How to shape demands to gain competitive advantage with Oracle Demantra

Srini Subramanian
Inspirage LLC

The audience will gain an understanding of powerful Oracle Demantra capabilities to shape demands to meet corporate financial objectives and gain competitive advantages. This presentation is geared towards IT functional and business process owners. We will utilize several customer scenarios to explain how these Demantra capabilities address real life business problems with practical solutions

Background and Overview:

Companies constantly face challenges such as ever shortening product lifecycles, increased lead times due to global nature of supply chains and extreme product segmentation to meet various demographic needs. These challenges result in increased pressure for the supply chain planning organizations to accurately predict and respond to customer's needs. The implications of not having the ability to sense, shape and respond to the customer's demands is reduced service levels resulting in dissatisfied customers leading to reduced pricing power. The capital also gets misallocated in maintaining wrong products' inventory and investments are made in building factory capacity to manufacture not-so-profitable products. The result is reduced profits, lost market share and dissatisfied shareholders.

In this paper, we focus on the importance of pro-actively shaping the demands to meet the customers' needs to maintain competitive advantage. We start by defining the concept of "shaping demands" and its benefits, then go on to describe the various tools available within the Oracle Demantra and APS suite of applications to facilitate that process. Shaping demands can be defined as the process of aligning your forecast to reality by taking all possible variables into consideration. Shaping demands requires collaboration amongst stakeholders and results in a single consensus forecast that is agreed upon by sales, marketing, operations and finance departments. This pro-active approach to demand management makes your supply chain more demand driven thereby enabling your organization to satisfy more of your customer's needs. The result is improved service levels and increased profitability.

There are two aspects to shaping demands. One is having the ability to strategically forecast your demands and the other is operational considerations to fulfill the demand. Developing an accurate single statement of demand requires extensive collaboration amongst all the stakeholders such as marketing, sales, finance and operations. Furthermore, the various people involved in the forecasting may enter their forecast at different levels. For example, a country manager may enter the forecast for the entire country at a product category level and an account manager may enter the forecast at an individual customer SKU intersection. The forecast should also consider historical trends, seasonality and causal factors that influence the forecast. There should be a robust process and tools to forecast new products and new stores. The operational planning include considering the constraints in various factories and systematically distributing the forecasts to various organizations, prioritizing the demands that needs to be fulfilled and developing the metrics to support strategic positioning of the supplies to react to customer demands quickly.

Use cases to shape demands

In this section, we use examples of problems faced by companies in various industrial verticals to illustrate how various capabilities within Demantra can be used to pro-actively shape the demands.

The first example is the case of a company that manufactures consumer electronics such as mobile phones that works with multiple technologies, caters to multiple demographics and sells through out the world. Forecasting for these products is complicated by the fact that there are a wide variety of related products differentiated only by attributes such as color, casing, language and software that is loaded on the device. The customers are also spread though out the world requiring extensive collaboration between the various customer facing regional and country managers to develop a single global statement of demand.

For a scenario such as this, Demantra offers a robust workflow based collaboration capability. There are many standard out-of-the-box flows to support various business processes. If there are any special needs that are not met out of the box, there is a simple, easy to use drag and drop type development tool that allows for creation of any custom flows to support various business processes. For example, a workflow process can be implemented to send a notification to various planners once a baseline forecast is ready. The account reps that interact with the customers can enter their forecast and progress the workflow for the regional managers to review and respond. This process can be extended to have back and forth collaboration at any level in the organization and achieve a true consensus forecast.

Demantra also supports having unlimited hierarchies and any number of levels in each one of those hierarchies. The stakeholders can review and enter the forecast depending on the level at which they operate in the organization. Demantra supports multiple schemes to disaggregate the data that was entered at higher levels in the hierarchy. For example, the disaggregation can happen based on the weights of another measure or based on “Proport” mechanism which stores the weights of the various item/location combinations. There are system parameters that control how the Proport mechanism calculates the weights. This feature is critical because determining the forecast mix for the various related products could be the difference between profits and obsolete inventory. In addition, Demantra offers the ability to create mathematical expressions through server and client expressions. The color expressions allow for conditional color coding of the data. All of the above features help the various stakeholders across the globe to collaborate and pro-actively shape the demands to arrive at the best possible forecast.

The second use case is for a manufacturer of construction equipment whose business is growing but also depends significantly on the economic indicators. Their business is seasonal but also varies with the seasons in the various regions of the world. For example, the sale of snow equipment is expected to be higher in the northeastern United States during winter months than in the southwestern United States. Demantra supports both global and local causal factors in determining the statistical forecast. For example, housing starts indicator is a global causal factor that tends to affect all the products they manufacture. Local factors are ones such as a new product launch that tend to affect specific related products. Here, Demantra offers specific capabilities to generate a robust statistical forecast that is “shaped” by considering all the factors that affect the demands.

The third example from the presentation is of a retailer that is on an aggressive growth trajectory. They open about 10 – 12 new stores every year and continuously expand their product offerings in their stores. Besides needing the ability to collaborate amongst and between marketing and merchandising departments, they need to be able to rapidly forecast new stores accurately and introduce new products to existing stores. Demantra’s Member Management and Chaining modules offer those specific capabilities. The Member

Management initializes the new items and locations and Chaining helps to initialize the history for the new products and stores based on existing products/stores. Such capabilities help any retailer to shape their demands to reduce stock-outs and allow them to turn their inventory more frequently.

The final example is that of a global telecommunications manufacturer that ships their products from many factories and distribution centers through out the world. For such as scenario, Demantra provides the ability to create a global forecast for the corporation and let ASCP consume the forecast at a global level and distribute the remaining forecast to organizations that fulfill the demand.

Summary

The use-cases illustrate the various capabilities (but not limited to ones described in the document) that exist within the Demantra application to pro-actively shape demands to meet corporate financial goals. Demantra is a suite of applications within the broader Advanced Planning and Scheduling umbrella of products. Companies should first determine their priorities such as to improve forecast accuracy by 5% or to increase inventory turns by 2. Then identify the capabilities they need to accomplish those objectives. For example, the need to collaborate between stakeholders in developing a consensus forecast or a robust causal factors capability may be needed to create an accurate statistical forecast. Based on the objectives and the capabilities, map the Demantra and APS components that are needed to achieve the end goals. Demantra and APS suite has many components with overlapping features. So, it is extremely crucial to conduct this evaluation first and then layout an incremental implementation plan to rollout the capabilities.