

Oracle® Retail Lifecycle Pricing Optimization Cloud Service User Guide



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Preface

This guide describes the Oracle Retail Lifecycle Pricing Optimization user interface. It provides step-by-step instructions to complete most tasks that can be performed through the application.

Audience

This User Guide is intended for retailers and analysts.

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The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Lifecycle Pricing Optimization

This chapter describes Lifecycle Pricing Optimization (LPO).

Introduction

Oracle Retail Lifecycle Pricing Optimization Cloud offers the evolution of price optimization capabilities into a lifecycle optimization solution that recommends promotions, markdowns, regular pricing, and targeted offers in conjunction with planned business initiatives, such as time-bound marketing campaigns. It optimizes promotions and markdowns to drive higher in-season sell-through as well as potentially increasing revenue and/or gross margin throughout, to the end of life. It empowers retailers to drive better profit margins and inventory sell-through, to meet forecast expectations with the power of exception-based retailing and advanced machine learning models.

Key Features of LPO

- Automated pricing recommendations for regular, promotional, markdown, and targeted scenarios.
- Contextual insight into the estimated impact of promotions, offers, and markdowns, which includes the impacts on sales, margin, and inventory.
- Weekly updates based on new sales, inventory levels, competitor pricing, and other dynamic data points.
- Forecasts describing what will happen if the user take the system recommendations versus doing nothing based on the recent data.
- In-season performance assessment to adjust pricing strategy in real time.
- New item price estimation based on similar item behavior and historical data.
- Intelligent re-pricing for items affected by cost changes, competitor shifts, or business objectives.
- Location or zone-level granularity for pricing, with personalized targeting capabilities.
- Integration with Oracle Retail Planning and Execution systems to ensure alignment across merchandising decisions.

Types of Pricing Optimizations in LPO

LPO determines the optimal pricing and timing for regular promotion markdowns and targeted price recommendations. These recommendations help retailers maximize inventory productivity, optimize working capital, and drive customer engagement across channels. Promotions and markdowns are managed at the location or price zone level, while targeted recommendations are customer specific. The timing and depth of these recommendations are critical levers for managing inventory throughout the product lifecycle.

- **Regular Pricing Recommendation**

- Regular price is the initial price for a new item or a regular price update at the location (for example, Region or Area) or price zone level.
- Regular Pricing Recommendation in LPO ensures that the base price of an item is competitive, profitable, and aligned with market conditions by analyzing the cost changes, competitor prices, and demand trends to determine the best price for new and existing items.
 - * Regular Pricing Recommendation can be done in two ways - Forecast-based (using historical data to generate forecasts, along with pre-defined business rules) and non-forecast-based (using only business rules).
 - * Forecast-Based: This method uses historical data to generate demand forecasts, which are then used to optimize pricing for revenue, margin, or volume. It enables strategic, data-driven decisions based on predicted customer behavior. Example: Raise the price of a top-selling item by \$10 if demand is expected to remain high.
 - * Non-Forecast/Rules Based (also known as Regular Lite): This method uses a rules-based engine that is triggered by pricing conditions, not forecasts. It relies on data such as current pricing, cost, competitive data, and so on, making it ideal for quick, operational pricing updates. Example: Automatically ensure and update Item A's price to remain like the competitor's price of Item A in the same zone.
- **Promotional Pricing Recommendation**
 - Promotion is a temporary reduction in the item's price to drive sales, based on forecast data and configurations.
 - Promotional pricing recommendations in LPO is optimized to drive sales while maintaining profitability by recommending discounts that maximize revenue and customer traffic without excessive margin loss.
 - Example: Offering a weekend discount on fresh produce to boost foot traffic or running a limited-time sale on jeans to clear seasonal inventory.
- **Markdown Pricing Recommendation**
 - Markdown is a permanent reduction in the item's price, typically for clearance or end-of-life management, based on forecast data and configurations.
 - Markdown pricing recommendations in LPO help retailers clear aging inventory efficiently by providing optimal markdown recommendations to minimize margin erosion while maximizing sell-through.
 - Example: Marking down winter coats at the end of the season to clear inventory or permanently reducing the price of a slow-moving snack brand.
- **Targeted Pricing Recommendation**
 - Targeted recommendation is personalized price or offer designed for a specific customer segment or individual, based on forecast data and configurations.
 - Targeted recommendations in LPO allow retailers to offer personalized discounts based on customer behavior and segmentation. LPO ensures that price adjustments maximize conversion without unnecessary discounting.
 - Example: Providing a special loyalty discount on organic vegetables for frequent buyers or offering an exclusive promotion on handbags for high-value customers.

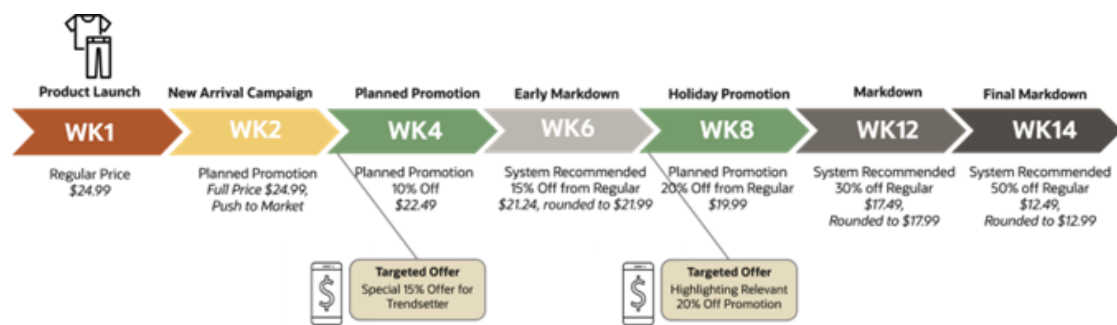
Business Values

- Maximize Profit Across the Product Lifecycle

- LPO enables retailers to capture the highest possible gross margin by recommending optimal prices at every stage, from new item introduction to final clearance.
 - Example: For a seasonal item like a winter jacket, LPO can start with a high regular price, apply promotions during peak season, and intelligently trigger markdowns as demand wanes-maximizing margin across the season.
- Improve Inventory Turnover
 - By aligning pricing decisions with inventory levels and sales performance, LPO suggests markdowns and promotions based on real-time inventory status, ensuring timely sell-through and minimizing the need for heavy end-of-season discounts.
 - Example: If a particular size or color of a product is under-performing, LPO can recommend a localized markdown while keeping stronger-performing variants at full price.
- Respond Quickly to Market Changes
 - Weekly data refreshes and re-optimization allow businesses to adapt pricing strategies quickly.
 - Example: If a competitor introduces a lower-priced version of the same product mid-season, LPO can adjust pricing to remain competitive while preserving margins wherever possible
- Enable Customer-Centric Pricing
 - With Targeted Recommendations, LPO supports personalized pricing strategies based on customer segments or individual preferences. This improves offer relevance, drives engagement, and enhances loyalty, without eroding margins for the broader audience.
 - Example: Offer a special discounted price to loyal customers or high-value segments, while maintaining standard pricing for general consumers.
- Operational Efficiency
 - LPO automates complex pricing decisions using machine learning and optimization techniques, which reduces the manual effort of analyzing sales trends, setting promotions, and managing markdowns.
 - Example: A merchant managing hundreds of SKUs across multiple regions can rely on LPO to generate location-specific recommendations in a fraction of the time.

LPO Use Case Example

Figure 1-1 LPO Use Case Example

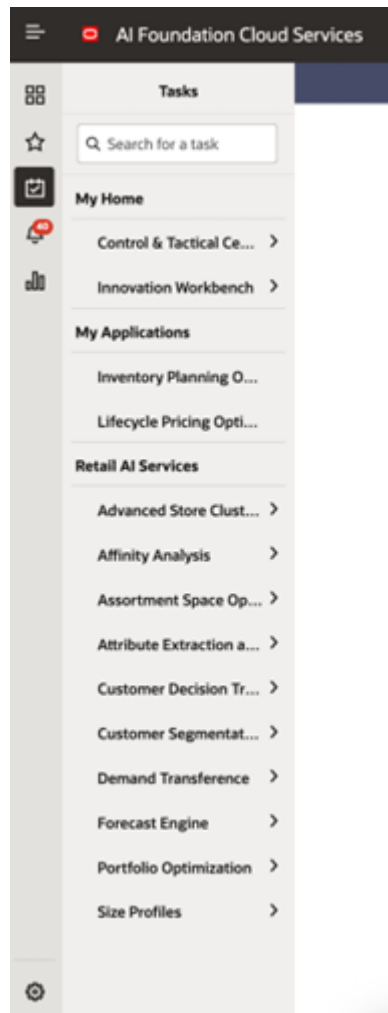


Overview of the User Interface

The LPO user interface, at a high level, consists of the following components in a JET UI.

- AIF Task Pane
 - When the user logs in to the application, the Task Pane is displayed on the left side of the application. This allows the user to navigate between AI Foundation (AIF) applications and their respective subtasks, such as LPO.

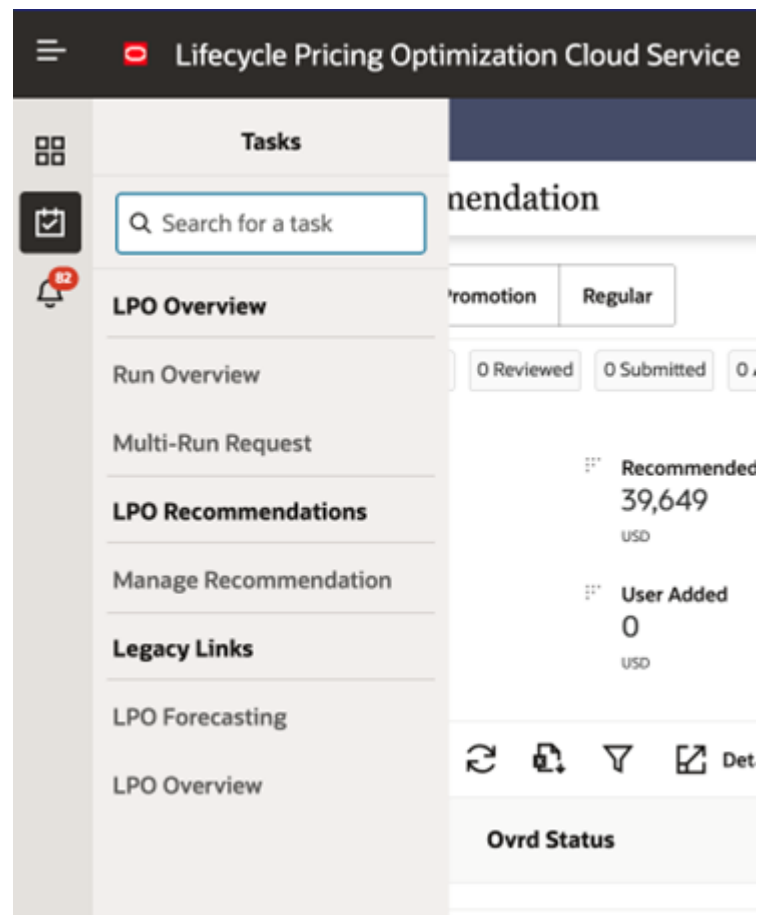
Figure 1-2 AIF Tasks



- Lifecycle Pricing Optimization - Task Pane
 - Clicking Lifecycle Pricing Optimization from the AIF Task Pane opens the LPO Task Pane, displaying the following links:
 - * Run Overview - Manage runs and business rules, or view and edit results.
 - * Multi-Run Request - Manage multi-run entries.
 - * LPO Recommendations - Manage recommendations, view reports and metrics, and review, approve, or submit recommendations.

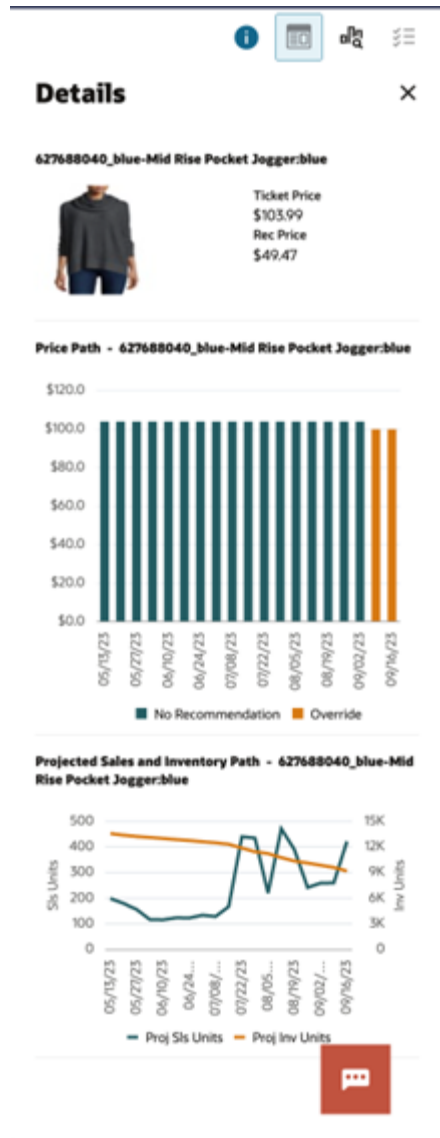
- * Legacy Links - Opens LPO in older ADF screens.

Figure 1-3 LPO Tasks



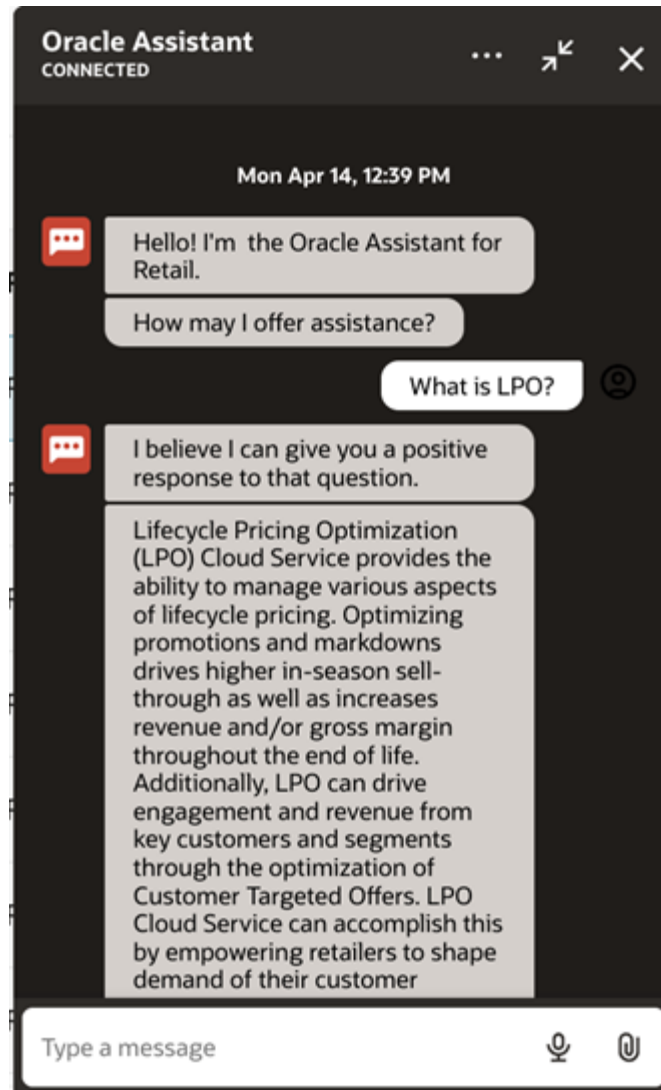
- Contextual Panel
 - This panel, located on the right side of the application, displays graphical insights that help in setting up runs and interpreting optimization results.

Figure 1-4 Contextual Panel



- Oracle Digital Assistant (or Chatbot)
A floating icon appears in the bottom-right corner of the screen (movable across the screen). This functionality, called Artie, offers voice or chat-based assistance. Users can interact with the chatbot to ask queries (see [Integration with Oracle Digital Assistant](#)), and LPO responds with relevant answers.

Figure 1-5 Oracle Digital Assistant Connected



Administering Lifecycle Pricing Optimization

For information about the administration of LPO, see the *Oracle Retail AI Foundation Cloud Services Administration Guide*.

2

LPO Workflow and User Roles

This chapter describes the end-to-end workflow of LPO and the user roles responsible for the activities within LPO, such as the LPO Run, Optimization, Recommendations, or Approvals.

