## ORACLE

# Oracle Retail Inventory Planning Optimization Cloud Service

Oracle Retail Inventory Planning Optimization Cloud Service provides retailers the ability to best predict how much demand there will be and enables them to deploy their inventory to optimize revenue or margin throughout an item's lifecycle. Leveraging artificial intelligence (AI), users can drive an exception-based workflow to understand demand forecasts across their customer base and network. Inventory Planning Optimization Cloud Service can then leverage multiple optimization criteria to best size inventory deployment across complex supply chains. The result allows retailers to manage their current and future inventory at scale to ensure that customers buy the right products in the right place and at the right time.

Oracle's **Retail Demand Forecasting** has been further enhanced by adding additional capabilities and has evolved into Oracle Inventory Planning Optimization Cloud Service. It is paired with **Oracle Retail AI Foundation Cloud Service** and is a comprehensive forecasting, allocation, and replenishment solution that employs extensible analytics and AI to make optimal planning decisions. Forecasting drives the business tasks of planning, replenishment, purchasing, and allocation. It is organized into three modules that can be enabled individually or collectively. These modules are: 1. Forecasting 2. Allocation 3. Replenishment.

### MAXIMIZE FORECAST ACCURACY

Today's retail organizations know that consumer demand drives the supply chain. Forecasting consumer demand productively and accurately is vital to a retailer's success. Forecasts are the foundation of every advanced retail analytics solution in this modern retail environment, and accuracy is paramount.

The business requirements for consumer responsiveness mandate a forecasting system that more accurately forecasts at the point of sale, handles difficult demand patterns, forecasts promotions, and other causal events. Operationally, the solution must scale to process large amounts of data promptly to ultimately create the most accurate forecast possible.

Oracle Retail Inventory Planning Optimization Cloud Service is a comprehensive solution that maximizes the forecast accuracy for the entire product lifecycle. It gives the ability to adapt to recent trends, seasonality, out-of-stocks, and promotions, as well as reflect the unique demand drivers of each retailer.



### Key Benefits

- Increase revenue and expand a loyal customer base with higher instock rates
- Increase profitability and assortment flexibility with decreased inventory levels
- Shift focus to strategic planning and collaboration to drive operations with sophisticated and highly automated forecasts
- Maximize supply chain efficiencies and accelerate optimal inventory management by ensuring the right quantities, at the right location, and right time with in-depth analytics and reporting capabilities.

With a single view of demand, it provides pervasive value across retail processes, including driving optimal strategies in planning, increasing inventory productivity in retail supply chains, decreasing operational costs, and driving customer satisfaction from engagement, to sale, to fulfillment.

Al-driven forecasting helps retailers make sense of disparate and large amounts of data sets to drive increased accuracy over time. As forecasts become more accurate, businesses run more efficiently by buying the right inventory at the right time. This ultimately lowers inventory levels, improves safety stock requirements, enhances customer service, and increases the company's profitability.

# ENHANCE LIFECYCLE ALLOCATION AND REPLENISHMENT ACCURACY

Oracle Retail Inventory Planning Optimization Cloud Service is an automated allocation and replenishment planning system that constantly monitors inventory conditions and lifecycle phases. The solution enhances allocation accuracy and drives replenishment precision to help manage inventory levels and provide recommendations to guard against inventory shortages. It helps retailers to create strategies that control how an item is allocated and replenished from introduction to end of life, and it uses strategies, inventory positions, and demand forecast along with operational constraints of the retailers' supply chain network to create orders and transfers. The strategies automatically adjust deployment methodologies as products go through their different lifecycle phases to ensure the best deployment method. When new products or locations are introduced, the solution can automatically determine the appropriate strategy and alert users for review.

Oracle Retail Inventory Planning Optimization Cloud Service's Lifecycle Allocation and Replenishment modules dynamically deploy inventory throughout an item's lifecycle and allow retailers to spend their time managing exceptions. Ultimately, this increases the inventory efficiency and margin across a product's lifecycle.

### DRIVE REPLENISHMENT PRECISION

A retailer's most significant investment is its inventory. Oracle Retail Inventory Planning Optimization Cloud Service enhances replenishment precision by leveraging Al and machine learning models along with advanced analytics to improve optimal inventory management.

