



3 Steps to Simplifying Demand Forecasting for Retailers



“An intelligence-driven strategy focuses retailers on the customer’s journey with ease and agility. Simplifying the forecasting process enables supply chain responsiveness to shifts in trends and behaviors and consumer engagement consistently and seamlessly across all channels. Our goal is to empower retailers to create space for innovation, keeping customers at the core.”

– Katie Fang, Manager, Retail Strategy and Solutions, Oracle Retail



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As shoppers’ ordering and delivery options widen and their expectations grow, overall retail planning becomes increasingly complex.

Much of the challenge is having the right inventory available in the right place to quickly fulfill customer demand, no matter when and where a purchase is made. **Despite the complexities, there are a few simple steps retailers can take to improve forecast accuracy and inventory management.**

With changes in consumer shopping behavior, there are new innovations in Oracle’s Retail Planning and Optimization solutions, in particular Retail Demand Forecasting and Merchandise Financial Planning, that enable retailers to improve their forecasting and inventory management capabilities.



Step 1:

Tackle These Four Forecast Areas

The fluidity and frequency of seasonal assortments and promotional events are putting even more pressure on forecast accuracy for multiple business units — from merchandising to marketing to supply chain. These four areas can greatly impact a forecast.

Challenge	Solution
Seasonal Assortments: Retail is seasonal and revenue high points align with the highest concentrations of promotional activity. If the past can be any indication of the future, what sets promotions and seasonal demand apart?	A highly accurate forecasting system decouples demand drivers with historical estimations of seasonal demand separate from causalities, to provide a foundation for optimizing accuracy over a suite of seasonal forecasting approaches that reflect everything from fast and slow movers to short and long lifecycle items.
New Assortments: These are prevalent across all retail verticals and many times include new items that don't have a history to draw upon, whether it's a hot toy or the latest gadget.	Retailers need a forecasting system that can leverage attributes, evaluate similarities against past performers and provide robust forecasts that reflect smart starting points for initial base rate of demand and lifecycle curves.
Pricing and Promotions: With advertising, display units, endcaps, personal offers and discounts you need to be able to accurately anticipate demand drivers in aggregate.	Oracle Retail's Demand Forecasting Cloud Service (RDF) mines for similar occurrences in the past to understand the net effect of overlapping promotions in the future. What about new items with no promotional history? RDF performs pooled pricing and promotional effect estimation over similar performing item-locations (detected using unsupervised machine learning and critical attributes) to provide accurate promotional forecasts in the absence of promotional history.
Weather: According to research done by Planalytics , a leading provider of weather-based predictive analytics, 4.2% of a stores' sales are weather-sensitive during November. Impacts can fluctuate by over 35% across locations for key categories.	Capitalize on the uncontrollable, particularly for categories that are highly weather-sensitive. In partnership with Planalytics, Oracle Retail has developed approaches in RDF to incorporate weather analytics throughout the forecasting process – from de-weatherizing historical demand to reflect true trends and seasonality to incorporating imminent weather events into forecasting and exception-driven processes for weather-sensitive categories.



Competitive Advantage of a Forecast-driven Enterprise



Delivering on your omnichannel strategy depends on informed pricing and promotional decisions based on forecasting insights, efficiently coordinating those decisions throughout the supply chain and ultimately to sales execution:

- **Convert up to 50% of shoppers into buyers with time-sensitive sales and promotions.** Forecasts drive these decisions, from contextual what-if's and predictive analytics to optimized and forward-looking prescriptive analytics. The forecast and corresponding pricing and promotional effects, paired with the underlying costs and inventory availability are the foundation for effective pricing and promotional decisions.
- **Increase brand loyalty by up to 77% with higher in-stock rates.** Forecasts drive replenishment and allocation processes, with automated intelligence at a massive scale. The forecast and corresponding statistical prediction intervals provided by Oracle Retail's Demand Forecasting (RDF) Cloud Service enable supply chain success of right product, place and time supported by forward-looking demand and statistical safety stocks balanced with minimizing inventory costs.

Convert up to
50%
of shoppers



Increase
brand loyalty
by up to
77%

“As multiple ways to attract and retain customers emerge, it’s more important than ever for retailers to understand what compels consumers to act. The year-round challenge is how to anticipate demand, simplify how customers interact with retailers, and inspire them to stay engaged. The bottom line: consumers rule. Retailers who can predict what they want, and when and where they want it, win the game.”