LPO Workflow Components

This section describes the LPO workflow components.

Forecast Configurations

This is a prerequisite step for LPO's Promotion/Markdown and Regular Pricing Optimization (not applicable for Regular Lite) sets up demand forecasting, which is essential for LPO to review and estimate how price changes will impact sales. By training the model and generating demand parameters, it ensures that LPO has the data required to make accurate, data-driven price recommendations. Approving and mapping the forecast links the forecast to the LPO application for use in optimization.

For additional details on forecast configurations, see the Control and Tactical Center chapter in the *Oracle Retail AI Foundation Cloud Service Implementation Guide*.

Business Rules and Strategy

In LPO, a business strategy defines how prices are set, based on a retailer's goals such as maximizing margin, staying competitive, or driving volume. A default strategy applies broadly across items or locations and reflects the retailer's standard pricing logic. Custom strategies are applied selectively, allowing exceptions when specific business needs arise such as high-priority products, promotional events, or competitor activity. Both default and override strategies can include rules that guide price changes, such as margin thresholds, competitor gaps, or price point alignment.

For additional details on business rules and strategy, see the Control and Tactical Center chapter in the *Oracle Retail AI Foundation Cloud Service Implementation Guide*.

Manage LPO Recommendation

The Manage LPO Recommendation screen allows users to take final actions on pricing recommendations - accept, reject, override, review, and approve. In production environments, this is often the most frequently accessed screen, serving as the launch pad to view results from batch runs, analyze forecasts, and decide whether to initiate new ad hoc runs. For details, see [Manage LPO Recommendation](#).

LPO Run

In LPO, a run refers to a single execution of the optimization process, based on a defined set of business goals, strategies, and rules. It uses input data such as historical sales, forecasts, and inventory to generate pricing recommendations for a specific scope such as season, location, merchandise level, and period.

A run can be for promotion, markdown, or regular price optimization, and it can be a batch run or a what-if run. Batch runs are scheduled and use the default business strategy to generate forecasts (when applicable) and recommendations. What-If runs are user-initiated price optimizations that apply a custom strategy to test alternate pricing approaches without impacting live data.

LPO Run Overview

The LPO Run Overview screen provides a centralized workspace to view, create, delete, compare optimization runs. It displays key details such as run type, status, objective, pricing event, and calendar period. Users can filter and search for specific runs, monitor progress, and access detailed results or diagnostics. The Overview screen displays both batch runs and what-if runs, along with details such as run name, type, status, calendar period, and so on. The user can click on an existing run or initiate a new one and each run opens in a dedicated tab labeled "LPO: <Run ID>", which serves as the workflow for defining pricing strategies and reviewing optimization results.

The workflow within a run is organized into the following stages:

- **Scope** - Define the scope of the run by selecting the relevant season, location or price zone, and department. This stage also allows the user to set pricing objectives (for example, increase revenue, margin) and specify budget constraints.
- **Business Rules** - View, modify, or apply business rules that guide the optimization engine, such as promotions, markdowns, margin thresholds, competitive pricing rules, and so on.
- **Results** - The Results screen displays the outcomes of an LPO run, including recommended prices and forecasted performance metrics. Users can compare current versus recommended prices, review the impact on revenue, margin, and units, and see visual indicators of the metrics. Users can also review the optimization results and choose to accept, reject, or override pricing recommendations and recalculate recommendations if inputs or constraints have changed.
- **Forecasting** - LPO forecasting is used to review the sales forecasts, returns forecasts, and exceptions of a successfully executed offer optimization run for Markdowns and Promotions. These screens provide the user with the ability to review the way in which different components of forecast (for example, baseline, seasonality) affect the price recommendation for an item.

For more details, see [LPO Run Overview](#).

LPO Run Optimization

Run optimization in LPO determines the best pricing strategies at various levels, such as location, product category, and time. Users can configure optimization to apply pricing decisions at a price zone (a group of stores or online locations) or a specific node in the location hierarchy, such as a region or store group. However, the same instance cannot be set up to generate recommendations by price zone and location node (for example, region).

Once optimization is completed, LPO generates price recommendations at a more detailed level, known as the recommendation level. This can include:

- **Location or Price Zone Level** - The specific stores, regions, or online locations where pricing applies.
- **Merchandise Level** - The product category or grouping (for example, department, brand, or style/color).
- **Calendar Level** - The period for which pricing recommendations are valid.

- Customer Segment Level (for Targeted Offers) - Specific customer groups that receive personalized pricing or promotions.

For example, a retailer selling women's apparel in university-based stores can group these locations into a single price zone and optimize pricing accordingly. Typically, optimization runs are set up at higher levels, such as Region or Price Zone, Department, and Week, while recommendations are generated at more granular levels, such as Style/Color, Location, or Customer Segment.

Example of Optimization in Action:

Imagine a retailer is optimizing prices for a grocery chain:

- Optimization Setup Level: The retailer configures the run for the Dairy department across a price zone (for example, all urban stores) for a specific week.
- Inventory and Data Roll-Up: LPO considers inventory, demand, and pricing rules at the chosen levels.
- Price Recommendations: LPO generates recommendations for specific products (for example., different brands of milk), at each price zone, for a specific week, and even for different customer segments (if targeted offers apply).

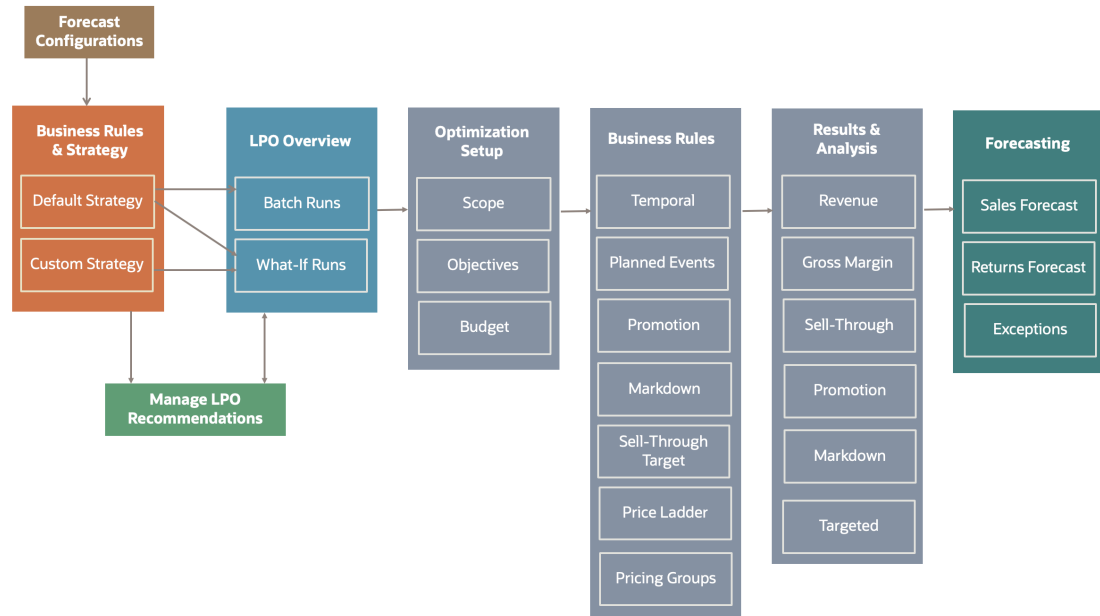
Promotion and Markdown Optimization Workflow

A typical LPO Workflow is as follows:

- The buyer begins with a business strategy (for example, maximize revenue) and aims to determine when to offer a promotion, the appropriate discount depth, which items to include, and similar decisions related to markdowns, while considering business rules and inventory constraints.
- Business rules are provided via interfaces and can be associated with a specific strategy (for example, a Christmas Sales strategy). A default strategy, DEFAULT_SET, is always available.
- The application evaluates various price combinations for each item, factoring in the potential gains from offering a promotion or markdown. If customer-specific promotions (for example, Targeted Offers) are enabled, these are also considered. The system identifies the most effective pricing scenario that meets the defined optimization objective.
- On a scheduled basis (typically weekly), batch runs are created and populated using business rules defined in the DEFAULT_SET strategy.
- Once optimization is complete, item-level recommendations are moved to the Ready for Review status. By default, all batch run recommendations appear in the Manage LPO Recommendation screen.
- A pricing analyst can review these recommendations, evaluating them at the item level. The analyst may choose to accept, reject, or override any recommendation.
- Once the analyst completes the review, the item recommendations transition to Reviewed status. These reviewed items are then routed to the buyer for final action.
- If the buyer agrees with the recommendations, they can Submit or Approve them. Both actions send the price recommendations to:
 - The export interface, and
 - A web service, which forwards them to a price execution system (for example, RPCS) with the respective Submitted or Approved status.

- If a new set of recommendations is required, a what-if run can be initiated. This may involve modifying business rules or selecting a different strategy.
- Once the what-if run is optimized and the results are satisfactory, the run can be finalized. Finalizing a what-if run replaces the batch run recommendations with those from the finalized run.

Figure 2-1 Markdown Promotion Optimization Workflow

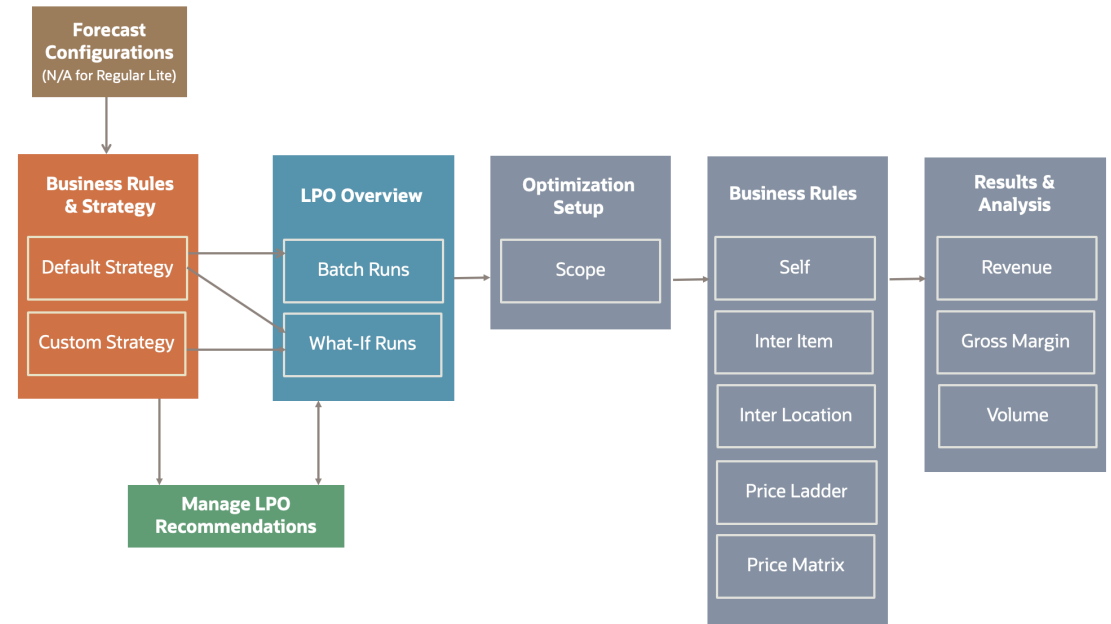


Regular Pricing Optimization Workflow

Similarly, Regular Pricing Optimization runs follow the same optimization flow as promotion and markdown, from defining business objectives and applying business rules to reviewing and approving recommendations.

- It is not required that regular price recommendations and promotion/markdown recommendations use the same run setup or recommendation levels.
- For instance, promotion/markdown recommendations may be defined at the style-color or price zone level, while regular price recommendations can be configured at the style or channel level, either as part of the location hierarchy or mapped to separate price zones.

Figure 2-2 Regular Optimization Workflow



Users and Roles

LPO supports both data-level and role-based security controls.

- Data filtering defines which merchandise and locations a user can access. For example, the user Tom may be limited to viewing only U.S. locations.
- Role-based access governs what actions a user can perform within the application interface, ensuring users only see and interact with features relevant to their responsibilities.

The following table lists the user login roles that are available and can be assigned at the time of user creation:

Table 2-1 User Login Roles

Role	Equivalent IDCS Role(s)	Description
Pricing Analyst	PRICING_ANALYST_JOB or PRICING_ANALYST_JOB_PREP ROD	Main business user responsible for day-to-day LPO activities and working through price recommendations.
Pricing Manager (or Analytical Super User)	PRICING_MANAGER_JOB or PRICING_MANAGER_JOB_PREP PROD	Manages analytical configurations, testing, and model diagnostics.
Pricing Administrator	ADMINISTRATOR_JOB or ADMINISTRATOR_JOB_PREP ROD	Responsible for the general system setup and configuration tasks related to the business.

Table 2-1 (Cont.) User Login Roles

Role	Equivalent IDCS Role(s)	Description
Buyer	BUYER_JOB or BUYER_JOB_PREPROD	Responsible for department(s), who submits, approves, or rejects the LPO recommendations, and for the translation of data between LPO and Oracle Retail Price Management (RPM) and Oracle Retail Customer Engagement (CE).
Targeted Offer User	TARGETED_OFFER_JOB or TARGETED_OFFER_JOB_PRE PROD	Responsible for working through the targeted price recommendations.
Regular Price User	REGULAR_PRICE_JOB or REGULAR_PRICE_JOB_PRE PROD	Dedicated to working with regular price recommendations.

Note that the users must the following additional roles (depending on PROD or PREPROD) to access platform services such as saving preferences, saving Query Builder queries, and so on. PLATFORM_SERVICES_ADMINISTRATOR and PLATFORM_SERVICES_ADMINISTRATOR_ABSTRACT (OR) PLATFORM_SERVICES_ADMINISTRATOR_ABSTRACT_PREPROD and PLATFORM_SERVICES_ADMINISTRATOR_PREPROD

Table 2-2 Privileges on Runs and Recommendations

Privilege	Description
Create new LPO run	Set up and execute optimizations. All steps on the main train can be carried out, including creating a new run via the copy run functionality.
Modify the name and description of an existing LPO run	Open an existing run and modify the name and description of that run.
Modify the general strategy of an existing LPO run	Ability to modify the general strategy for that run. Not applicable for regular LPO runs.
View existing LPO run	Open an existing run and visit any step in the main train. The user can view data and search/aggregate/filter but cannot change anything.
Optimize a LPO run	Optimize a new or modified run or a failed run.
Review or Undo Review LPO recommendations	Review recommendations. Reviewed recommendations can be submitted or approved.
Submit or Undo Submit LPO recommendations	Submit recommendations for flat files or RPCS web service. When integrated with RPCS, it sends recommendations in Submitted status.
Approve or Undo Approve LPO recommendations	Approve recommendations for flat files or RPCS web service. When integrated with RPCS, it sends recommendations in Approved status.
Modify LPO recommendations	Ability to accept, reject, override, or add promotion, markdown or regular price recommendations.
Modify Targeted recommendations	Ability to accept, reject, or override targeted recommendations for that run.
Delete saved runs	Delete run setup information and results from the database.

Table 2-3 Privileges Based on Data Access

Privilege	Data Access	Pricing Analyst	Pricing Manager	Pricing Administrator	Buyer	Targeted Offer User
Create new LPO run*	All runs		X			
View existing LPO run	All runs		X			
Modify the name and description of an existing LPO run.*	Runs they created		X			
Modify the general strategy of an existing promotion or markdown LPO run	Runs they created		X			
	Batch runs		X			
Optimize or re-optimize LPO run	Runs they created		X			
	All runs with technical failures			X	X	
Delete saved LPO runs*	Runs they created		X			
	All runs			X		
Modify promotion or markdown recommendation	Runs they created or batch runs	X	X		X	
Recalculate LPO recommendations	Runs they created or batch runs	X				
Review LPO recommendations	Runs they created or batch runs	X			X	
Submit LPO recommendations	All runs				X	
Approve LPO recommendations*	All runs				X	
Modify targeted recommendations	Runs they created or batch runs					X

* LPO runs for generating regular price recommendations require additional regular price user role to the above-mentioned roles.

