

Oracle Fusion Cloud Demand Management

Better forecast accuracy helps you improve customer service levels while reducing costs. But how can you accurately predict demand when your business constantly changes? Oracle Fusion Cloud Demand Management combines proven forecasting algorithms with flexible analytics to anticipate customer demand. It gives you immediate feedback on new products, business segments, and customer behaviors along with time-phased replenishment requirements so you can meet demand-driven inventory targets.

CUSTOMER-CENTRIC DEMAND MANAGEMENT

Oracle Demand Management's embedded processes orient your demand planning practice around your customer. You can analyze and dynamically segment customer demand, manage demand variability, handle frequent product introductions, or plan demand of configured products and options. The customer-centric segmentation drives inventory policies and fulfillment to connect demand and supply. Comprehensive analytics, social collaboration, and mobility features enhance your insights and promote teamwork, enabling your organization to accurately sense, predict, and shape demand.



Capabilities

- Capture internal and external demand signals
- Identify demand patterns and changes via real-time updates
- Multi-dimensional demand modeling that adapts to your business
- Superior Bayesian demand forecasting engine
- Flexible time buckets, units, and currencies for operational and financial planning
- Collaborate to reconcile cross-functional forecasts
- Monitor changes with one-click baseline, seasonal, trend and causal factor analysis
- Perform simulations to project business impact and prioritize needs
- Specify inventory policies and automate demand-driven inventory replenishment and rebalancing



Figure 1. Quickly respond to changes in supply and demand across global networks

Benefits

- Respond faster to market changes
- Improve forecast accuracy
- Predict demand for new items
- Reduce inventory investments
- Improve customer service levels

Easily Configure Your Unique Business Process

Oracle Demand Management is built on a flexible, multidimensional data architecture that gives users “slice and dice” analytic capabilities along any dimension and level of granularity. Users can organize the data in different hierarchies, currencies, and units of measure so that each has their own view of up-to-date plans, while sharing the same granular base data. Oracle Demand Management focuses your customer-centric analysis and processes by providing:

- Configurable dashboards with summary infotiles and KPIs
- Spreadsheet-like personalized workbenches with pivot tables and graphs
- Prebuilt measures, calculations, and exceptions to support your analysis and decision making

It also automates the evaluation of demand data with exception alerts, notifications, and color-coding to highlight areas of interest. The “management by exception” approach helps you monitor and respond to customer demand more efficiently.

SENSE DEMAND IN REAL TIME

To respond to uncertain and variable demand effectively, you need to capture demand signals at the right level of detail and uncover any correlations or factors that influence demand patterns. You can then drive downstream planning processes by involving key stakeholders.

Demand Management senses demand from multiple data sources in real time, including internal sources such as shipments and bookings and external ones like market and syndicated data that depend upon your industry.

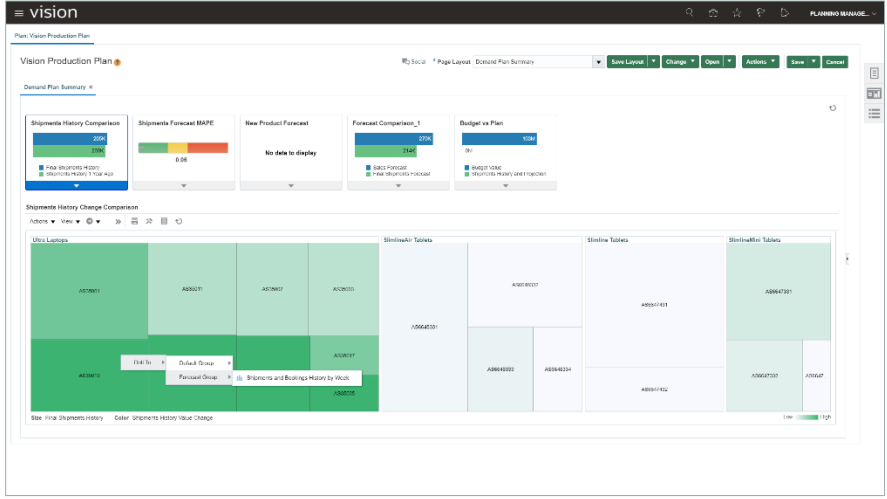


Figure 2. Analyze multiple demand signals and sense demand in real time

A detailed understanding of the origin and relative contribution of demand signals helps you predict their behavior, so you can develop effective demand-shaping programs that stimulate sales and increase market share.

Oracle Demand Management can capture quantitative and qualitative demand insights from online and offline stakeholders. You can also annotate the data with notes to document changes and assumptions. Custom calculations help you spot trends, identify forecast variances, and respond to other demand stream changes easily and efficiently.

PREDICT DEMAND ACCURATELY

Better real-time demand insight is only useful if you can translate it into a more accurate forecast. Demand Management's patented Bayesian analytical forecast engine applies cross-validation machine learning to enhance results. Its ensemble of 15 industry-standard and proprietary statistical models handles a wide range of product life cycles and demand patterns.