– DJ O’Neil, Oracle Solutions Director for Planning, Supply Chain and Optimization

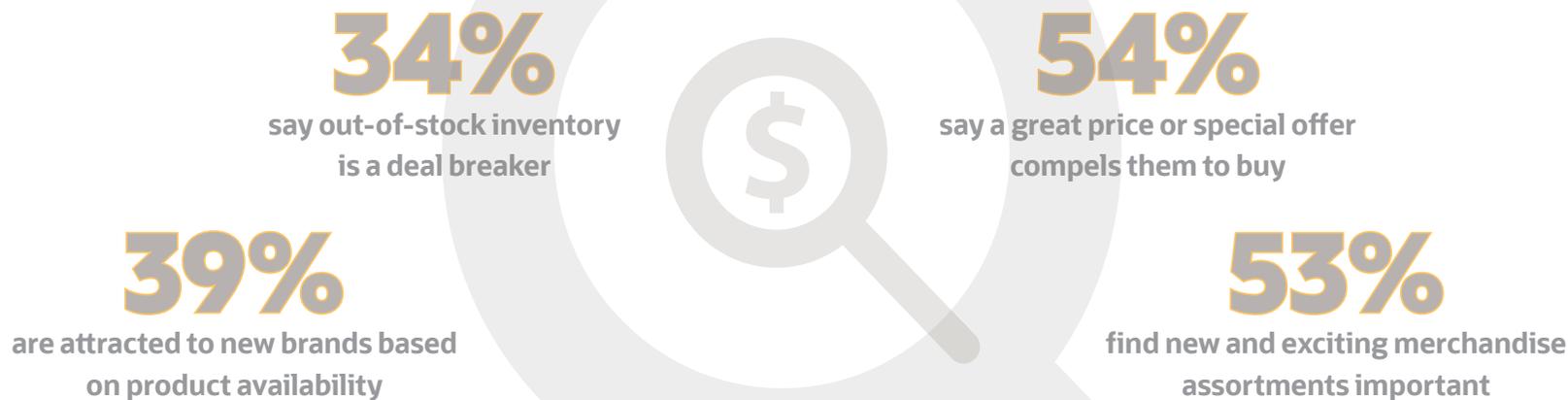


Step **2**: Understand What Compels Consumers to Act

In Oracle's [consumer research findings](#) — inventory and promotions continue to influence customer decisions. As new customer journeys and shopping experiences emerge, execution is everything. Consumers will not tolerate out-of-stock inventory, and 63% of consumers confirmed they will not wait to try another brand. Retailers with more accuracy and insight into their inventories will be able to quickly pivot to meet customer demands, whether that's in-store, BOPIS, curbside, or other channels.

Consumers shop differently when shopping for gifts than when shopping for example seasonal items: sometimes price is everything, sometimes it's no object. Retailers can now understand how shoppers respond, at a localized level, for every item when the effects of promotions, seasonality and weather are factored into the forecast.

One example is attribute-based modeling of new items for forecasting, which increases the speed at which you can leverage and forecast your own processes. This provides a high level of automation, and explicit like-item definitions can give you greater control. Oracle Retail's RDF Cloud Service features multiple new-item forecasting methods, including a method oriented around product lifecycle that works very well for short-lifecycle items.



Top 3 Things That Compel a Shopper to Buy When Only Browsing:





Step **3**: Use a Single Source of Truth

Accuracy Improves When Planning Simplifies Customer Complexities



Retailers should be driving the enterprise with a single forecast that includes everything from replenishment and allocation to pricing and promotion decisions, planning, and venture collaboration in order to gain a single view of the customer. Oracle Retail allows you to estimate historical demand of past years' sales with customer journeys and promotions to help predict seasonality on the future. The solution also provides both high automation and high control by automatically re-forecasting every item location and intelligently layering any user adjustment onto the latest generated forecast. By using a combination of statistics, optimization, and machine learning methods, retailers are able to maximize the accuracy of the seasonal forecast to ensure that they are able to deliver exceptional customer experiences by anticipating buyer intent.

Managing by Exception

Oracle Retail's latest planning suite user experience includes a contextual and interactive view of key performance indicators, notifications, exceptions by role and business process, and intuitive launch points of business activities — all through a user-defined dashboard. The ability to anticipate and proactively manage retail operations allows you to increase margin by focusing your team on adding value where it is needed the most.

The embedded data science and automation capabilities increase visibility across all channels and automates 80 percent of manual forecasting, planning, and replenishment processes. The solutions make it possible to improve overall sales and margins by 5-7 percent, while reducing overall inventory spend.





Here's a step-by-step example of the intuitive drag and drop UI using Merchandise Financial Planning to set up a pre-season online plan.