Table 2-4 Privileges Based on Run and Recommendation Status

Role	Privilege	Object	Status
Users	cannot modify existing LPO run	when run is	running
Users	cannot optimize LPO runs	when run is	running or autorun
Users	cannot delete saved LPO runs	when run is	running
Administrator	cannot delete saved LPO runs	when run has	approved or submitted recommendations
Users	cannot optimize batch runs	when run is in	any status

Table 2-4 (Cont.) Privileges Based on Run and Recommendation Status

Role	Privilege	Object	Status
Users	cannot modify recommendations	when recommendation is	reviewed, submitted, or approved
Users	cannot modify recommendations	when recommendation is	pending calculation or changes
Users	cannot recalculate	when recommendation is	reviewed, submitted, or approved

3

LPO Run Overview

The Run Overview is the dashboard for the LPO runs. In this tab, the user can see a list of all existing runs, along with details that describe each run. The list includes runs created by other users, which can be opened in read-only mode. The user can create a run, copy a run, open a run, delete a run, compare runs, debug/playback a run, or finalize a run and view the recommendations and status.

Run Overview Dashboard

The Run Overview dashboard has two tabs, Markdown/Promotion and Regular, which the user can select based on the runs to be actioned. Each tab has three components: Tiles, Table of Runs, and Contextual Panel.

Figure 3-1 Run Overview - Markdown/Promotion

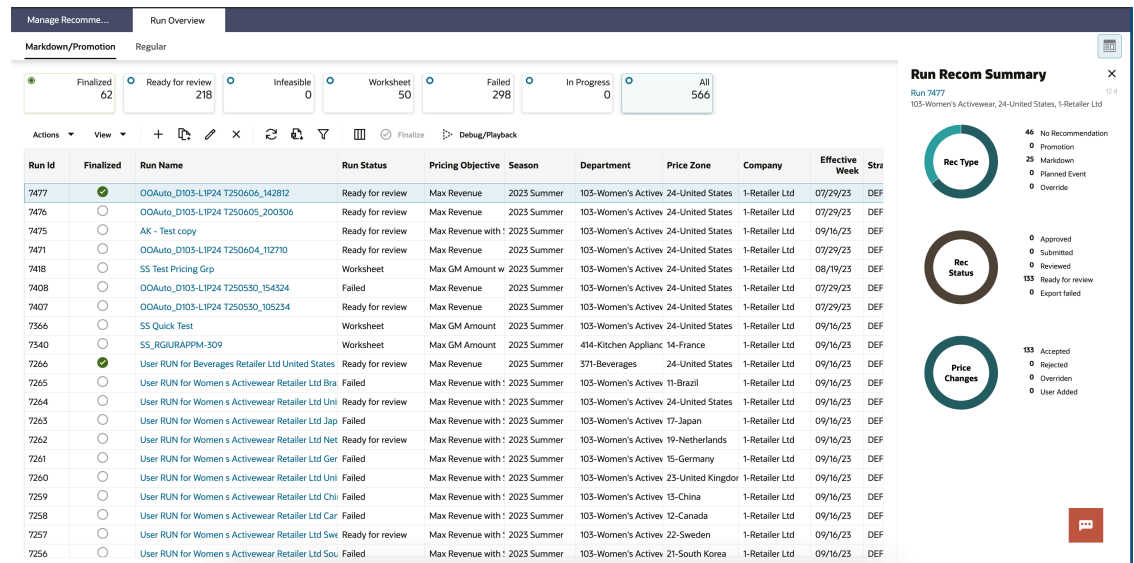
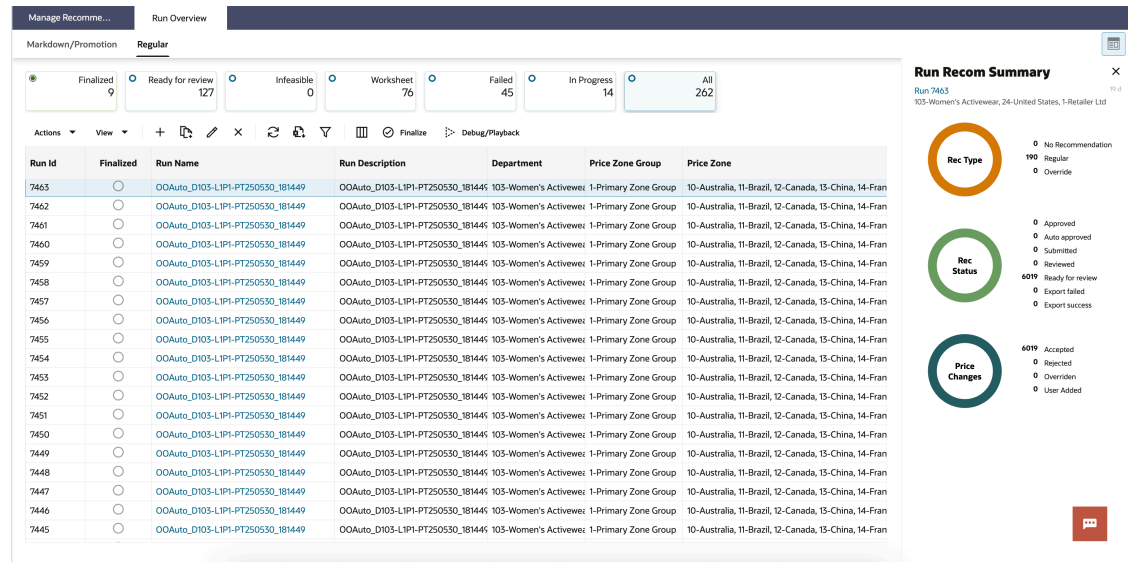


Figure 3-2 Run Overview - Regular



Status Tiles

The Tiles tab provides quick access to the number of runs by run status in the form of tiles - Finalized, Ready for Review, Infeasible, Worksheet, Failed, In Progress, and All. The 'Finalized' tile is selected by default, displaying the list of Finalized runs. Clicking the relevant tile filters the Table of Runs to show the list of runs in the selected status. For example, clicking the Ready for Review tile filters the table with the list of runs that are in Ready for Review status.

Figure 3-3 Run Overview - Status Tiles

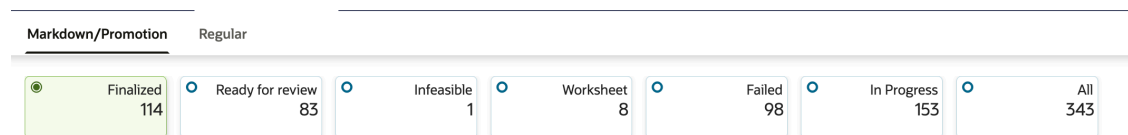


Table of Runs

This tab provides relevant information on all the runs in a tabular format; the user can perform operations such as create, copy, delete, compare, and finalize runs in this table. See [Appendix: Promotion and Markdown Pricing Optimization Rules](#) and [Appendix: Regular Pricing Optimization Rules](#) for further information.

Figure 3-4 Run Overview - Table of Runs

Run Id	Finalized	Run Name	Run Description	Department	Price Zone Group	Price Zone	Company	Opt Start Dt
7047	✓	Batch for Women's Activewear Retailer Ltd Pri	Batch for Women's Activewear Retailer Ltd Pri	105-Women's Activewear	1-Primary Zone Group	10-Australia, 11-Brazil, 12-Retailer Ltd	1-Retailer Ltd	04/30/25
7046	✓	Batch for Beverages Retailer Ltd Primary Zone	Batch for Beverages Retailer Ltd Primary Zone	371-Beverages	1-Primary Zone Group	10-Australia, 11-Brazil, 12-Retailer Ltd	1-Retailer Ltd	04/30/25
7045	✓	Batch for Women's Tops Retailer Ltd Primary Zone	Batch for Women's Tops Retailer Ltd Primary Zone	101-Women's Tops	1-Primary Zone Group	10-Australia, 11-Brazil, 12-Retailer Ltd	1-Retailer Ltd	04/30/25
7044	✓	Batch for Kitchen Appliances Retailer Ltd Primary Zone	Batch for Kitchen Appliances Retailer Ltd Primary Zone	414-Kitchen Appliances	1-Primary Zone Group	10-Australia, 11-Brazil, 12-Retailer Ltd	1-Retailer Ltd	04/30/25
7043	✓	Batch for Men's Tops Retailer Ltd Primary Zone	Batch for Men's Tops Retailer Ltd Primary Zone	121-Men's Tops	1-Primary Zone Group	10-Australia, 11-Brazil, 12-Retailer Ltd	1-Retailer Ltd	04/30/25
7042	✓	Batch for Women's Bottoms Retailer Ltd Primary Zone	Batch for Women's Bottoms Retailer Ltd Primary Zone	104-Women's Bottoms	1-Primary Zone Group	10-Australia, 11-Brazil, 12-Retailer Ltd	1-Retailer Ltd	04/30/25
7041	✓	Batch for Men's Activewear Retailer Ltd Primary Zone	Batch for Men's Activewear Retailer Ltd Primary Zone	125-Men's Activewear	1-Primary Zone Group	10-Australia, 11-Brazil, 12-Retailer Ltd	1-Retailer Ltd	04/30/25
7040	○	AK_RPO_RULE_MARGIN_ITEM_005A	AK_RPO_RULE_MARGIN_ITEM_005A	105-Women's Activewear	1-Primary Zone Group	10-Australia, 11-Brazil, 12-Retailer Ltd	1-Retailer Ltd	04/30/25
7039	○	AK_RPO_RULE_MARGIN_ITEM_004A	AK_RPO_RULE_MARGIN_ITEM_004A	105-Women's Activewear	1-Primary Zone Group	10-Australia, 11-Brazil, 12-Retailer Ltd	1-Retailer Ltd	04/30/25
7038	○	AK_RPO_RULE_MARGIN_ITEM_003A	AK_RPO_RULE_MARGIN_ITEM_003A	105-Women's Activewear	1-Primary Zone Group	10-Australia, 11-Brazil, 12-Retailer Ltd	1-Retailer Ltd	04/30/25

- For each run with a successfully completed optimization, certain KPIs such as Revenue, Gross Margin, and Sell-Through are shown in absolute numbers as well as by % gain. Note that each run can be in its own currency.
- When the run is in Ready for Review status, clicking the run name in the overview screen will automatically take the user to the Results stage. Otherwise, if the run is Worksheet status, the Results stage is disabled.
- The table of runs also provides the information about the batch runs. Batch runs are prefixed with "Batch" in the run name, and the run status will say "Auto Run" when created.
 - A user cannot optimize the batch runs individually as they are scheduled for optimization as part of the batch process.
 - When a user wants to execute batch optimizations on demand, the user can leverage the Oracle Retail Process Orchestration and Monitoring Cloud Service (POM) UI to submit the ad hoc batch job for optimization. Then, the batch runs are run at a regular frequency specified by the batch process, for example, each batch run.
 - Extracts the latest sales data, updates the relevant inputs, and sends the run for optimization.
 - If the batch run is successfully executed, the results will be shown, and the run will be finalized. Click the Refresh button to update the table and run statuses.

Table 3-1 Run Overview - Run Status

Status	Description
Worksheet	The user is setting up the run, which has not yet been sent for optimization.
Running	The run has been sent for execution, and the process of collecting data and optimization is currently running. When the user selects recalculate, the run enters running status as well, but here it will be recalculating all the metrics based on the user price overrides (no re-optimization).
Ready for Review	The optimization process is complete, and the run status and item recommendations are ready for review.
Submitted	The run submitted and queued for optimization.
Auto Run	This status indicates that the run is a batch run and will be executed as part of batch process.

Table 3-1 (Cont.) Run Overview - Run Status

Status	Description
Failed	Run execution was aborted due to technical or data errors.
Infeasible	Optimization could not find any solution due to the various business rules set for the run and thus it produces a current ticket or regular prices as the recommendations.

Contextual Panel

When a user selects a row or runs in the table, the contextual panel in the right-hand side shows the pie charts for the Recommendation Type, Recommendation Status Summary and Price Change Summary along with their respective counts.

Figure 3-5 Run Overview - Markdown/Promotion Run Recommendation Summary



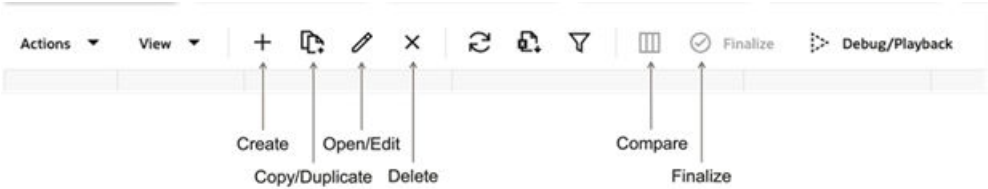
Figure 3-6 Run Overview - Regular Run Recommendation Summary



Run Overview Actions

This section describes the run overview actions.

Figure 3-7 Run Overview - Actions



Create a Run

A Pricing Manager (Analytical Super User) or Regular Pricing Manager can create a new run by clicking the **Create** icon. This opens the Run Overview tab, allowing the user to configure a new optimization run. Here, the user defines the scope, selects the appropriate strategy, and sets up business rules for promotion, markdown, or regular price optimization.

Copy/Duplicate a Run

To duplicate an existing run, the user must select the desired run from the list on the Overview screen and click the **Duplicate** icon. The user will then be prompted to either continue with the existing effective week or select a new one from the drop-down list. The Scope stage in the Run tab will be opened, where all fields are pre-populated with copies of the inputs and data from the source run. Any existing results are not included.

The duplicated run appears in the list with a new Run ID and a Run Name prefixed with "Copy Of." All business rules from the source run are also copied. However, data elements such as demand data, price, cost, and inventory are not copied, as they are refreshed during optimization.

Open/Edit Run

The same Run Overview tab is used for both viewing and editing runs, providing access to the Scope, Strategy, or Rules Summary, and Results screens. To edit or view an existing run, the user must select it from the displayed list and click the **Edit** icon. Any run can be opened for viewing; however, edit mode is allowed only for runs created by the user with the appropriate roles (such as Pricing Manager (Analytical Super User) or Regular Pricing Manager), and only when the run status is not Running, Reviewed, or Submitted. All other runs are opened in read-only mode.

Delete a Run

Runs can be deleted based on the run status and the user's permissions. A user with Administrator permissions can delete any run except those with a status of Running. Users can delete runs they have created, provided the run does not have a status of Running. Runs created by another user or runs with an Auto Run status cannot be deleted. Multiple runs can be selected and deleted simultaneously.

Compare Runs

The user can compare three runs that share the same Merchandise Level and are in Ready for Review status, by clicking the **Compare** icon to initiate a comparison. The selected runs are evaluated based on revenue, gross margin, volume, and other key metrics to identify the most favorable outcome. This feature is also useful for comparing different what-if strategies and selecting the best-performing option.

Figure 3-8 Run Overview - Compare Rules

Compare Runs

103 Women's Activewear
\$635-Batch for Women's Activewear Retailer Ltd Italy 2023 Summer

Revenue

\$166,528

+12%

Gross Margin

\$263,602

-47%

Sell Thru Fcst

-

Promo Item Cnt

10

Middn Item Cnt

0

No Rec Item Cnt

-

103 Women's Activewear
7254 - User RUN for Women's Activewear Retailer Ltd United States 1100

Revenue

\$79,485,875

+2%

Gross Margin

\$18,733,739

-3%

Sell Thru Fcst

95%

+0%

Promo Item Cnt

0

Middn Item Cnt

26

No Rec Item Cnt

45

103 Women's Activewear
7254 - User RUN for Women's Activewear Retailer Ltd New Zealand 1100

Revenue

\$310,644

+10%

Gross Margin

\$114,741

-3%

Sell Thru Fcst

90%

+9%

Promo Item Cnt

0

Middn Item Cnt

6

No Rec Item Cnt

4

Finalized

☐

Strategy

DEFAULT_SET

Company

1-Retailer Ltd

Price Zone

16-Italy

Proj Promo Budget (Life)

\$216,656

Proj Middn Budget (Life)

\$121,423

Non-fcst Item Cnt

-

Plan Event Item Cnt

0

Use Ovrld Item Cnt

0

Total Item Cnt

10

Created By

RASED1_0562485447 - 05/16/24

Compare Items

Actions

View

Item	Location	Price Zone	Recom Price: 3635 7264 7254	Tkt Price: 3635 7264 7254	Orig Price: 3635 7264 7254	Reg Price: 3635 7264 7254	Opt Revenue: 3635 7264 7254	
988654950_black-Ribbed Scoop Neck T-Shirt-Black	1-Retailer Ltd	24-United States	-	\$103.99	-	\$103.99	-	\$0.0
3010220_brown-Ribbed Crew Neck Top-brown	1-Retailer Ltd	20-New Zealand	-	\$62.99	-	\$62.99	-	\$62.99
3010220_brown-Ribbed Crew Neck Top-brown	1-Retailer Ltd	24-United States	-	\$20.97	-	\$36.99	-	\$36.99
3010780_16in-1 new-Blue 1 Inseid Short-sleeve-Black	1-Retailer Ltd	20-New Zealand	-	\$12.04	-	\$41.07	-	\$41.07

Finalize Runs

Once the run is optimized, if the user wants to send recommendations from another run, the user can select the run and click the **Finalize** button if the results are satisfactory. Upon finalization, the recommendations from the what-if run replace those from the corresponding batch run in the Manage LPO Recommendation screen.

