



Oracle Retail Demand Forecasting Cloud Service

Retailers better understand the modern consumer as their journey towards omnichannel proficiency continues. According to the [Massachusetts Institute of Technology](#), digital transformation of the supply chain can lead to a 50% reduction in process costs and increased revenue by 20%.

MAXIMIZE FORECAST ACCURACY

Forecasts are the foundation of every advanced retail analytics solution in this modern retail environment, and accuracy is paramount.

Paired with Oracle Retail AI Foundation Cloud Service, [Oracle Retail Demand Forecasting Cloud Service \(RDF\)](#) employs extensible analytics and AI to drive optimal planning decisions. RDF provides accurate forecasts that enable retailers to coordinate demand-driven outcomes that deliver connected customer interactions. With a single view of demand, RDF 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.

With RDF, Oracle Retail distilled over 15 years of forecasting experience across hundreds of retailers worldwide into a comprehensive solution that maximizes the forecast accuracy for the entire product lifecycle.

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.



Key Benefits

- Increase revenue and expand a loyal customer base with higher in-stock 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
- Join an active community of hundreds of retailers worldwide using these industry-leading forecasting capabilities

KEY FEATURES INCLUDE:

- Tailored approaches for short and long lifecycle products, maximizing forecast accuracy for the entire product lifecycle.
- Seamless adaptability to recent trends, seasonality, out-of-stocks, and promotions
- Reflects a retailers' unique demand drivers, delivering better customer experience from engagement, to sale, to fulfillment.
- Dashboard views to support day-in-the-life forecasting workflows such as forecast overview, scorecard, exceptions, and approvals.
- 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.

PROVEN RESULTS:

Oracle Retail evaluated its next-generation forecasting science against 2.2M units sold over the holiday season, representing over \$480M in revenue. With the forecast accuracy improvements, the retailer could achieve the same sales with at least 345,000 units less of inventory. With the Oracle Retail Demand Forecasting Cloud Service, this specialty retailer improved 70% of forecasts using completely automated forecasting.

Using completely automated forecasting science on Oracle Retail Demand Forecasting Cloud Service, one retailer was able to:

- Decrease safety stock by 10%
- Reduce inventory by 30%, while achieving the same service levels
- Improve in-stock rates by 10%, through smarter inventory placement

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.

Key Features

- *Tailored approaches for short and long lifecycle products.*
- *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.*
- *Dashboard views to support day-in-the-life forecasting workflows such as forecast overview, scorecard, exceptions, and approvals.*
- *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.*
- *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*

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.

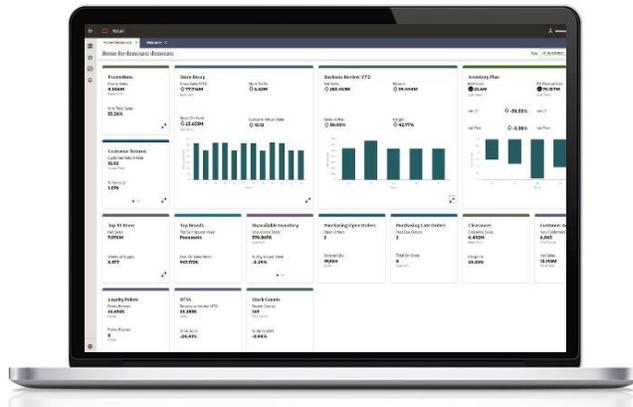
The Oracle Retail Analytics and Planning family of cloud services includes:

- 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 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.



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, also included are Oracle Data Store, Oracle APEX, and Oracle REST Data Services.

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, AutoML, 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.

[Learn more or request 1:1 demo](#)

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