uncertainties in new product forecasts through data visualization of past new product introductions.

Structured decision making

The use of analogies is a common NPF practice. You can see it, for example, in the real estate market, where an agent will prepare a list of “comps” – similar houses in the area that are on the market or have recently sold – and use this to suggest a selling price.

The structured analogy approach requires two types of data – product attributes (for prior and new products) and historical sales (for prior products). Product attributes can include:

- Product type (toy, music, clothing, shirts, etc.).
- Season of introduction (summer item, winter item, etc.).
- Financial (target price, competitor price, etc.).
- Target market demographic (gender, age, income, postal code etc.).
- Physical characteristics (style, color, size, etc.).

Integrated forecasting

SAS New Product Forecasting is integrated into the SAS Demand-Driven Planning and Optimization suite. A tightly integrated suite of supply chain forecasting and planning tools means that the data moves seamlessly between applications, making it easier for the demand forecasting and demand planning team members to collaborate. The result is faster forecast-to-execution time, and a shorter period between data input and execution means a more accurate forecast.

Configurable workflows

We provide a systematic workflow to forecast the values for new products. This more structured process uses data, analytics and domain knowledge to increase your forecasting accuracy and significantly reduce forecasting time. This means making faster business decisions so you can more agilely respond to changing demand and other market factors.
Structured analogy approach
- Integrated statistical analysis with business judgment in five steps.
- Suggests future demand of new products using “as-like” or surrogate products based on a product profile (primary attributes and characteristics).
- Considers seasonality, level and trend of surrogate products.
Users can shape the suggested demand based on their business knowledge.

New product forecasting workflow
- Combines data mining, clustering and statistical forecasting with domain knowledge in a structured process.
- Ability to integrate new product forecasts into the planning process.
- Project management tools allow you to create a project that contains the new product and its parameters, such as KPIs, periodicity, and number of clusters to be created.
- Define the relationship of the new product to the dimensions and select candidate products.
- Common attributes and characteristics are identified to filter the candidate products.
- Candidate products can be analyzed according to seasonality.
- Remove outlier products whose demand pattern will not be similar to the expected demand pattern of the new product.
- Select a cluster that contains the most suitable candidate products.
- Review and override the predicted demand using business judgment of various factors (such as market conditions, organizational environment and constraints).

Forecasting suite integration
- Forecast analyst workbench uses SAS High-Performance Forecasting to generate large-scale forecasts.
- Collaborative planning workbench includes forecast input, review, comparison and override, all facilitated with a configurable workflow and approval process integrated with email.
- Inventory optimization workbench gives you multiechelon inventory optimization and optimal replenishment planning, including supply sensing and shaping using what-if analysis.
- Forecasting for SAP APO is advanced analytic forecasting integrated to APO with forecast parameter selection.
- Demand-signal analytics includes an integrated repository of demand information with tools to explore and analyze sales, products, stores, territories, promotions, inventory, price, performance and operations.
Final review step provides the analyst the opportunity to enter forecast overrides.