If there is any conflict, that is, when the new run to be finalized is for same run scope as an existing finalized run, an alert is displayed asking the user to un-finalize the existing finalized run. Users must exercise caution when they un-finalize the existing finalized run, since any approved recommendations will be removed from the export integration views.

Debug/Playback

The user can select a run and click the **Debug/Playback** button that downloads a zip file containing relevant data for debugging a what-if run. These files help troubleshoot discrepancies between environments (for example, Stage versus Prod) or when submitting a Service Request (SR), thereby making it easier to identify and resolve issues quickly.

The Run Tab

Clicking the **Create** icon or selecting a run to edit or view it opens the Run tab that serves as the central workspace where the user creates a run and defines business goals and rules by selecting the appropriate strategy from the available list. This tab supports workflows for promotion, markdown, or regular price optimization, and is titled either PRO: <RunID>The Run tab consists of three primary screens:

- **Scope:** Enables the user to select the season, location (for example, region or price zone), merchandise level (for example, department), effective week, and strategy. For regular pricing optimization, similar options are available such as season, location, price zone group, merchandise, and effective week.
- **Rules Summary:** Allows the user to view or modify the applicable business rules.

- **Results:** Displays the outcome of an optimized run and allows the user to override, accept, reject, or revisit earlier steps to make changes.

Figure 3-9 Run Tab - Markdown/Promotion

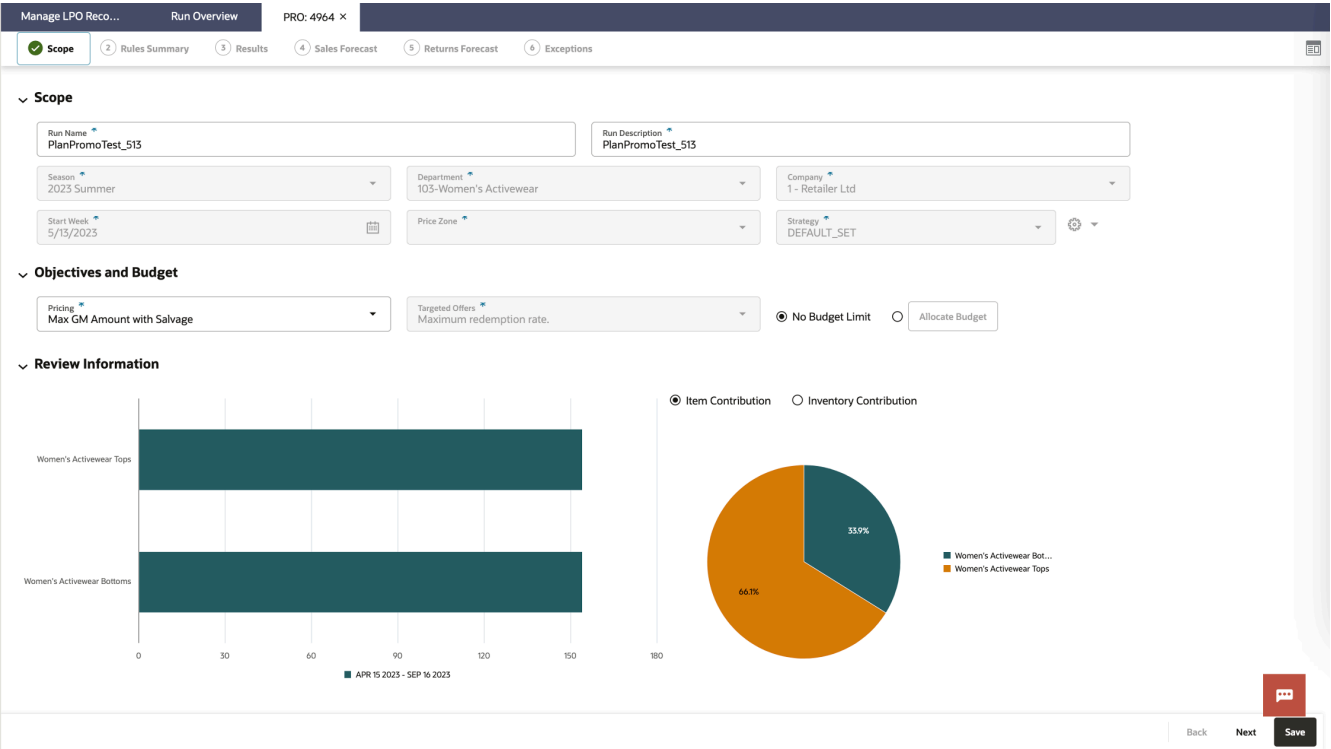
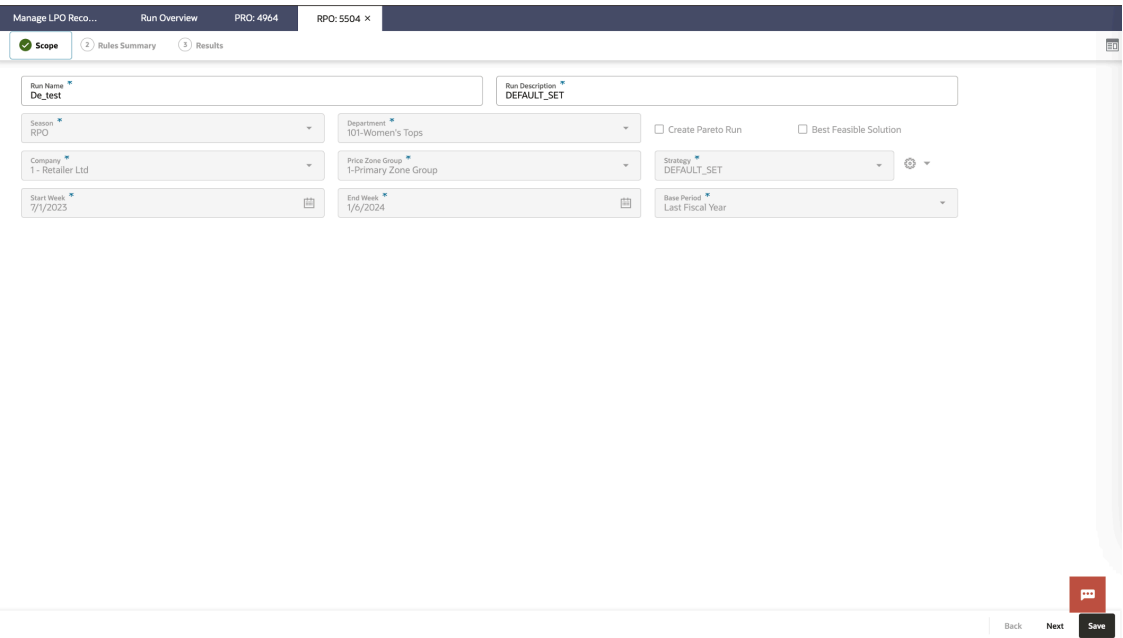


Figure 3-10 Run Tab - Regular



4

LPO Rules and Strategies

Pricing rules and strategies in LPO are the foundation for generating optimized price recommendations. Strategies combine multiple rules that reflect business objectives such as maximizing margin, staying competitive, or clearing inventory. Each rule defines specific conditions or constraints, such as minimum margin thresholds, price change limits, or competitive price alignment. Users can configure, review, and manage these rules to ensure that recommendations align with their pricing goals. These strategies are then applied during optimization runs to drive consistent and data-driven pricing decisions.

The rules and strategies for LPO are created from the Control and Tactical Center in the Oracle Retail AI Foundation Cloud Service. For further details, see the "Control and Tactical Center" chapter in the *Oracle Retail AI Foundation Cloud Service Implementation Guide*.

Pricing Optimization Rules in LPO

Pricing rules are the building blocks of price recommendations. They define specific conditions that must be met when determining a price, ensuring compliance with business objectives such as margin protection, competitive positioning, or price consistency. The list of rules can be found in RSE_APPL_RULE_PROPERTY table.

Regular Pricing rules are classified as Forecast-based (F) or Non-Forecast-based (N/F). Regular Lite uses only N/F rules, while Regular Full uses both F and N/F rules. If Forecast-based rules are included in a strategy used for a Regular Lite run, they will be ignored.

Figure 4-1 Control and Tactical Center - Regular Rule Categories - Forecast or Non/Forecast

Regular		▼
Competitor and CPI	F	1
Cost Change	N/F	0
Objective	F	0
Inter-Item	N/F	1
Inter-Loc/PZ	N/F	0
Margin for Group	F	0
Margin for Item	F	7
Pack Pricing	N/F	0
Price Range	N/F	6
Revenue for Group	F	0
Revenue for Item	F	4
Pricing Group	N/F	0
Volume for Group	F	0
Volume for Item	F	4

To list only the Non-Forecast based rules, set
RSE_CONFIG.PRO_LPO_REGULAR_LITE_ENABLED_FLG to Y.

For the complete list of Promotion Markdown rules and strategies, see [Appendix: Promotion and Markdown Pricing Optimization Rules](#). For Regular Pricing rules and strategies, see [Appendix: Regular Pricing Optimization Rules](#).

The pricing rules in LPO are built using rule criteria and rule values. For Regular Pricing, each rule value displays F or N/F to indicate Forecast or Non-Forecast based respectively.

Figure 4-2 Control and Tactical Center - Regular Rule Values Example - Forecast or Non/Forecast

Create Regular Margin for Item Rules

Please note that when you edit the rule criteria or rule value, the change will be propagated to all the rules that are mapped to this rule criteria or rule value

Description Required

Rule Criteria

+ Criteria: No Criteria Exists

Rule Value

Margin for each item in the group/product hierarchy node needs to be greater or equal than this percentage value. **F**

Rule Value

Margin for each item in the group/product hierarchy node needs to be less or equal than this percentage value. **F**

Rule Value

Margin for each item in the group/product hierarchy node needs to have a minimum percentage increase compared to base period (e.g. last year, last quarter). **F**

Rule Value

Margin for each item in the group/product hierarchy node needs to have a maximum percentage increase compared to base period (e.g. last year, last quarter). **F**

Rule Value

List Margin for each item in the group/product hierarchy node needs to be greater or equal than this value. **N/F**

Rule Value

List Margin for each item in the group/product hierarchy node needs to be less or equal than this value. **N/F**

Rule Value

List Margin for each item in the group/product hierarchy node needs to be greater or equal than this percentage value. **N/F**

Rule Value

Cancel Save

Rule Criteria

Rule criteria define the scope in which the rule will apply and where and how the rule should be enforced, for example., Merchandise, Price Zone, Season, Pricing Groups, and so on, in alignment with the business objective.

Not all rule categories and subcategories support the same criteria types. The supported criteria depend on the rule type and configuration. For example, Promo/Markdown rules support Merchandise, Price Zone, and Price Zone Group, while Inter-Item and Inter-Location rules require criteria for two sets of items and locations, respectively.

Rule Value

Rule value defines the target or threshold for the rule. It sets the specific action or limit that the rule will enforce.

Example rule values:

- Margin - Minimum margin of 30%
- Budget - Maximum budget of \$50,00,000
- Exit Date - 30/09/2023
- Promotion Range - Between 15% to 40% for first promotion and 10% to 25% for subsequent promotions

Figure 4-3 Rule Criteria and Value - Markdown and Promotion

Create Markdown Rules

Please note that when you edit the rule criteria or rule value, the change will be propagated to all the rules that are mapped to this rule criteria or rule value

Description: Markdown Rule Demo

Rule Criteria

Criteria: Merchandise 4 - Department = 103-Women's Activewear AND Price Zone = 24-United States AND Price Zone Group = 1-Primary Zone Group AND Season = 1202-2023 Summer

Rule Value

Maximum absolute markdown discount percentage
Rule Value: 50%

Minimum number of markdown items
Rule Value: 100

Absolute maximum discount percentage for markdowns over the entire season
Rule Value: 55%

Maximum discount percentage for the first markdown
Rule Value: 50%

Minimum discount percentage for the first markdown
Rule Value: 20%

Length of markdown as a percentage of the whole season
Rule Value: 2%

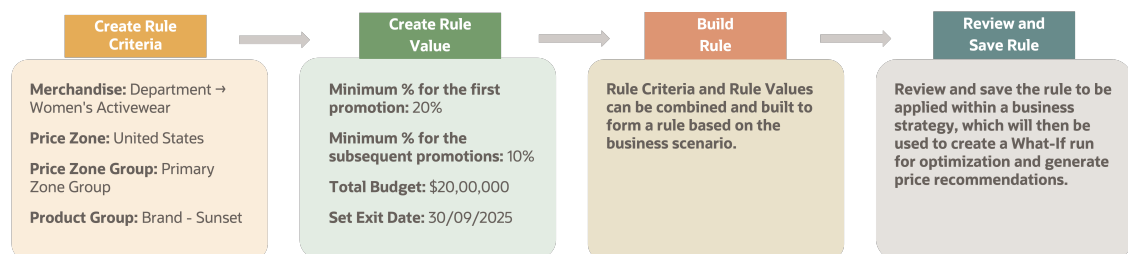
Cancel Save

Example - Creating a Pricing Optimization Rule For LPO

For example, a retailer may want to apply the following criteria and values to boost sell-through while maintaining profitability during the season:

- Apply a minimum 20% discount for the first promotion and 10% for any subsequent promotions
- Within a budget of \$2,000,000
- Targeting the Women's Activewear brand Sunset in the United States zone
- Valid through 30/09/2023

Figure 4-4 Steps to Create a Pricing Optimization Rule



Pricing Strategy in LPO

A pricing strategy is a set of one or more rules applied at the merchandise and location level to achieve a specific business objective. LPO enables retailers to define and apply tailored pricing strategies, ensuring that all relevant rules work together to generate price recommendations aligned with their overall goals.

For example, a regular pricing strategy may combine:

- A competitor match rule (ensuring prices align with key competitors).
- A margin floor rule (preventing price reductions that affect profitability).
- A rounding rule (ensuring customer-friendly pricing).

A markdown strategy may include:

- A markdown phase rule (defining phased markdowns over time).
- A minimum price threshold rule (preventing markdowns below a certain value).
- A sell-through target rule (adjusting markdown depth based on inventory movement).

Types of Strategy

• Default Strategy

The default strategy is a baseline pricing framework created during the initial setup and applied automatically in batch runs. Example: A retailer sets the default strategy to ensure all products maintain a minimum margin of 25% during regular pricing.

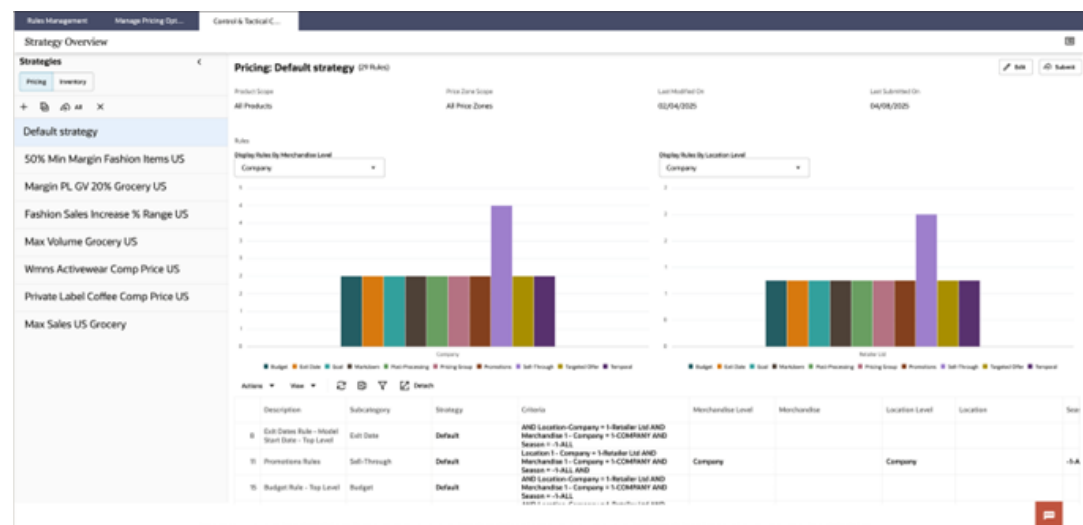
Example: A retailer sets the default strategy to ensure all products in a particular department maintain a minimum margin of 25% during regular pricing.