The resulting forecasts reveal the baseline, seasonality, trends, and other causal factors for both continuous and intermittent data series. Causal correlations and other analytic parameters are automatically maintained at hierarchy levels where all relevant data points are available.

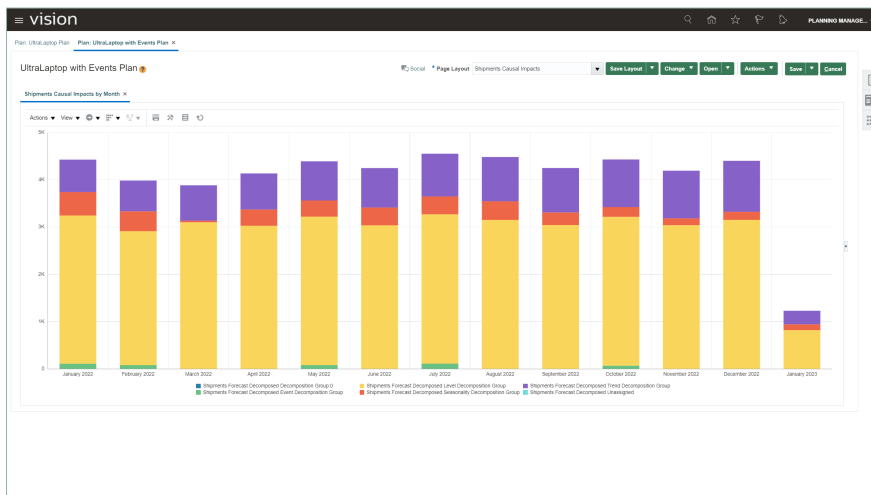


Figure 3. Understand predicted forecast details and impact of simulations

To reduce management effort and complexity, Demand Management allows you to dynamically classify item-location combinations that have similar behavior into named segments based upon the business rules you define. You can vary the planning horizon, forecast methods, or measure selection by segment. The relevant combinations will be affected – even as demand patterns change.

Forecast Configure-To-Order Products

With Demand Management, a configure-to-order model's demand, model option-dependent demand, and independent option demand are all calculated when you run a demand plan. You can use attach rates specified in the bill of material, input the attach rates manually, or automatically calculate attach rates based on the historical option mix trend.

Improve Forecast Accuracy

Demand Management calculates a wide variety of key performance indicators (KPIs) that highlight the true effectiveness and efficiency of your planning process. These KPIs include measures of forecast accuracy, such as mean absolute deviation (MAD),

mean and absolute percentage error (MAPE), and bias. Out-of-sample testing validates and improves the forecast accuracy metrics. To drive continuous improvement, you can review built-in waterfall forecast error reports, drilling down to identify items with chronic accuracy issues. Users can run an unlimited number of forecast simulations to see the potential impact of price changes, marketing campaigns, weather shifts, demand upside, and other events. Advanced users can also simulate changes to forecasting models and parameters to fine-tune the machine learning forecast.

SHAPE DEMAND TO ACHIEVE BUSINESS OBJECTIVES

To achieve your business objectives, you need to shape demand by introducing new products, promoting your brand, and taking other market initiatives. Oracle Demand Management helps you evaluate demand shaping alternatives to select the ones with the greatest impact.

Optimize New Product Introductions

Demand Management’s Planning Advisor feature uses machine learning to understand the relative importance of features in a new product versus those of existing products, and generates forecasts based upon the new product’s features.

The extreme gradient boosting supervised learning model evaluates up to 500 static and dynamic attributes to find the most predictive features without overfitting. You can review the predicted accuracy, compare the influence of each feature, and drill down to the relevant screen to review and accept the recommended forecast.

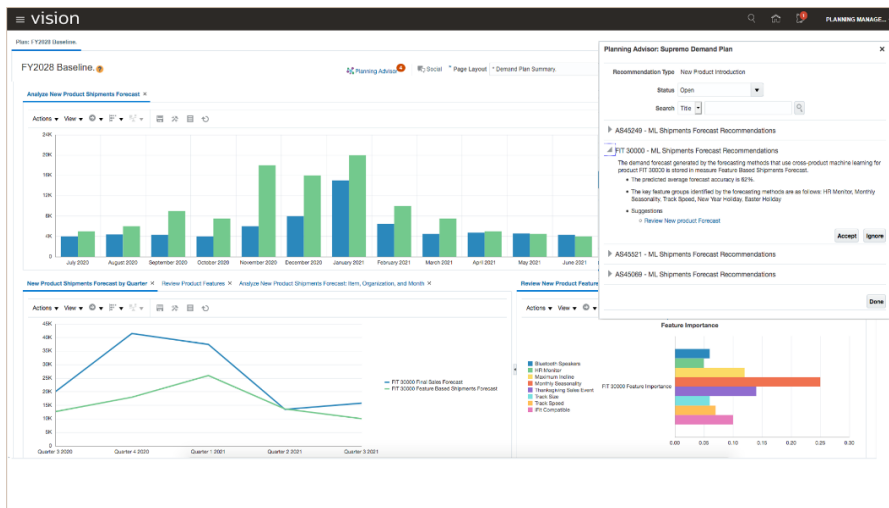


Figure 4. Demand Management’s Planning Advisor highlights features that drive forecasting for new items