STEP **1**

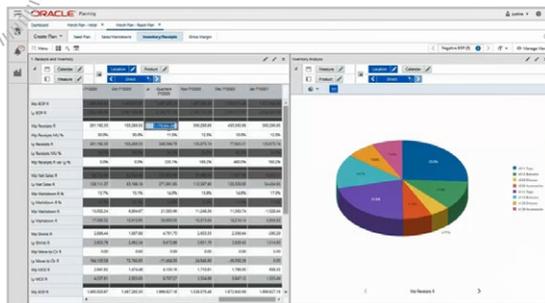
Sales Projection:



Let's start with the sales plan for Q4; we expect sales variants against last year to increase from 2.1% to 4.4% with a new promotion and brand collaboration. As we change the figures within the pivot table, the displayed graph reacts immediately.

STEP **2**

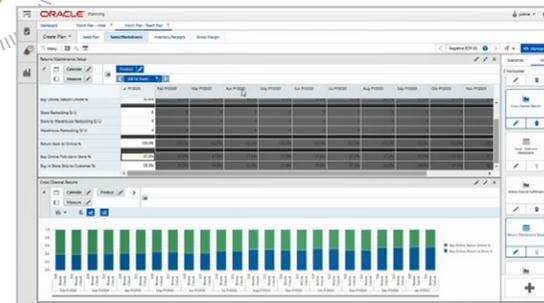
Inventory:



Now that we've made changes to the sales plan, we shift focus to inventory to make sure we have enough receipts to support the plan. Our end-of-period inventory for online must end at around two million; to stay on plan.

STEP **3**

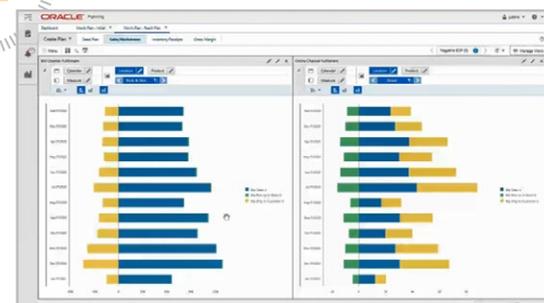
Fulfillment:



We have not yet accounted for whether customers will be receiving delivery of the product via shipment from the dot-com warehouse to home, or picking it up at a store—which is becoming increasingly popular. To ensure that we do not order unnecessary inventory for our .com warehouse and at the same time make sure we have enough inventory in stores to fulfill pickups, we need to plan for that customer journey.

STEP **4**

Adjustment:



After taking into account this new customer journey, we can go back and reduce receipts from 1.2 million down to half a million—and still stay on target for our end-of-period inventory of two million units. The need in inventory due to the pick-up in store option is shifting from the .com warehouse to stores inventory. Those receipts can now be allocated to the store plan, to make sure they have enough inventory to fulfill our buy online and pickup in store sales.



Mitigate Risk and Protect Your Data with Cloud Apps



PROVEN SUCCESS AT OVER 200 RETAILERS:

- A global supermarket chain **reduced inventory by 1.1 days or 3%**.
- A large U.S. electronics retailer **improved in-stock rates by 2-4%**.
- A U.K. grocer **increased forecast accuracy by 50%**.
- A Russian retailer **gained forecast accuracy of 75%** for promotional items **and 90%** for non-promotional items.
- An Italian eyewear retailer **increased store service level to consistently above 98%**, with increased inventory visibility to reduce stock-out situations.
- A Brazilian shoe company increased stock productivity by **surpassing planned sales targets, while reducing inventory by 25%**.

Oracle Retail Planning and Optimization Cloud Service helps retailers take immediate advantage of new and continuous product updates, integrated retail processes, and changing external data sources. All of these contribute to steady improvements in what retailers know about the upcoming seasons, and how they adjust operations to better serve customers.

Major benefits of moving to a modern cloud solution are the multi-layers of security your data receives and the ability to scale at a faster pace. Since it is designed to be secure at every layer – application, platform, infrastructure and physical – the cloud reduces risk, while increasing your speed to innovation.

[Request a Demo](#)



Video:

[Retail Planning & Optimization](#)

About Oracle Retail:

Oracle is the platform for modern retail. Oracle provides retailers with a complete, open, and integrated platform for leading retail solutions, cloud services, and hardware that are engineered to work together. Innovative retailers use Oracle solutions to pivot to customer and to drive agility across the business. Oracle Retail customers can deliver an authentic customer experience while protecting their people, processes, brand, and customers.

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