• What-If Strategy

A What-If Strategy is created when a retailer wants to test different pricing scenarios. It allows comparison against the default strategy to identify the best outcome before applying changes. After running a what-if scenario, retailers can compare its outcomes against the default strategy to determine if adjustments should be implemented.

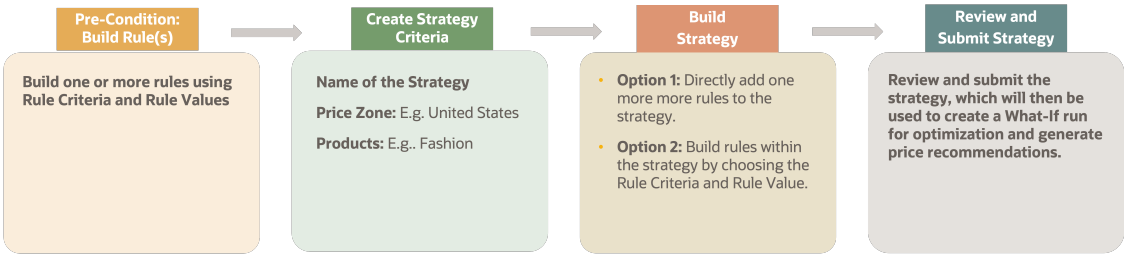
Example: A retailer creates a what-if strategy to test a 20% promotion on summer wear to evaluate its impact on revenue, margin, volume, and so on.

Figure 4-5 Pricing Strategy Overview



Example - Creating a Pricing Strategy in LPO

Figure 4-6 Creating a Pricing Strategy



Conflict Management in LPO - Regular Pricing

Since multiple regular pricing rules can apply to the same item, location, or period, conflicts may arise when different rules suggest different pricing outcomes. LPO resolves these conflicts through a structured conflict management framework that balances business priorities while maintaining logical and profitable pricing decisions.

Figure 4-7 Regular Rules - Hard Constraint and Priority

Rule Value

Do you want to enforce the following rules as Hard constraint?

☐

Specify the priority for the following rules (when not hard)? ⓘ

Priority

▼

▲

Products in Set A need a price greater or equal than this value compared to items in Set B. N/F

Rule Value

▼

▲

Products in Set A need a price less or equal than this value compared to items in Set B. N/F

Rule Value

▼

▲

Products in Set A need a price percentage greater or equal than this value compared to items in Set B. N/F

Rule Value

▼

▲

Products in Set A need a price percentage less or equal than this value compared to items in Set B. N/F

Rule Value

▼

▲

Cancel

Save

Hard versus Soft Rules

Hard Rules: These are strict, non-negotiable rules that LPO must always enforce. If a price recommendation violates a hard constraint, it will be rejected or adjusted to comply.

Example: A minimum margin rule (ensuring at least a 10% profit margin) must always be met, even if it conflicts with a competitor price match.

Soft Rules: These are flexible guidelines that LPO tries to satisfy, but they can be overridden if necessary to meet other critical objectives.

Example: A competitor match rule may suggest lowering the price to align with a competitor, but if it conflicts with a hard margin constraint, LPO will prioritize profitability over competitor alignment.

How LPO Enforces Hard and Soft Rules

LPO always enforces hard constraints, ensuring that mandatory rules such as legal price limits or minimum margins are never violated. All soft constraints are also evaluated, with the system attempting to satisfy them wherever possible, especially when aligned with high priority rules. The optimization process aims to minimize violations and deliver the best feasible solution within the defined rule framework.

Priorities

When multiples soft rules apply, LPO uses priorities (1-100, 100 being highest priority) to determine which rule takes precedence. Higher-priority rules are enforced first, and lower-priority rules are adjusted accordingly.

LPO allows users to configure rule priorities based on business objectives, ensuring the most important rules guide pricing decisions.

Example: A retailer may set margin protection as a higher priority than competitor pricing, meaning that even if a competitor lowers their price, the retailer will not match it if it results in an unprofitable margin.

5

Markdown/Promotion

This chapter describes the Markdown/Promotion functionality.

What-If Run - Introduction

A what-if run allows the user to simulate and analyze the impact of different pricing strategies or business rule changes without affecting the live production data. It is used to evaluate potential outcomes and make informed decisions before finalizing the actual optimization run.

To create a what-if run for markdown/promotion, the pricing analyst must first ensure the Markdown/Promotion tab is selected from the Run Overview page. On clicking the Create icon from the Run Overview table, the system opens the Run Overview tab, where the user can define the scope, select the applicable strategy, and configure business rules tailored to the scenario being tested. Before creating the run, it is essential to complete any required forecast configuration steps to ensure accurate demand estimation and enable valid optimization outcomes.

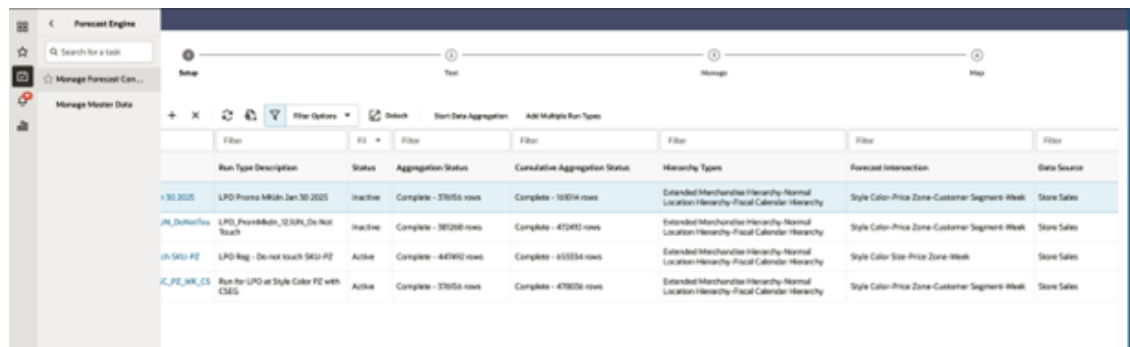
Prerequisite - Forecast Configuration

The Forecast Configuration is the prerequisite step before setting up a Lifecycle Price Optimization run, as the forecasting analyzes and mines historical data (along with other data sources) using machine learning algorithms for developing a predictive model to provide the forecasting inputs to the LPO's Optimization Algorithm.

Later, the Optimization Algorithm obtains inputs such as scope, objectives, budgets, and business rules from the LPO Run in the UI, along with optimization parameters from AIF and the data warehouse. The algorithm analyzes the feasible price paths efficiently and generates price recommendations. These recommendations can be viewed in the LPO Manage Recommendation screen and can be exported to the price execution systems such as Oracle Retail Price Management (ORPM) or Customer Engagement (CE).

The Forecast Configuration can be set up from the Forecast Engine in the AIF Tasks Menu.

Figure 5-1 AIF - Forecast Configuration



The screenshot displays the 'Forecast Engine' interface. On the left is a sidebar with navigation options: 'Manage Forecast Con...', 'Manage Master Data', and 'Forecast Engine'. The main area shows a table of forecast runs. Above the table are tabs for 'Setup', 'Test', 'Manage', and 'View'. The table has columns for 'Run Type Description', 'Status', 'Aggregation Status', 'Cumulative Aggregation Status', 'Hierarchy Types', 'Forecast Intersection', and 'Data Source'. Four runs are listed, each with a unique ID and a description.

Run Type Description	Status	Aggregation Status	Cumulative Aggregation Status	Hierarchy Types	Forecast Intersection	Data Source
1-30-2025 LPO Promo Mktg Jan 30 2025	Inactive	Complete - 37655 rows	Complete - 16104 rows	Extended Merchandise Hierarchy Normal Location Hierarchy Fiscal Calendar Hierarchy	Style Color-Price Zone-Customer Segment Week	Store Sales
1N-2025-12-31 LPO Promo Mktg 12/31/25 Do Not Touch	Inactive	Complete - 38208 rows	Complete - 47542 rows	Extended Merchandise Hierarchy Normal Location Hierarchy Fiscal Calendar Hierarchy	Style Color-Price Zone-Customer Segment Week	Store Sales
1N-2025-12-31 LPO Reg - Do not touch SKUs PZ	Active	Complete - 44742 rows	Complete - 61034 rows	Extended Merchandise Hierarchy Normal Location Hierarchy Fiscal Calendar Hierarchy	Style Color-Price Zone-Customer Segment Week	Store Sales
1N-2025-12-31 LPO Reg - Do not touch SKUs PZ with CSES	Active	Complete - 37655 rows	Complete - 47608 rows	Extended Merchandise Hierarchy Normal Location Hierarchy Fiscal Calendar Hierarchy	Style Color-Price Zone-Customer Segment Week	Store Sales

For further details, see the Lifecycle Processing Optimization chapter and Control and Tactical Center chapter in the *Oracle Retail AI Foundation Cloud Service Implementation Guide*.

Markdown/Promotion - Scope

The Scope stage is used to define the scope of the optimization where the pricing analyst can select a season, merchandise (for example, Department), location (for example, Region), or prize zone effective week and strategy for the run. This stage is divided into three key sections: Scope, Objectives and Budget, and Review Information. Click the **Save** button to apply updates to the Name, Description, and any changes made within the Objectives and Budget section. Upon saving, the Review Information panel is populated, offering insights into inventory and item count contributions, based on the defined product processing level.

The user can proceed to the next stage only after the run has been saved. If ready to optimize, the user can click **Optimize** or **Re-optimize** from the footer. If no adjustments are made in the next stage (Rules Summary), the system will use the business rules tied to the selected strategy by default.

Figure 5-2 Markdown/Promotion Optimization - Run Scope

Table 5-1 Markdown/Promotion - Run Scope

Field	Description
Run Name	The name identifying the run. The name must be 80 characters or less and use alphanumeric characters only. It is case sensitive.
Run Description	A brief description of the run. The value must be 200 characters or less and use alphanumeric characters only.
Season	You can choose from the drop-down list of seasons available for the run.
Product Hierarchy (Merchandise)	You can choose from the drop-down list of merchandise available for the run.
Location Hierarchy (Region)	You can choose from the drop-down list of locations available for the run, based on PRO_LOC_HIER_PROCESSING_LVL.
Effective Week	You can choose from the drop-down list of effective weeks available for the run. Effective weeks in the past compared to the last pull of sales data (whenever the batch process was successfully executed) are not displayed.

Table 5-1 (Cont.) Markdown/Promotion - Run Scope

Field	Description
Price Zone	You can choose from the drop-down list of available price zones for the run. Available set of price zones will be decided based on the forecast run type mapped to the Lifecycle Pricing - Promotion/Markdown application or Lifecycle Pricing - Regular application, respectively.
Strategy	You can choose from the drop-down list of strategies available. You can define the set of business rules and associate the set with a strategy (for example, Christmas Specials). By default, there is always a strategy named DEFAULT_SET. In case of regular pricing optimization runs, you have the option to create a new strategy by clicking the + icon.

Scope - Multi-Run Request

Multiple what-if runs can be submitted to test new strategies or explore different business rule scenarios. This is done by selecting a configuration above the run setup level, which generates multiple runs that appear in the Multi-Run Request screen. These runs are queued for execution in the daily batch and will later be listed in the Run Overview table. You can review or delete any pending requests from this screen before they are processed. The Multi-Run Request screen also includes filter tiles that help narrow down the Request Summary table based on request status.

Figure 5-3 Multi-Run Request Defining the Scope (For Example, Women's Clothing Group)

The screenshot shows the 'PRO: 6955' header with tabs for Scope, Rules, Results, Sales Forecast, Returns Forecast, and Exceptions. The 'Scope' tab is active. Below the tabs, the 'Scope' section is expanded, showing a form with the following fields:

- Run Name:** Test Run
- Run Description:** Test Run Desc
- Season:** 2023 Summer
- Department or Higher:** 10-Women's Clothing
- Company or Higher:** 1 - Retailer Ltd
- Off Week:** 05/06/2023
- Division:** 11-Women's Clothing
- Group:** 12-Men's Clothing
- Strategy:** DEFAULT_SET
- Objectives and Budget:** Pricing: Max Revenue
- Department:** 105-Women's Tops
- 105-Women's Activewear**
- 37-Centre / Ambient**
- 41-General Merchandise**
- Budget Limit:** No Budget Limit (selected) or Allocate Budget

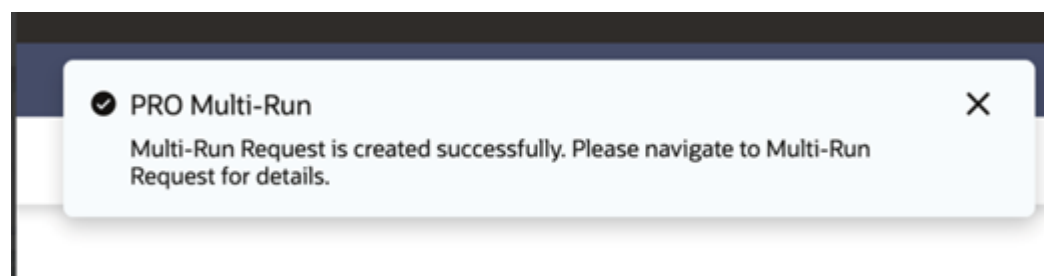
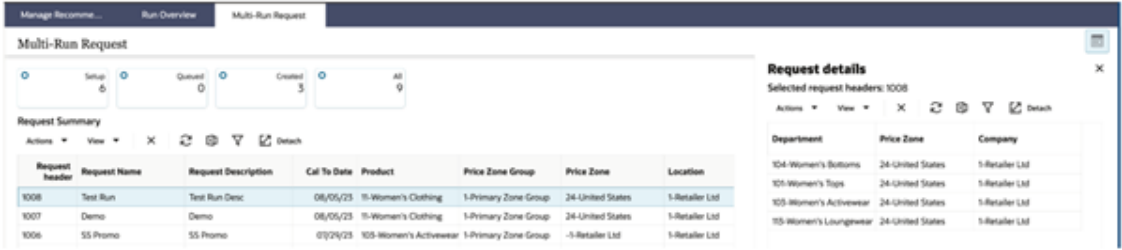
Figure 5-4 Multi-Run Request Confirmation Message

Figure 5-5 Multi-Run Request for Four Departments Under Women’s Clothing Group



Scope - Objectives and Budget

This section allows the user to define objectives for both pricing and targeted offers optimization problems. For Markdown/Promotion, you can choose between four objectives: Maximize Revenue, Maximize Gross Margin Amount, Maximize Revenue with Salvage, or Maximize Gross Margin Amount with Salvage. Additionally, you can specify whether the optimization should consider a Budget Limit or proceed without one. For Targeted Offers, the only supported objective is to maximize the redemption rate. Any changes made in this section must be saved using the Save option under the Action menu.

Figure 5-6 Markdown/Promotion - Optimization Run - Objectives and Budget

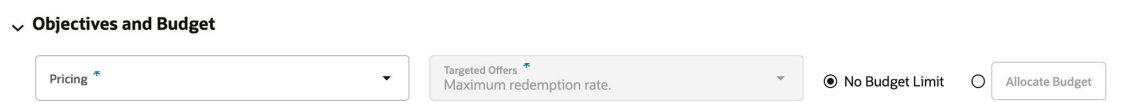


Table 5-2 Markdown/Promotion - Optimization Run - Objectives and Budget

Field	Description
Pricing Objective	You can choose between Max Revenue, Max GM Amount, Max Revenue with Salvage, and Max GM Amount with Salvage from the drop-down list of values. You can set the default pricing objective using the strategy interface.
Targeted Offers Objective	Supports only Maximize Redemption Rate.
No Budget Limit	Indicates no budget limit for promotions and markdowns for the run.
Allocate Budget	Use the radio button before this button to toggle to put a limit on the budget for the run. When you click this button, it brings up a pop-up that you can use to specify allocation mechanism and budget limit for promotions and markdowns.