Achieve Demand Consensus

Demand Management enables you to reconcile cross-functional forecasts by comparing them at the plan level to show the variance over time or across different product segments. Built-in exceptions such as “deviation between sales and final shipments forecast” help you align the sales forecast with your estimates. You can easily audit and trace forecast changes made by different stakeholders. Once you collaboratively shape the demand plan, you can share it with executives via Oracle Fusion Cloud Sales & Operations Planning to drive enterprise-wide alignment.

REPLENISH EFFICIENTLY TO MEET DEMAND

Oracle Demand Management combines dynamic segmentation, inventory policy planning, and automated order generation to enhance your replenishment planning processes. Replenishment Planning computes optimal inventory levels for each item-location in the supply chain to meet target customer service levels. This helps determine time-phased replenishment quantities for each item-location required to cover the expected demand. The process may be automated to minimize planner intervention using inventory policies to determine replenishment requirements, and generate orders when inventory levels fall below the minimum threshold value. The relationship between forecast generation and the dynamic update of on hand inventory helps reduce stock levels and highlights investment opportunities.

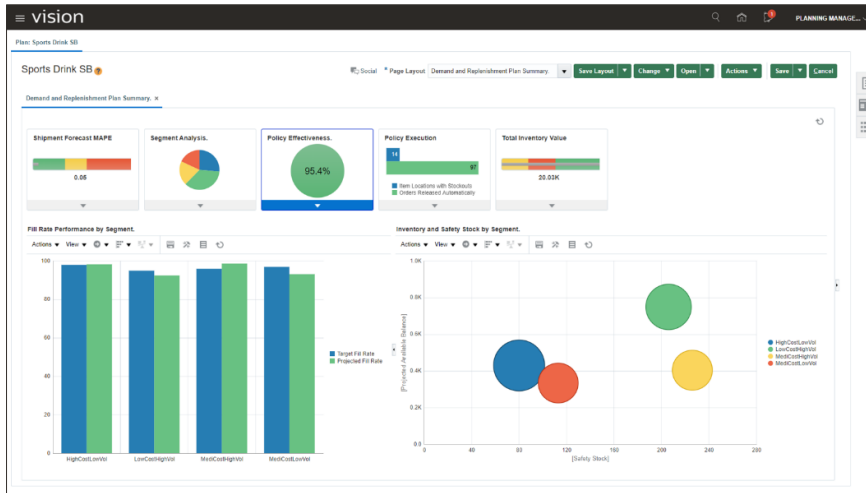


Figure 5. Demand-driven inventory policy analysis

Replenishment Planning provides a variety of key features and simulation capabilities to help planners carry out replenishments with a high degree of efficiency.

- Dynamically segment item-locations into segments with similar replenishment characteristics
- Deploy inventory and simulate the impact of different demand conditions
- Monitor the supply chain for item-locations with stockouts or safety stock violations and take action to resolve the issues
- Review and compare inventory policy values with existing in-force values on an on-going basis and make updates to improve performance.
- Automate replenishment processes including releasing orders for execution

EXTEND YOUR PLANNING PROCESS AS YOU SEE FIT

Oracle Demand Management provides comprehensive planning tools that work as part of a unified solution that includes Oracle Fusion Cloud Supply Planning and Oracle Fusion Cloud Sales & Operations Planning. You can continuously balance demand and supply in a single user interface and incorporate demand planning insights in strategic planning. Oracle Demand Management is also pre-integrated with other Oracle Fusion Cloud SCM services, so you can spend less time implementing.

Take advantage of Oracle Demand Management's world-class simulation, collaboration, ease of use, and ease of deployment to take your planning to the next level.

To learn more about Oracle Fusion Cloud Demand Management, visit oracle.com/scm/supply-chain-planning/demand-management.

Related Products

- **Oracle Fusion Cloud Supply Planning** plans material and capacity and responds to demand, availability and resource issues as they occur.
- **Oracle Fusion Cloud Sales & Operations Planning** aligns business plans and operations across the sales, marketing, finance, and supply chain organizations.
- **Oracle Fusion Cloud Supply Chain Collaboration** shares order forecasts with suppliers and collaborates on their supply commitments.
- **Oracle Fusion Cloud Order Management** centralizes and standardizes your order fulfillment across multiple sales channels.
- **Oracle Fusion Cloud Supply Chain Execution** defines and executes production, shipping, receiving, transfers, and other execution activities across the global supply chain.
- **Oracle Fusion Cloud Procurement** integrates sourcing, contracts and purchasing of goods and services.

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