Understanding the inventory necessary to achieve a target service level is critical to achieving business goals, and doing so with the least investment reduces the need for markdowns. Oracle Retail Inventory Planning Optimization Cloud Service helps retailers understand the trade-off between service levels and the cost of inventory that is associated. The solution will recommend an initial service level to balance inventory levels. With the desired target service level defined, the solution will optimize target stock levels, which translate into item-location replenishment policies. The replenishment policies are used to complete a full replenishment simulation, giving complete visibility of the resulting purchase and placement of inventory in a time-phased plan. This visibility helps retailers validate their policies and understand the purchasing impact of a small change in service level, which can translate to a significant change in inventory investment.

### **Key Features**

- Single forecasting review workflow across forecasting methods
- Seamless adaptability to recent trends, seasonality, out-of-stocks, and promotions
- Reflects a retailer's unique demand drivers, delivering better customer experience from engagement, to sale, to fulfillment.
- Automatically optimize your replenishment based on demand forecast, inventory, and past performance.
- Transparency across the entire supply chain that enables analytical processes and end-users to understand and engage with the forecast, increasing inventory productivity.
- Coordination and simulation of demand-driven outcomes using forecasts that adapt immediately to new information and without a dependency on batch processes, driving operational agility.
- Dynamic business rules can be setup in order to alert users and drive an exception driven workflow.
- Lifecycle based allocation and replenishment that automatically adjusts through time.
- Embedded <u>Retail AI Foundation</u>, powering Oracle Retail Inventory Planning Optimization Cloud Service with:
  - o Forecasting Engine
  - $\circ \ \textit{Customer Segmentation}$
  - o Advanced Clustering
  - o Profile Science
  - Attribute Extraction and Binning
  - o Customer Decision Trees
  - o Demand Transference
  - o Affinity Analysis
  - o Innovation Workbench
- Further extensibility with:
  - o Oracle Retail Home
  - Oracle Analytics
  - Oracle Application Express
  - o Oracle REST Data Services
  - Oracle Machine Learning

The truck scaling process makes purchase orders actionable by recommending scaled order quantities that maximize truck utilization by incorporating business rules. Finally, Oracle Retail Inventory Planning Optimization Cloud Service drives successful outcomes in end-of-life by recommending rebalancing transfers between stores to increase sell-through to avoid markdowns. Rebalancing can be disabled for lower-margin categories where transferring goods is most often cost-prohibitive.

### **RETAILERS CAN:**

- Anticipate customer demand by maximizing the value of your data through the application of retail sciences that draw from machine learning, artificial intelligence, and decision science disciplines.
- Simplify forecast management by maximizing the productivity of your team with exception-driven processes paired with an experience-inspired user interface.
- Inspire new ways to engage customers and augment the forecasting process while maximizing the agility of your business with extensible science, workflows, and operations.
- Build supply chain resilience and improve customer conversion by reconnecting demand and supply plans, enhancing allocation accuracy, and driving replenishment precision.

### ORACLE CLOUD INFRASTRUCTURE

All Oracle Retail Analytics and Planning cloud services are deployed as cloud-native Software-as-a-Service solutions within Oracle Cloud Infrastructure (OCI) upon Oracle's Autonomous Data Warehouse, and are based upon an architecture and technology stack that is optimally engineered for exceptional performance and scalability, and the highest levels of system availability and security - from storage to scorecard.

### ORACLE RETAIL HOME

Oracle Retail Home is a single access point, to simplify a user's interactions with the data and applications that are most relevant to their roles, and to better empower them to anticipate informed actions, and to inspire engagement. Based on a robust and flexible portal framework, Retail Home is intended first to provide timely and rolespecific high-level insights, and second to enable selectively drilling into relevant applications for more details.



### Learn more or request a 1:1 demo

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# The Oracle Retail Analytics and Planning family of cloud services includes:

- Oracle Retail AI Foundation
- Oracle Retail Insights
- Oracle Retail Inventory Planning Optimization
- Oracle Retail Merchandise Financial Planning
- Oracle Retail Assortment Planning
- Oracle Retail Lifecycle Pricing Optimization
- Oracle Retail Assortment and Space Optimization