From the above figure, you can select and click **Allocate Budget** to access the utility that you can use to allocate the run's product setup level (for example, department-level) budget to the run's product processing level (for example, classes). The run's product setup and processing level are configured using these two flags, PRO_PROD_HIER_RUN_SETUP_LVL and PRO_PROD_HIER_PROCESSING_LVL, respectively. You can choose to enter the budget available either through the UI or send, using the budget interface regularly.

Figure 5-7 Markdown/Promotion Optimization Run - Objectives and Budget - Budget Allocation

Budget Allocation

Total Budget (USD)
\$9,999,999,999.0

Separate budgets
☒

Promotion Budget (USD)

Markdown Budget (USD)

Please select a scheme for allocation

☒ Batch ☐ Optimally ☐ Inventory Value ☐ Custom

Cancel Save

- Total Budget: Represents the budget available over the entire of the life of the item and across all items in the run for both promotions and markdowns.
- Promotion and Markdown Budgets: You can check this option to use separate budgets for promotions and markdowns.
- Allocation Scheme:
 - Batch: When you send in the budget through the interface and send the budget values at the run's product processing level (for example, Class), the default option selected is Batch. This option is not available when the budget is not sent through the interface at the run's product processing level.
 - Optimally: When you send in the budget through the interface at the run's product setup level, (for example, Department) then the default option selected is Optimally.
 - Inventory Value: This option allocates the budget in proportion to the inventory value (current price * unsold inventory) of the run's product processing level (for example, Class).
 - Custom: You can choose to specify the allocation percentage. Allocation percentages must add up to 100% as shown in the figure.

Figure 5-8 Markdown/Promotion Optimization Run - Objectives and Budget - Budget Allocation Custom

Budget Allocation

Total Budget (USD) *
\$15,100,000.00

☒ Separate budgets

Promotion Budget (USD) *
\$100,000.00

Markdown Budget (USD) *
\$15,000,000.00

Please select a scheme for allocation

☐ Batch ☐ Optimally ☐ Inventory Value ☒ Custom

Actions ▾ View ▾ Detach

Class	Inventory Value (as %)	Promotion Budget (Batch)	Markdown Budget (Batch)	Promotion Budget (Custom %)	Markdown Budget (Custom %)
Women's Activewear Tops	0	0	0	<input type="text" value="50%"/>	<input type="text" value="50%"/>
Women's Activewear Bottoms	0	0	0	<input type="text" value="50%"/>	<input type="text" value="50%"/>

Cancel

Save

Scope - Review Information

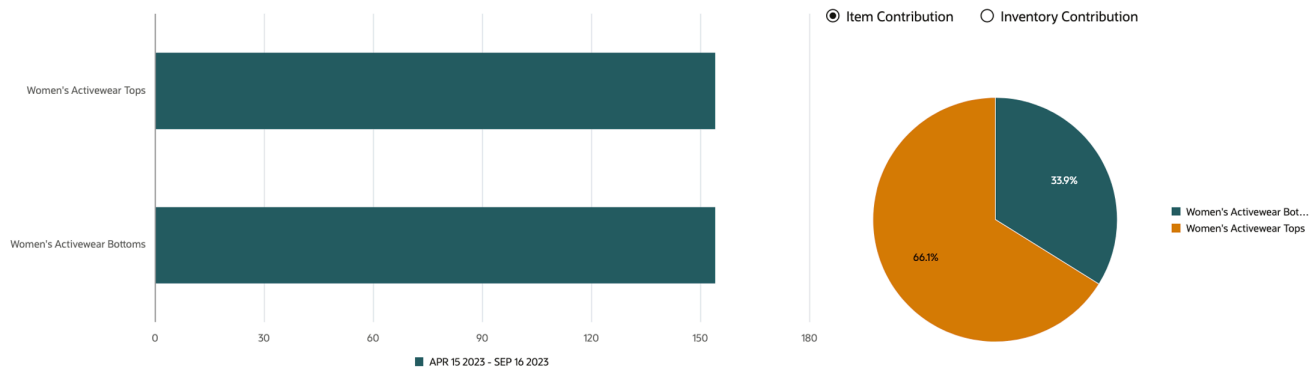
This section provides information on the following:

- Start and end date of the run's product processing level (configured by PRO_PROD_HIER_PROCESSING_LVL, for example, class) for a season's start and end date.
- Pie-charts of item counts and unsold inventory units by the PRO_PROD_HIER_PROCESSING_LVL (for example, class).

You can toggle between the Item contribution pie chart and the Inventory Contribution pie chart. For example, if the run's processing level is Class, then Item contribution shows how many items are present by each class, and inventory contribution shows the unsold inventory units by each class. Unsold inventory is the sum of all configured inventory components (for example, on order, allocated warehouse in transit, and so on.)

Figure 5-9 Markdown/Promotion Optimization Run - Review Information

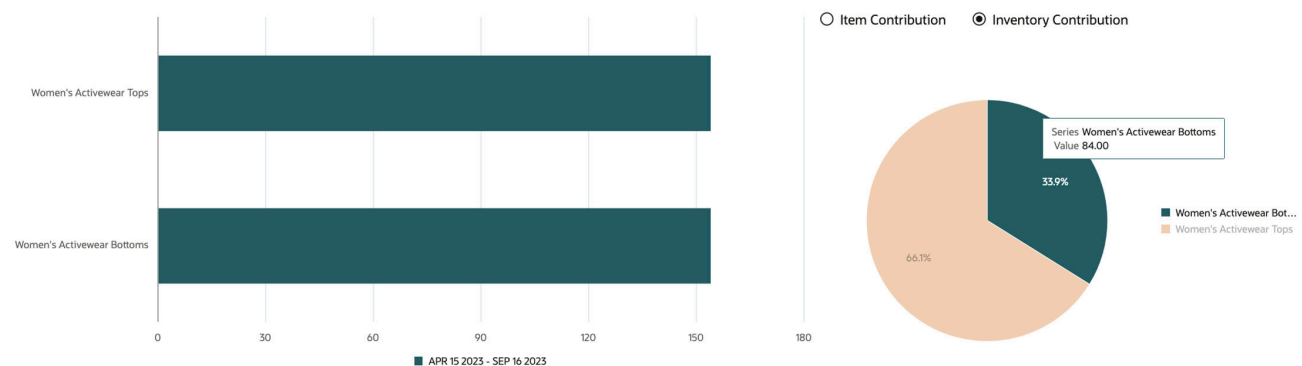
Review Information



When you hover over a component in the chart, the corresponding legend item is highlighted. Similarly, hovering over a legend item highlights the respective component in the chart. For example, in the figure below, the Women's Activewear Bottoms segment is highlighted.

Figure 5-10 Markdown/Promotion Optimization Run - Review Information Highlight Chart Component

Review Information



Markdown/Promotion - Rules

Business Rules correspond to the different constraints that are imposed on a pricing optimization problem. Business rules can be delivered through the interfaces and associated with a strategy (for example, Christmas Strategy). By default, there is always a DEFAULT_SET strategy, which is used to populate Strategy screens. The Strategy stage is divided into seven different tabs: Temporal, Planned Events, Promotion, Markdown, Sell-Through Target, Price Ladder, and Pricing Groups.

Each screen is generally divided into two panels:

- Summary to the left, with a General Strategy button.
 - The Summary panel displays the summary of all rules specified at different merchandise levels. When the run is saved (or optimized), the default values are used

to populate at the run's product processing level (for example, Class). This panel is read-only and not editable.

- Using the General Strategy button, you can open the General Strategy pop-up window where you can specify the constraint at the run-level, which means that the rule is applied to all locations and all product processing levels (for example, all classes) in the run. All product processing levels (for example, all classes) obtain the same values mentioned in the General Strategy section.
- When the rules are sent to optimization, the rules are applied based on the concept that lower merchandise-level rules override higher merchandise-level rules. Consider the following example. Suppose the department-level rule says that the first min discount% cannot be lower than 10%. This means that all items in all classes are assigned this 10% criterion. If you decide to add a style-level rule, say, 20%, then all the items in all classes are assigned the 10% rule and the items in this style are assigned the 20% rule.
- Contextual Area that expands on the right when clicked on the icon. The contextual area displays a pie chart that shows the percentage of rules specified at different merchandise levels.

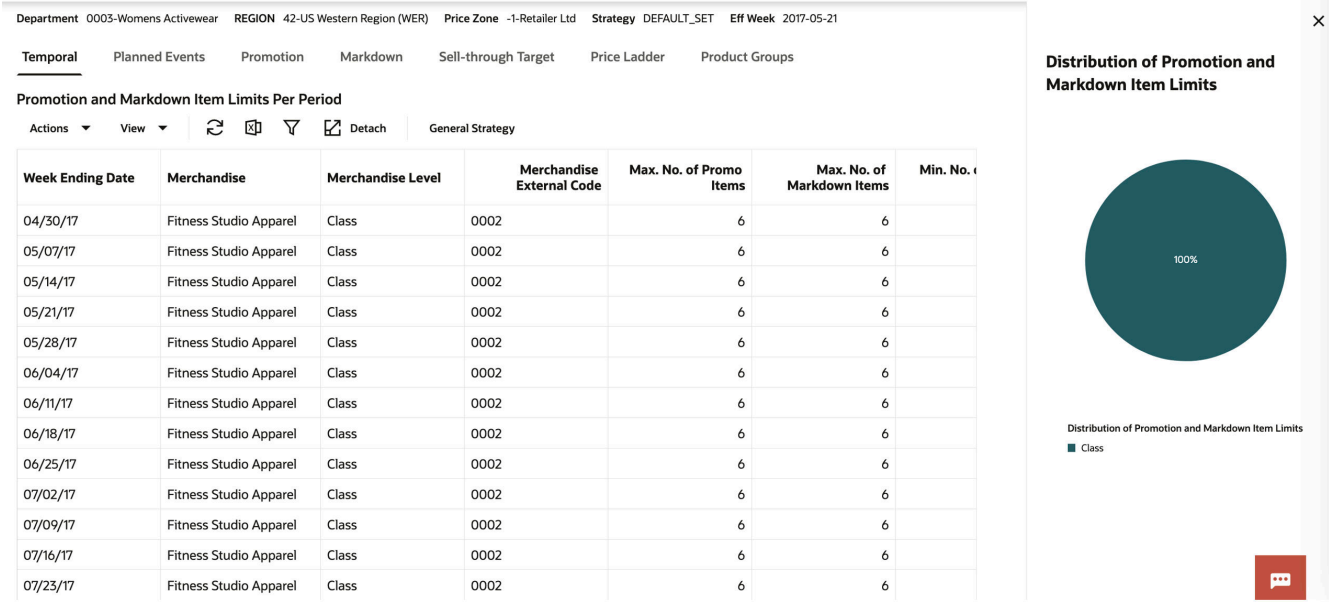
Markdown/Promotion - Rules - Temporal

The following figures illustrate specifying the business rules associated with the temporal aspects of the pricing problem.

Promotion and markdown eligibility for periods is defined in the PRO_SEASON_PERIOD_STG interface, and the run is populated as follows:

- Default values at the run merchandise processing level (for example, class) are populated based on the interface.
- The interface allows you to specify the general promotion, markdown, and ineligible periods at the run's product processing level or higher. That is, for each period, the type of pricing change that is allowed is specified through this interface. When sending period eligibility to optimization, the no-touches are applied on top of the period eligibility specified by the interface.
- You can modify no-touch at the beginning and at the end of life for all classes in the UI by clicking the **General Strategy** button from table toolbar, as shown in the second figure below.

Figure 5-11 Temporal Strategy - Summary and Contextual Area



In the following table, the default value is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.

Table 5-3 Temporal Rules

Field	Description
Week Ending Date	The week ending date for the period. Non-editable field.
Merchandise	Description of the merchandise.
Merchandise Level	Merchandise level of the rule. This can be from PRO_PROD_HIER_PROCESSING_LVL (for example, class) to subclass or style/color.
Max No. of Promo Items	This feature is not editable and provides the ability to limit how many items can be promoted for that period. The default value is the number of items at that merchandise level and name. When a period is marked as Promotion Allowed, then the Max No. of Markdown Items is disabled and set to 0. When a period is marked as ineligible, then this field is disabled and set to 0.
Max No. of Markdown Items	This feature is not editable and provides the ability to limit how many items can be marked down for that period. The default value is the number of items at that merchandise level and name. When a period is marked as Markdown Allowed, then the Max No. of Promotion Items is disabled and set to 0. When a period is marked as ineligible, then this field is disabled and set to 0.

Table 5-3 (Cont.) Temporal Rules

Field	Description
Min No. of Promotion Items	This feature is editable and provides the ability to specify the minimum number of items to be promoted for that period. The default value is 0. When a period is marked as Markdown Allowed, then the Min No. of Promotion Items is disabled and set to 0. When a period is marked as ineligible, then this field is disabled and set to 0
Min No. of Markdown Items	This feature is editable and provides the ability to specify the minimum number of items to be marked down for that period. The default value is 0. When a period is marked as Promotion Allowed, then the Min No. of Markdown Items is disabled and set to 0. When a period is marked as ineligible, then this field is disabled and set to 0.

Figure 5-12 Temporal General Strategy

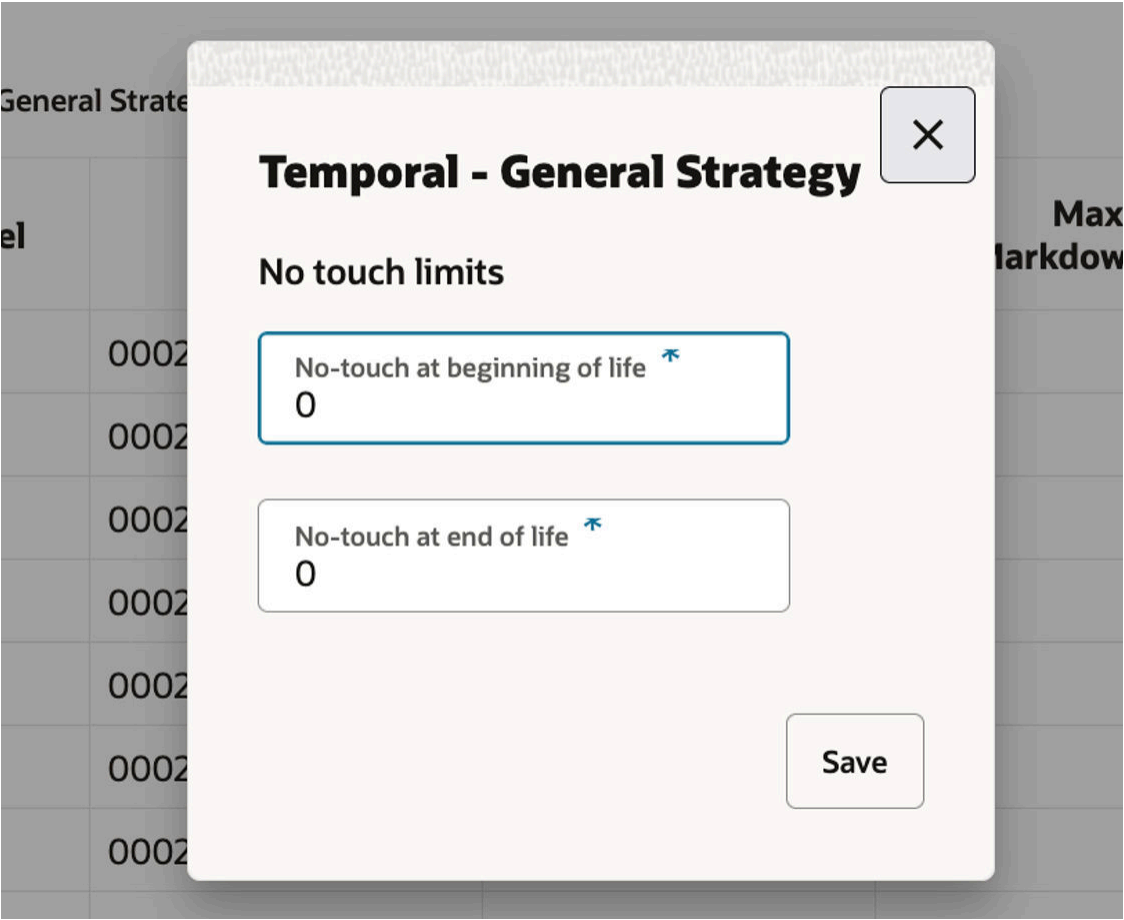


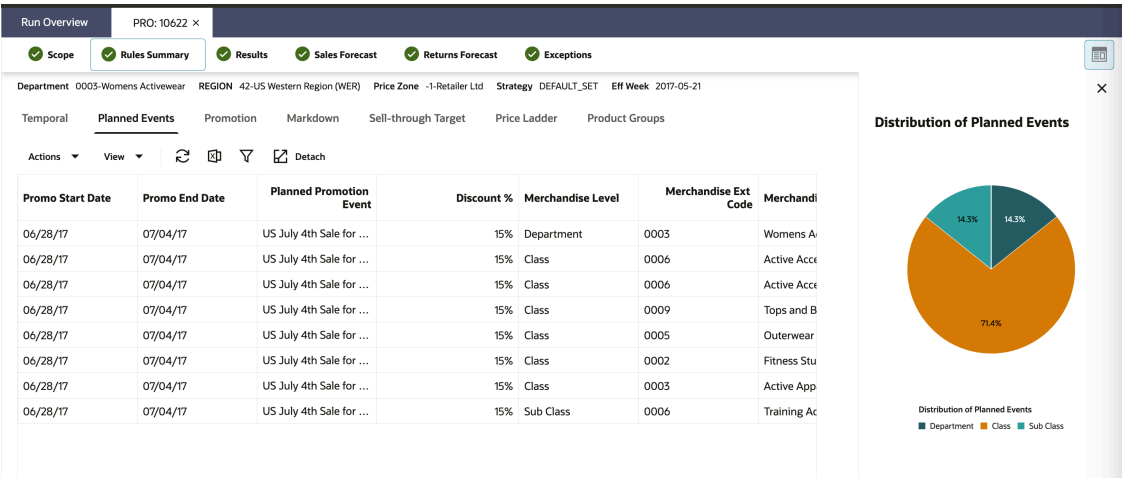
Table 5-4 Temporal Rules

Field	Description
No Touch After Landing	The default value is 0 weeks and is applied at the item level (and for all the locations). It indicates that price of an item cannot be changed from the initial full price until 0 weeks have been completed after the item start selling (also referred to as model start date).
No Touch at End of Life	The default value is 0 weeks and is applied at the item level (and for all the locations). It indicates that the price of an item cannot be changed in the last 0 weeks before the exit date.

