

Oracle Retail Inventory Optimization Cloud Service

Inventory is a retailer's most significant financial investment. It is also the most complex to manage efficiently. Consumers have instant access to product availability, and the retailer that fulfills wins the sale and their loyalty. The right strategy is a balancing act between the cost of inventory and service to customers.

However, in the real world, the execution of the best inventory strategy is susceptible to surprises and excess inventory and reduction of service levels are inevitable. Often retailers have outdated replenishment solutions with strategies that do not take forecasting into consideration. Setting an inventory strategy without insight into forecasting is a risky proposition.

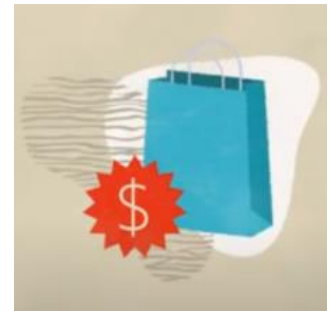
Oracle Retail Inventory Optimization Cloud Service adds intelligence to a retailer's existing solutions to drive scalable execution of inventory strategies. Define the strategies, and the system will do the work.

Retailers continue to face the fundamental need to position inventory at the right place, at the right time, and in the right quantities. As the focus on the customer and the flexibility in supply chains increases, so must the emphasis on inventory strategies that can scale.

MAXIMIZING INVENTORY PRODUCTIVITY AND OPTIMIZING WORKING CAPITAL

Oracle Retail Inventory Optimization Cloud Service pairs with the Oracle Retail AI Foundation, which provides analytical insights to drive planning, buying, moving and selling decisions. These capabilities enable retailers to drive profit and remain flexible to the changing retail environment. Oracle Retail Inventory Optimization Cloud Service maximizes the productivity of inventory across the entire supply chain, with a self-learning and self-tuning approach to optimizing working capital.

The solution helps retailers to optimize the daily replenishment decision, aligning the actual service level to the targets with the minimum amount of inventory. It also drives a reduction in working capital (mainly inventory), freeing up cash that could be re-invested more strategically.



Key Benefits:

- Reduces inventory - one-time inventory reduction up to 20%
- Reduces working capital and inventory handling cost
- Increases service level up to 5% and revenue up to 3%
- Provides results in 3-6 months
- Increases in-stock availability
- Increases end-user productivity and emphasis on strategies

VALUE DRIVERS

An average grocery retailer, with 30,000 SKUs and at least 1,000 stores, will have millions of SKU store combinations. Determining the optimal replenishment plan without the help of industry-leading science is near impossible. Retailers will need to leverage AI to do the heavy lifting at scale, since people can't scale like AI. Oracle Retail Inventory Optimization Cloud Service enables retailers to reap the rewards of AI, at scale, without changing the existing replenishment system.

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 rapid, low-cost deployments and exceptional performance and scalability, and the highest levels of system availability and security - from storage to scorecard.

ORACLE RETAIL AI FOUNDATION

Core retail AI and machine learning (ML) powers all Oracle Retail Analytics and Planning cloud services. For example:

- **Forecasting Engine** - Provide an intelligent starting point for your planners, increasing automation and accuracy. Move to a more touchless and exception management planning process.
- **Customer Segmentation** - Group customers based on attributes, behaviors, and transactions to tailor offers, pricing, and assortments accordingly, incorporating previously hidden patterns in your data.
- **Advanced Clustering** - Cluster your stores based upon traditional approaches of volume, square footage, region, etc., or leverage machine learning techniques to cluster stores based upon similar selling patterns, truly creating a customer-centric assortment.
- **Profile Science** - Determine the best size ratio for your buys by understanding the true demand of your sizes while considering stock-outs.
- **Attribute Extraction and Binning** - Extract item attributes from free-form descriptions, correcting short forms, misspellings, and other inconsistencies, and apply them to Demand Transference, Customer Decision Trees, Advanced Clustering, and more.
- **Customer Decision Trees** - Understand how your customers are shopping your assortments to drive attribute-based alternate hierarchies and effectively plan your assortment the way your customer shops.
- **Demand Transference** - Understand how unique your items are and the incremental revenue that item brings to determine the most optimal assortment for your customer.
- **Affinity Analysis** - Determine how items interact with each other to drive a more effective promotional strategy within your financial planning process.
- **Innovation Workbench** - Leverage open source along with your data science team to create your own AI and ML models. Utilize the language of your choice with Jupyter/Zeppelin notebooks.

