

# Oracle Value Chain Planning

## Demantra Advanced Forecasting and Demand Modeling

### ORACLE<sup>®</sup> VALUE CHAIN PLANNING 12

*Is your company trying to be more demand driven? A better understanding of demand drivers at a more granular level in order is the first step to improved demand sensing. Do you need to determine the cross-product effects of demand shaping activities and have forecasts automatically adjusted for these effects? Oracle<sup>®</sup> Demantra Advanced Forecasting and Demand Modeling enables you to automate the analysis of complex demand patterns, simulate an unlimited number of demand shaping scenarios, and leverage the power of advanced analytics to generate more accurate forecasts. With better insights to the true drivers of demand, your organization will be equipped to better sense and shape demand.*

#### KEY FEATURES

- Analyze complex demand data with powerful Bayesian Markov analytics
- Gain insight on product lifecycles, seasonality and promotional impacts of new items by leveraging data of more mature products
- Multidimensional data modeling with flexible data hierarchies for up-to-date demand visibility and one-number planning
- 15 powerful forecast models mixed in an infinite number of combination to provide precise forecasts
- Automated analytics engines and scalable architecture to manage massive volumes of data
- Proprietary Bayesian forecasting to handle an unlimited number of simultaneous causal factors, including pricing and promotions

#### KEY BENEFITS

- Improve forecast accuracy with advanced statistical modeling and causal factors
- Shape demand for profitability
- Optimize your product portfolio and manage new product introductions

#### Overview

Oracle Demantra Advanced Forecasting and Demand Modeling adds six additional advanced logistics and Ridge regression type forecast models<sup>1</sup> to make more precise predictions. Added to nine forecast models in Oracle<sup>®</sup> Demantra Demand Management, all the 15 forecast models are automatically weighted by the analytics engine based on performance in a specific time period. This means that both short term and long term forecasts can have higher accuracy in a single planning run. A unique capability called the Bayesian Markov envelope enables extended handling of large scale causal regression models by executing multiple comparative hypotheses (subsets of causal factors) combined with Bayesian averaging.

#### Built-In analytics improves demand sensing

Advanced Forecasting and Demand Modeling is built on a common, flexible and multidimensional data architecture that is shared with Demand Management and other Oracle applications to provide slice and dice analytic capabilities along any dimension and level of granularity. All departments can organize the data in hierarchies and units of measure so that each has their own view of up-to-date plans, while sharing the same granular base data—one version of the truth. Unlike conventional business intelligence tools that only let you view data, Advanced Forecasting and Demand Modeling enables you to dynamically read and edit data with changes automatically split and rolled up or down appropriately—known as “live read-write capability.” Top-down, bottom-up, and middle-out change analysis is supported. The unique middle-out capability enables planners to make plan changes at the appropriate level of the hierarchy and then have them automatically applied up and down the entire hierarchy.

## Unlimited causal analysis

Oracle Demantra Advanced Forecasting and Demand Modeling extends the causal analytics from the 15 preconfigured and 5 open causal factors supported in Demand Management to supporting unlimited causal factors. With unlimited causal factors, the analytics engine is able to better isolate the impact of individual positive and negative demand drivers. Unlimited causal factors greatly expand your ability to address more complex analytical questions. In addition, Advanced Forecasting and Demand Modeling supports more robust causal functionality including causal filters as well as contextual use of promotional information for more complete demand sensing. Lift decomposition as well as pre-post affects and cannibalization can be further highlighted separately. With these analytical capabilities, market, econometric, weather and other external data that might serve as a leading indicator can be modeled.

## Analyze demand shaping activities

All companies execute various demand shaping activities – programs and events designed to stimulate sales and grow market share. These activities can be in the form of price reductions, advertising, promotions, product bundling, sales incentives, additional services, and so on. These activities may be directed at individual products, groups of products or even corporate awareness. They have both intended effects, such as increased sales, and unintended effects, such as cannibalization. Designed to extend the demand-driven planning capabilities of Demand Management and Real-Time Sales and Operations Planning, Advanced Forecasting and Demand Modeling enables Sales and Marketing to take a more active role in the business forecasting process. It also enables supply chain and distribution planners to better align supply plans with promotions for both the promoted items and other items that might be cannibalized or see sales increases.

## Shape forecasts for new products

Oracle Demantra Advanced Forecasting and Demand Modeling extends the new production introduction functionality in Demand Management enabling you to statistically estimate shape of the new product introduction curve (product launch rate) based on prior learning. Shape modeling and attribute-based forecasting enable a more accurate new product history to be created and used as the basis for a phase-in and phase-out forecast.

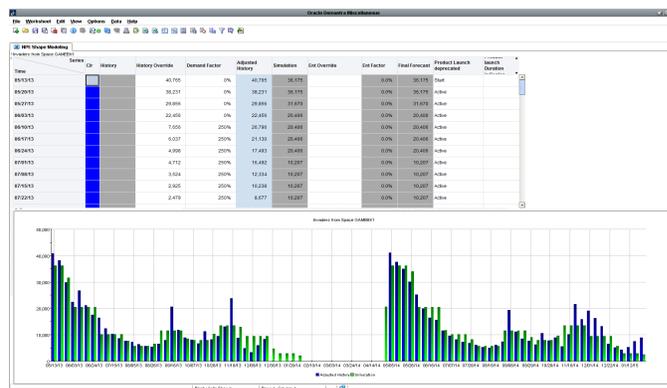


Figure 1: Use the shape of prior product history to develop a new forecast

## RELATED PRODUCTS

- Oracle® Demantra Demand Management
- Oracle® Demantra Real-Time Sales and Operations Planning
- Oracle® Demantra Predictive Trade Planning
- Oracle® Demantra Trade Planning Optimization

## Gantt charts enhance promotion analysis

Gantt charts provide a convenient way to visualize promotion and other marketing events on a continuous calendar. Gantt charts can be displayed with any worksheet that contains promotional data. A promotion calendar feature aligns promotions to standard calendar periods.

## Fully integrated solution – Expand the value chain solution

Oracle Demantra Advanced Forecasting and Demand Modeling is an optional module to Oracle Demantra Demand Management, both part of the broader Oracle Value Chain Planning solution. Advanced Forecasting and Demand Modeling can also be used in conjunction with Oracle Demantra Real-Time Sales and Operations Planning to give sales and marketing powerful analytic capability to improve the overall sales and operations planning process.

## VALUE CHAIN PLANNING — A COMPLETE SOLUTION

Oracle's Value Chain Planning solution enables companies to efficiently design, plan, and service their value chains from factory to shelf. Its componentized architecture enables you to start with any product and expand to other areas at any point in time. The Oracle Value Chain Planning architecture leverages the scalability and security of Oracle's Database and Fusion Middleware technology and can be deployed as a single instance with Oracle E-Business Suite, or integrated with other systems. Whether you implement one module or the entire product solution, Oracle Value Chain Planning enables you to share unified supply chain planning information across the enterprise so you can make informed decisions faster.



## CONTACT US

For more information about Oracle Demantra Advanced Forecasting and Demand Modeling, visit [oracle.com](http://oracle.com) or call +1.800.ORACLE1 to speak to an Oracle representative.

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## Hardware and Software, Engineered to Work Together

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