Markdown/Promotion - Rules - Planned Events

The screen shown in the following figure provides a detailed view of promotional activities, including their start and end dates, discount percentages, and event types. It also outlines the merchandise and location details, along with pricing zone information, ensuring effective organization and tracking of promotional strategies.

Figure 5-13 Planned Events



The fields available are described in the following table.

Table 5-5 Planned Events

Field	Description
Promo Start Date	Indicates the start date of the promotional event.
Promo End Date	Specifies the end date of the promotional event.
Planned Promotion Event	Describes the name of the planned promotional activity.
Discount %	Represents the percentage of discount applied during the event.
Merchandise Level	Defines the hierarchical level of merchandise included in the promotion.

Table 5-5 (Cont.) Planned Events

Field	Description
Merchandise Ext Code	A unique code identifying specific merchandise associated with the event.
Merchandise	Displays the name of the merchandise involved.
Location Level	Indicates the hierarchical level of the location (for example, region, area).
Location Ext Code	A unique code for identifying locations.
Location	Specifies the detailed name or description of the location.
Price Zone Ext Code	A unique code for the pricing zone involved in the promotional event.
Price Zone Name	Provides the name of the pricing zone.
Apply Planned Promotions?	Yes/No to decide if the planned promotions have to be applied.
Year Independent ID	Promotional event ID independent of the year.

Markdown/Promotion - Rules - Promotion

In this screen, shown in the following figures, you can specify the rules associated with promotions, specifically the reactive promotions (and not the planned promotions) that do not exceed more than one week.

The default values that are populated for this run, such as General Strategy, are based on the DEFAULT_SET strategy or selected strategy in the Scope stage.

The contextual area shows the percentage of rules specified by the merchandise-level, that is, percentage specified at Class-level versus Subclass versus Style/Color level.

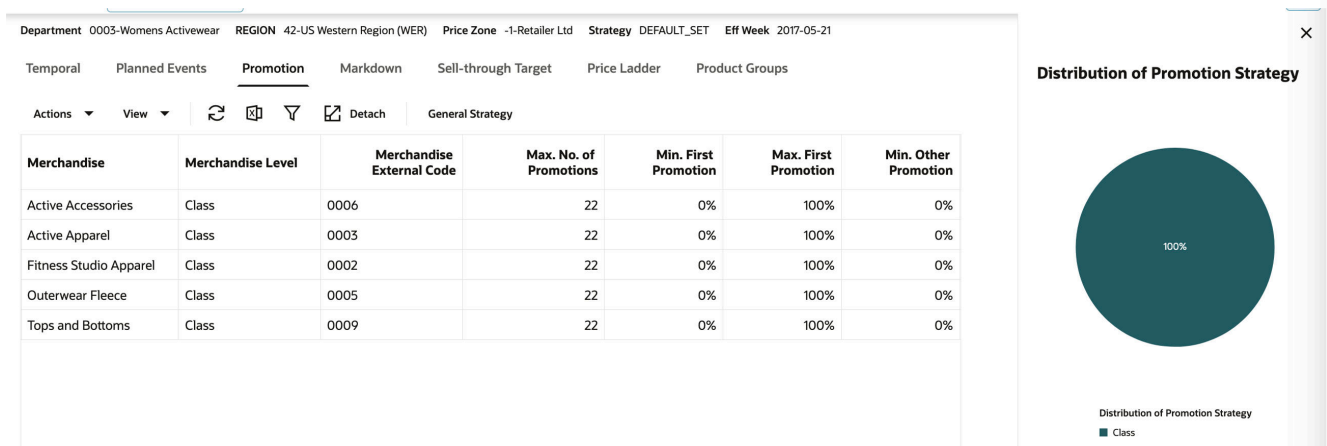
Figure 5-14 Promotion Strategy - Summary Contextual Area

Table 5-6 Promotion Strategy

Field	Description
Merchandise	Description of the merchandise.
Merchandise External Code	The merchandise's external code that can be identified by the retailer.
Merchandise Level	Merchandise level of the rule. This can be from PRO_PROD_HIER_PROCESSING_LVL (for example, Class) to Subclass, or Style/Color.
Min First Promotion Discount	The minimum discount that is allowed for the first promotion in the season. The default value (for example, 0%) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.
Min Other Promotion Discount	The minimum discount that is allowed for the subsequent promotions (except the first) in the season. The default value (for example, 0%) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.
Min Time Between Promotions	The minimum time (in periods or weeks) between consecutive promotions in the season. If there are four months in the promotion season, and the min time is four weeks, then roughly one promotion week is available per month. The default value (for example, one week) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.

Figure 5-15 Promotion - General Strategy

Promotion - General Strategy

Promotion Start Day
MONDAY

Promotion End Day
SUNDAY

Daily Weights

Mon
14%

Tue
14%

Wed
14%

Thu
14%

Fri
14%

Sat
15%

Sun
15%

Discount Range

Min First Promotion Discount
0%

Max First Promotion Discount
100%

Min Other Promotion Discount
0%

Max Other Promotion Discount
100%

Limits/Separation Time

Max. No. of Promotions
104

Min. Time Between Promotions
1

Save

The fields available are described in the following table.

Table 5-7 Promotion Strategy

Field	Description
Merchandise	Description of the merchandise.
Merchandise External Code	The merchandise's external code that can be identified by the retailer.
Merchandise Level	Merchandise level of the rule. This can be from PRO_PROD_HIER_PROCESSING_LVL (for example, Class) to Subclass, or Style/Color.
Max No. of Promotions	Maximum number of promotions allowed for an item in the life or season.
Min First Promotion	The minimum discount that is allowed for the first promotion in the season. The default value (for example) is 0%.
Max First Promotion	The maximum discount that is allowed for the first promotion in the season. The default value (for example) is 100%.

Table 5-7 (Cont.) Promotion Strategy

Field	Description
Min Other Promotion	The minimum discount that is allowed for the subsequent promotions (except the first) in the season. The default value (for example) is 0%.
Max Other Promotion	The maximum discount that is allowed for the subsequent promotions (except the first) in the season. The default value (for example) is 100%.
Min Time Between Promotions	The minimum time (in periods or weeks) between consecutive promotions in the season. If there are four months in the promotion season, and the min time is four weeks, then roughly one promotion.

Markdown/Promotion - Rules - Markdown

In this screen, shown in the following figures, you can specify the rules associated with markdowns.

The default values that are populated for this run, such as General Strategy, are based on the DEFAULT_SET strategy or selected strategy in the Scope stage. The retailer can choose to modify the values during implementation.

The contextual area shows the percentage of rules specified by the merchandise level (for example, the percentage specified at Class versus Subclass versus Style/Color level).

Figure 5-16 Markdown Rules

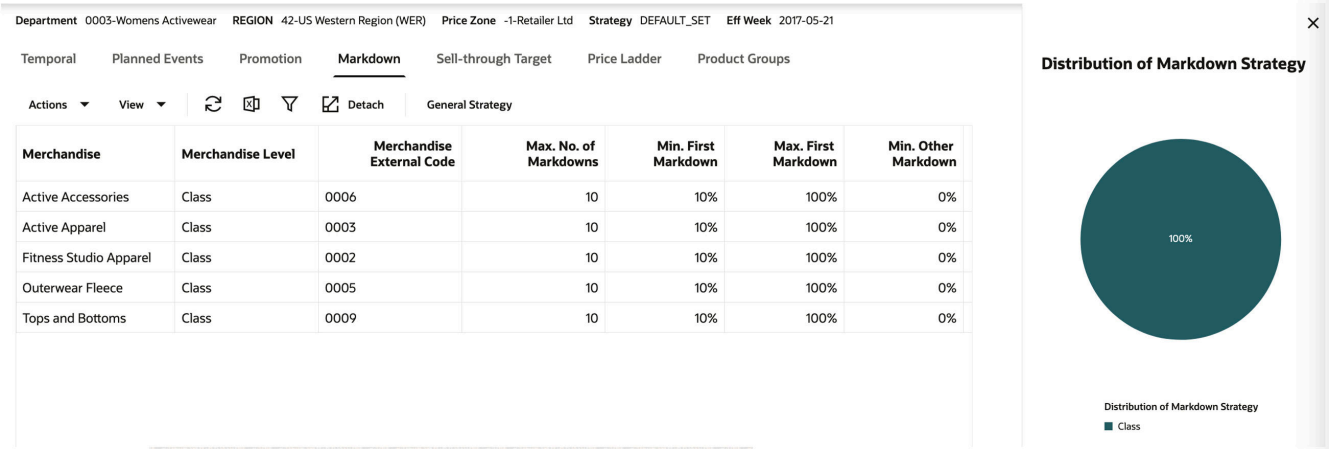





Figure 5-17 Markdown - General Strategy


×


Markdown - General Strategy


Markdown Start Day 
MONDAY 


Daily Weights


Mon 
14%


Tue 
14%

Wed 
14%


Thu 
14%


Fri 
14%


Sat 
15%


Sun 
15%


Discount Range

Min First Markdown Discount 
0%


Max First Markdown Discount 
100%


Min Other Markdown Discount 
0%

Max Other Markdown Discount 
100%

Absolute Max Markdown Discount 
100%

Limits/Separation Time

Max. No. of Markdowns 
104

Min. Time Between Markdowns 
1

Save

The fields available are described in the following table

Table 5-8 Markdown Strategy

Field	Description
Daily Weights	These values represent the proportion of weekly demand for each day of the week. This helps spread the weekly forecast into daily forecasts, depending on when the promotion is applicable (for example, Thu-Sun) for that week. These are generated internally by LPO forecasting or can be supplied through an interface.
Markdown Start Day	Indicates when the markdown can start within a week. The default value (for example, Thursday) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.
Max Absolute Markdown Discount	The maximum discount (of full price) that is allowed for any markdown in the season. The default value (for example, 100%) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.

Table 5-8 (Cont.) Markdown Strategy

Field	Description
Max First Markdown Discount	The maximum discount that is allowed for the first markdown in the season. The default value (for example, 100%) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.
Max No. of Markdown Weeks	The default is the total number of weeks in the season. This allows the user to limit how many weeks are available for markdowns for a particular merchandise.
Max Other Markdown Discount	The maximum discount that is allowed for the subsequent markdowns (except the first) in the season. The default value (for example, 100%) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.
Merchandise	A description of the merchandise.
Merchandise Level	The merchandise level of the rule. This can be from PRO_PROD_HIER_PROCESSING_LVL (for example, Class) to Subclass, or Style/Color.
Merchandise External Code	The merchandise's external code that can be identified by the retailer.
Min First Markdown Discount	The minimum discount that is allowed for the first promotion in the season. The default value (for example, 0%) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.
Min Other Markdown Discount	The minimum discount that is allowed for the subsequent markdowns (except the first) in the season. The default value (for example, 0%) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.
Min Time Between Markdowns	The minimum time (in periods or weeks) between consecutive markdowns in the season. If there are four months in the markdowns season, and the min time is four weeks, then roughly one markdown week is available per month. Default value (for example, one week) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.

Here is a description of Min Other Markdown and Max Other Markdown Discount. Consider the following example:

Suppose the user sets these values to 25% and 50%, respectively, for an item with a full price of \$100. If the first markdown was 20%, then the item's ticket price drops to \$80. Because of the Min Other and Max Other Markdown Discount, the second markdown will be limited to a value between $\$80 * (1 - 0.25) = \60 (or 40% off) and $\$80 * (1 - 0.50) = \40 (or 60% off). If there was a Max Absolute Markdown Discount of 50%, then the second markdown would be further constrained to be between \$60 and \$50.

Markdown/Promotion - Rules - Sell-Through Target

In this screen, as shown in the following figures, you can specify the sell-through targets by week and by merchandise. The default values that are populated for this run, such as General Strategy, are based on the DEFAULT_SET strategy or selected strategy in the Scope stage. The retailer can choose to modify the values during implementation.

The contextual area shows the percentage of rules specified by the merchandise-level (for example, the percentage specified at Class vs. Subclass vs. Style/Color level).

Figure 5-18 Sell-Through Target

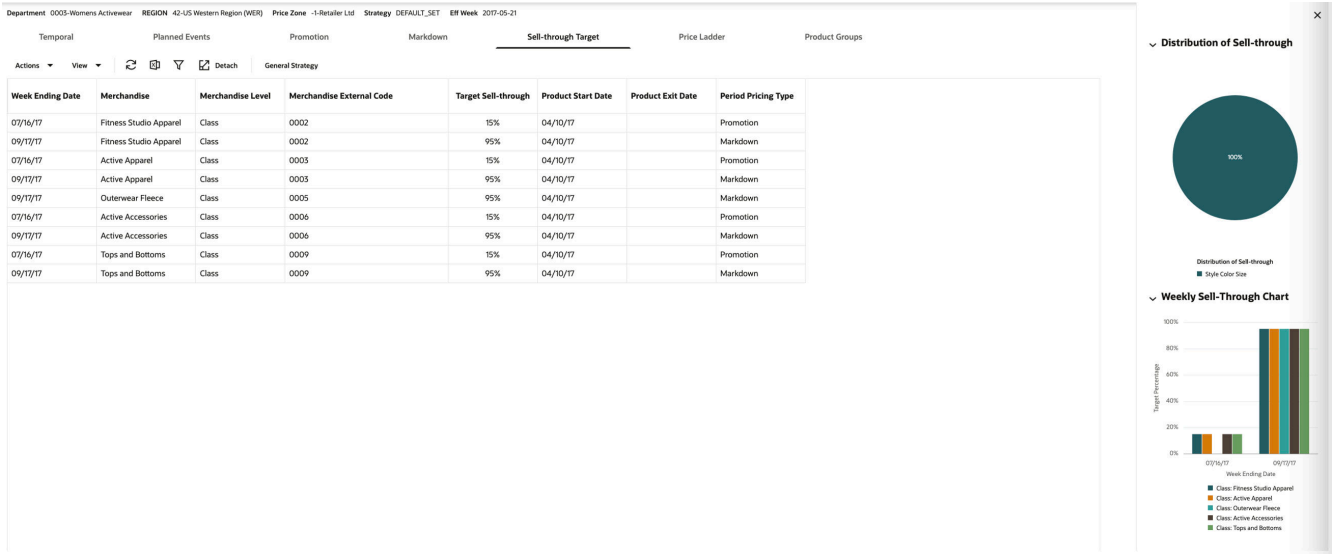


Figure 5-19 Sell-Through Target-General Strategy

Sell-through Target - General Strategy

Sell-through Target at end of Regular Season ↗
15%

Sell-through Target at end of Clearance Season ↗
85%

Salvage Value (%) ↗
0%

☐ All Sell-through Targets are enforced as Hard?