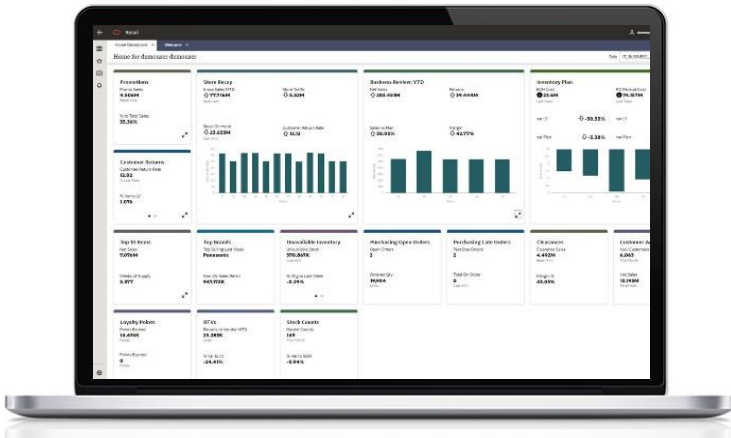
Key Features

- Continuously optimizes the replenishment parameters at the item-location level allowing retailers to achieve target service level with minimum inventory
- Leverages advanced self-learning science and automatically adapts to market changes and patterns
- Embeds an automatic forecasting algorithm
- Enables end-users to interact with strategies and recommendations
- Provides transparency to recommendations and underlying predictions
- Implements quickly with a high ROI and short payback
- Enhances the legacy replenishment solution without replacing it
- Minimizes IT and organizational disruption
- Embedded Retail AI Foundation, powering Oracle Retail Demand Forecasting Cloud Service with:
 - Forecasting Engine
 - Customer Segmentation
 - Advanced Clustering
 - Profile Science
 - Attribute Extraction & Binning
 - Customer Decision Trees
 - Demand Transference
 - Affinity Analysis
 - Innovation Workbench
- Further extensibility with:
 - Oracle Retail Home
 - Oracle Analytics
 - Oracle Application Express
 - Oracle REST Data Services
 - Oracle Machine Learning

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 role-specific high-level insights, and second to enable selectively drilling into relevant applications for more details.



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

- Oracle Retail AI Foundation
- Oracle Retail Insights
- Oracle Retail Assortment and Space Optimization
- Oracle Retail Promotion and Markdown Optimization
- Oracle Retail Offer Optimization
- Oracle Retail Merchandise Financial Planning
- Oracle Retail Assortment Planning
- Oracle Retail Demand Forecasting
- Oracle Retail Inventory Optimization

ORACLE ANALYTICS

Oracle Analytics can be used to generate and consume analytics from Oracle Retail AI Foundation data, and in turn can also surface dashboards to Oracle Retail Home.

Oracle Analytics is a comprehensive platform that parlays data into information to provide business insights, federating a broad array of features to suit business users, power-users and data scientists:

Governed

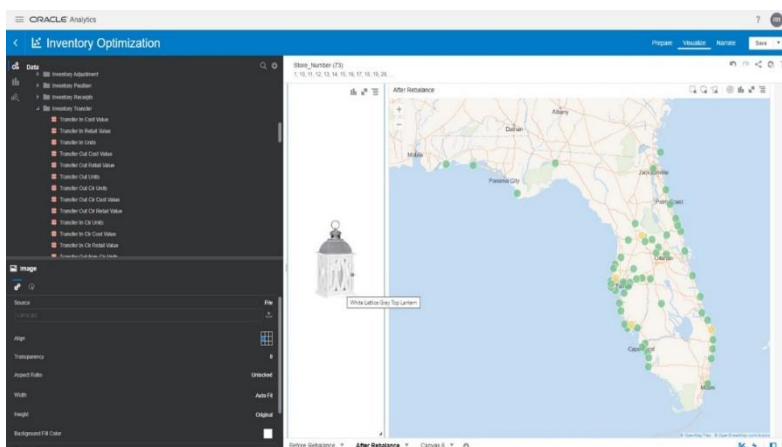
- Corporate Dashboards
- Pixel Perfect Report
- Semantic Models
- Role-based Access Control
- Query Federation

Self-Service

- Data Preparation
- Data Visualization
- Storytelling
- Sharing and Collaboration
- Mobile Apps

Augmented

- Natural Language Processing
- Voice and Chatbot
- Data Enrichment
- One-Click "Explain"
- Adaptive Personalization



Beyond the extensibility afforded by the Oracle Retail AI Foundation's Innovation Workbench, Oracle Analytics, and Oracle Retail Home, these areas are also included:

ORACLE DATA STORE AND APPLICATION EXPRESS

Oracle Retail Data Store can supply data for Oracle Application Express (APEX) apps and Oracle REST Data Services, which both are included. APEX is a low-code development platform that enables you to build scalable, secure enterprise apps with world-class features that can be deployed anywhere.

Developers can quickly develop and deploy compelling apps that solve real problems and provide immediate value using APEX. You won't need to be an expert in a vast array of technologies to deliver sophisticated solutions. Focus on solving the problem and let APEX take care of the rest.

ORACLE REST DATA SERVICES

Oracle REST Data Services bridges HTTPS and your Oracle Database, providing, among other things, a REST API, SQL Developer Web, a PL/SQL Gateway, SODA for REST, and the ability to publish RESTful Web Services for interacting with the data and stored procedures in your Oracle Database.

ORACLE MACHINE LEARNING

Oracle Machine Learning supports data exploration, preparation, and machine learning modeling at scale using SQL, R, Python, REST, Auto ML, and no-code interfaces. It includes more than 30 high-performance in-database algorithms producing models for immediate use in applications.

By keeping data inside the database, organizations can simplify their overall architecture and maintain data synchronization and security. It enables data scientists and other data professionals to build models quickly by simplifying and automating key elements of the machine learning lifecycle.

[Request a 1:1 Demo](#)

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