Save

The fields available are described in the following table.

Table 5-9 Sell-Through Target

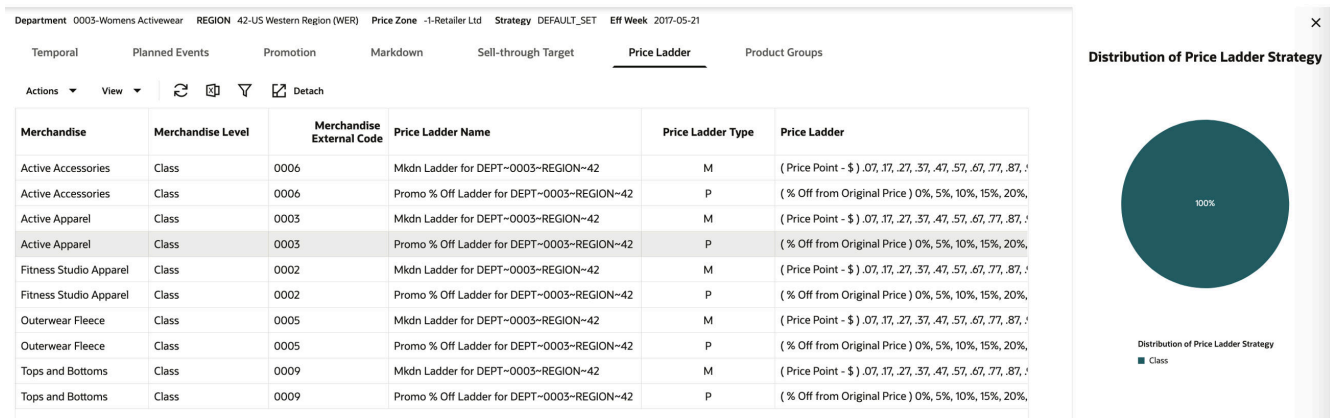
Field	Description
All Sell-through Targets are enforced as Hard?	If enforced as Hard (checked), then all the sell-through targets must be met; otherwise, the optimization will not return any solution. The default value (for example, not hard) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.
Merchandise	A description of the merchandise.
Merchandise External Code	The merchandise's external code that can be identified by the retailer.
Merchandise Level	The merchandise level of the rule. This can be from PRO_PROD_HIER_PROCESSING_LVL (for example, Class) to Subclass, or Style/Color.
Period Pricing Type	Indicates whether the period is marked as Promotion Allowed or Markdown Allowed or Ineligible.
Product Exit Date	This represents the date by which an item is expected to stop selling.
Product Start Date	This represents the calculated start date for an item based on the logic used for the model start date.
Salvage Value (%)	The salvage value for an item is calculated using this percentage: Salvage value percentage multiplied by the full price of the item. The default value (for example, 0%) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage. This is a non-editable field.
Sell-through target at end of Clearance Season	The sell-through target that must be achieved by the end of the clearance season (defined as the last markdown eligible period). The default value (for example, 85%) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.
Sell-through target at end of Regular Season	The sell-through target that must be achieved by the end of the regular season (defined as the last Promotion eligible period). The default value (for example, 0%) is based on a parameter specified in the DEFAULT_SET strategy or the selected strategy in the Scope stage.
Target Sell-through	The sell-through target at the end of the specified period for the merchandise as percentage (0% - 100%). If enforced as Hard, then this sell-through target must be met; otherwise, the optimization will not return any solution.
Week Ending Date	The week ending date for the period. This field is not editable.
Weeks From Start	This field is non-editable and it runs from Week 1 to the maximum number of weeks available for the selected merchandise level. Available only with the Relative Calendar option.

Markdown/Promotion - Rules - Price Ladder

In this screen, shown in the following figure, you can assign price ladders that have been loaded and are available for the selection location and merchandise levels from (PRO_PROD_HIER_PROCESSING_LVL (for example, Class). You can load as many price ladders as possible at different merchandise levels (Class and above). By default, the system assigns one price ladder for promotion and one for markdown at the PRO_PROD_HIER_PROCESSING_LVL (for example, Class level) that is closest to PRO_PROD_HIER_PROCESSING_LVL.

The contextual area shows the percentage of rules specified by the merchandise level (for example, the percentage specified at Class level versus Subclass versus Style/Color level).

Figure 5-20 Price Ladder



The fields available are described in the following table.

Table 5-10 Price Ladder

Field	Description
Merchandise	A description of the merchandise.
Merchandise Level	The merchandise level of the rule. This can be from PRO_PROD_HIER_PROCESSING_LVL (for example, Class) to Subclass, or Style/Color.
Merchandise External Code	The merchandise external code that can be identified by the retailer.
Price Ladder Name	The name for the price ladder.
Price Ladder Type	The type indicates whether price ladder is for Promotions (P) or Markdowns (M).
Price Ladder Values	The values available for this price ladder. The price ladder can be a percentage ladder (off full price or current ticket price) or a price-point ladder. The currency for the run shown depends on the locale loaded during the implementation.

Markdown/Promotion - Rules - Pricing Groups

In this screen, shown in the following figure, you can group products within a run's product processing level (for example, class) and categorize them as one of the following eight types:

- **Promote At most One.** In this group, at most one product of the group can be promoted in a given week or period. For example, competing brands such as jeans-L versus jeans-K cannot be promoted in the same week or time period.
- **Promote All or Nothing.** In this group, all the items must be promoted if any one item of the group is promoted in a given week or time period; otherwise, no item from the group is promoted in a given week or time period. All items in this group when promoted, need not necessarily have the same discount.
- **Markdown All or Nothing.** In this group, all the items must be marked down if any one item of the group is marked down in a given week or time period; otherwise, no item from the

group is marked down in a given week or time period. Items in this group when marked down, need not necessarily end up with the same discount.

- **Same Promotion Discount.** In this group, all the items are not only promoted together in a given week or time period (if promoted), but they also must get the same discount. Note that the recommended prices can be different for each item in this group.
- **Same Markdown Discount.** In this group, all the items are not only marked down together in a given week or time period (if marked down), but they also must get the same discount. Note that the recommended prices can be different for each item in this group.
- **Same Promotion and Markdown Discount.** All the items receive the same percentage off recommendations over the life of the item. Note that the recommended price can be different for items within this group. For example, items with a full price of \$100 and \$150 can receive a recommended price of \$80 and \$120. (Note that both get same discount of 20% off.)
- **Promote Nothing.** None of the items in this group receive any promotions.
- **Markdown Nothing.** None of the items in this group receive any markdowns.

You can click **Create New** and access the Create Pricing Group screen. You must enter a group name and the group type from the drop-down list. You can select each product, one at a time, and add it to the group. Alternatively, you can filter the products using Query by Example. Use Select All to add the products to the group, and then click **Save**. There is limited conflict checking or validation in place, so you must be careful when adding products in two conflicting groups (for example, Promote At most one and Promote All or Nothing).

Alternatively, the group definitions (that is, what items constitute a group) can be loaded using the interfaces: PROD_ATTR.csv and ATTR.csv (formerly, W_RTL_ITEM_GRP1_DS). How these groups must be treated for pricing for a particular product/location or price zone, can be specified using the PRO_OPTIMIZATION_RULES_STG interface or Rules Engine. When the runs are created, these groups will appear in the corresponding run with the intersecting set of items. You can choose to modify the items in the pricing group or pricing group type.

Figure 5-21 Create Pricing Group

Create Pricing Group

Name *

PG2

Type *

Add/Edit items from available list to product group *

103-Women's Activewear

Actions

View

Detach

Selected	Item
<input type="checkbox"/>	-81101261 - Yoga Low Rise Leggings Ankle Lengt
<input type="checkbox"/>	627688040_blue - Mid Rise Pocket Jogger:blue
<input type="checkbox"/>	-81101221 - Cold Weather Workout Super High W
<input type="checkbox"/>	548015360_tan - Slim Fit Ankle Length Jogger:ta
<input type="checkbox"/>	1102018_yellow - Graphic Crew Neck Tank:yellow
<input type="checkbox"/>	300300_green - Ribbed Crew Neck Crop Tank:gr
<input type="checkbox"/>	-81101214 - Workout High Waisted Leggings Ankle Length w...
<input type="checkbox"/>	755390750_black - Wide Leg Cotton Jogger:black
<input type="checkbox"/>	603765070_black - High Waist Ankle Length Jogger:black
<input type="checkbox"/>	-81101272 - Casual Super High Waisted Leggings Red Medium
<input type="checkbox"/>	-81101235 - Cold Weather Yoga High Waisted Leggings Blue ...
<input type="checkbox"/>	1102022_pink - V-Neck Racerback Tank:pink
<input type="checkbox"/>	-81101284 - Casual Super High Waisted Flare Leggings Red ...
<input type="checkbox"/>	-81101230 - Yoga Super High Waisted Flare Leggings Red M...
<input type="checkbox"/>	-81100320 - Cold Weather Running Super High Waisted Leg...
<input type="checkbox"/>	893084440_black - V-Neck T-Shirt:black
<input type="checkbox"/>	1102009_grey - Ribbed Crew Neck Tank:grey
<input type="checkbox"/>	-81100339 - Workout Low Rise Leggings Tan Medium

Promote Atmost One

Promote All or Nothing

Same Promotion Discount

Same Markdown Discount

Same Promotion and Markdown Discount

Promote Nothing

Markdown Nothing

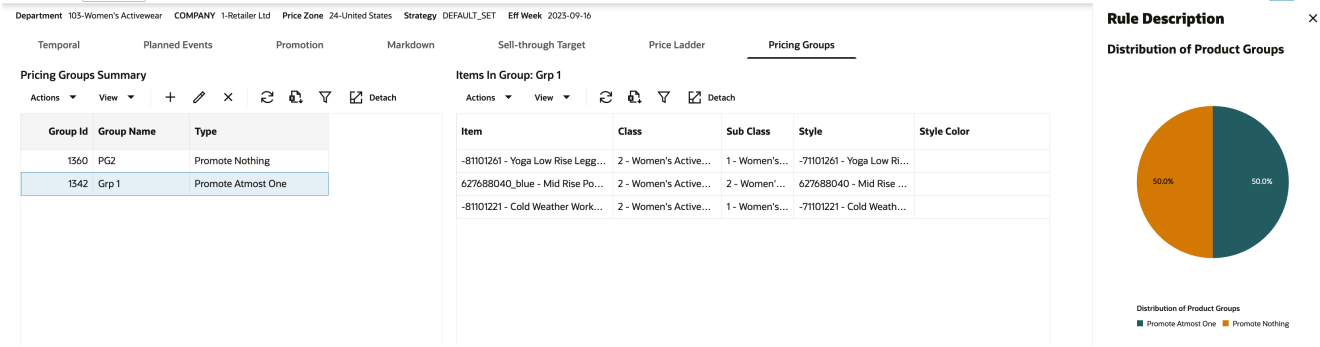
Markdown All or Nothing

Save

Cancel

All the groups created are shown in the Pricing Groups Summary. You can select any group, and the set of products within that group are displayed. You can edit or delete any group shown in the Summary panel. The contextual area shows the percentage of groups specified by the group type.

Figure 5-22 Pricing Groups Summary

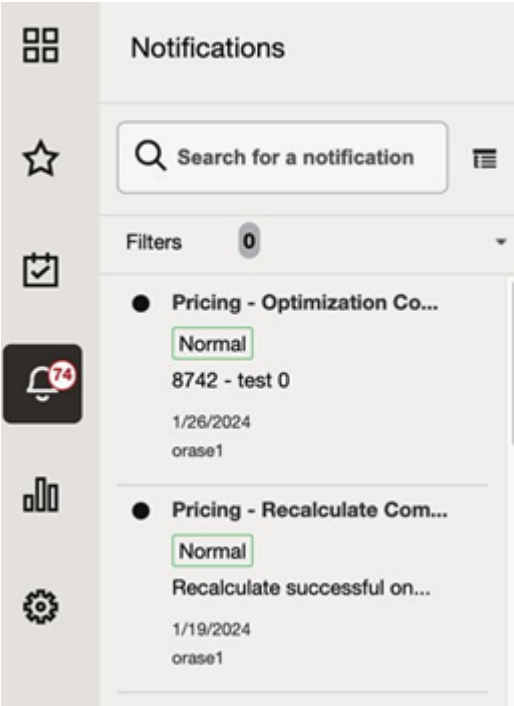


Markdown/Promotion - Run Optimization

After providing the scope and reviewing or updating the rules, you can click the Optimize button in the footer. This action creates a new row in the Run Overview table, and the run moves to a Running status. Once optimization is complete, the run transitions to either Ready for Review or Failed status. A notification is also pushed to the user that contains the status of the optimization, depending on the outcome.

If the run does not transition to Ready for Review status, you can update the scope or rules and re-optimize the run by clicking the Re-Optimize button in the footer.

Figure 5-23 Optimization Complete Notification



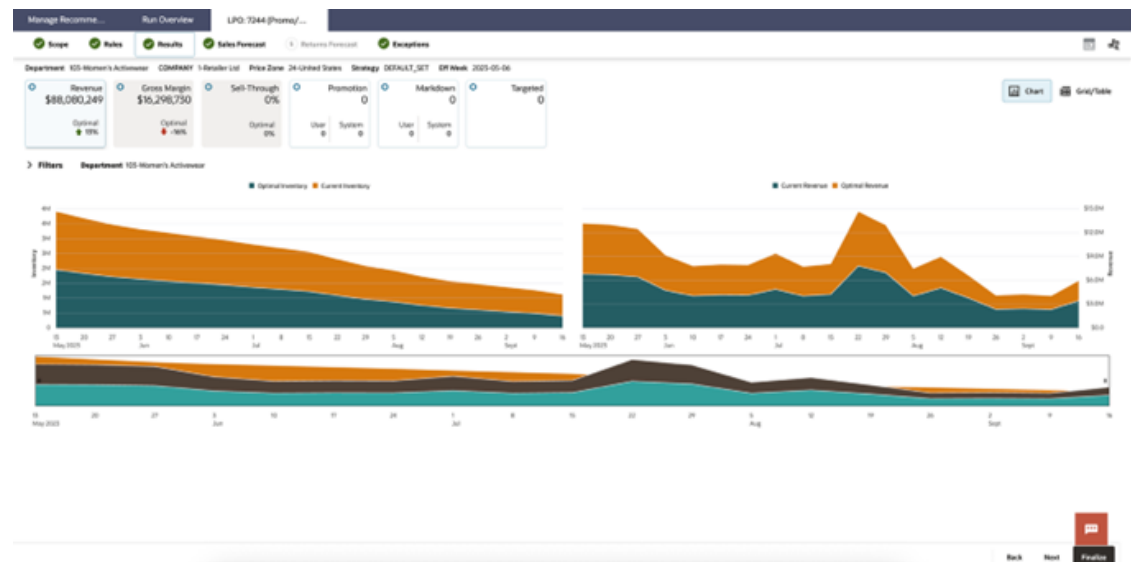
Markdown/Promotion - Results

After the optimization run is complete and the run is in Ready for Review status, the results are displayed in the Results stage. In this stage, you can accept, reject, override any price recommendation, or add a promotion or markdown for non-recommended items. After you make substantive changes, you can recalculate all the projected metrics. The results are displayed in six tiles: Revenue Tile, Gross Margin Tile, Sell-Through Tile, Promotion Tile, Markdown Tile, and Targeted Tile.

Results - Chart, Grid, and Contextual Panel

Click the Chart and Grid/Table option from Revenue, Promotion, Markdown and Targeted tiles to open the results in a chart or a detailed table where you can review, accept, reject, or override the price recommendation that are in Ready for Review status for the effective week.

Figure 5-24 Markdown/Promotion Results Chart (Revenue Tile)



You can select an item from the table and see the item image and the full price path for an item in the BI/ Contextual area on the right. Each price type is shown in a different color: Dark Green - No Promotion/Markdown Price, Orange - Markdown, Green - Planned Event. Override and Promotion also will be shown in the graph if present. You can also see the Projected Sales and Inventory Path and Projected Budget Usage for the selected item.

Figure 5-25 Results Grid and Table (Revenue Tile)

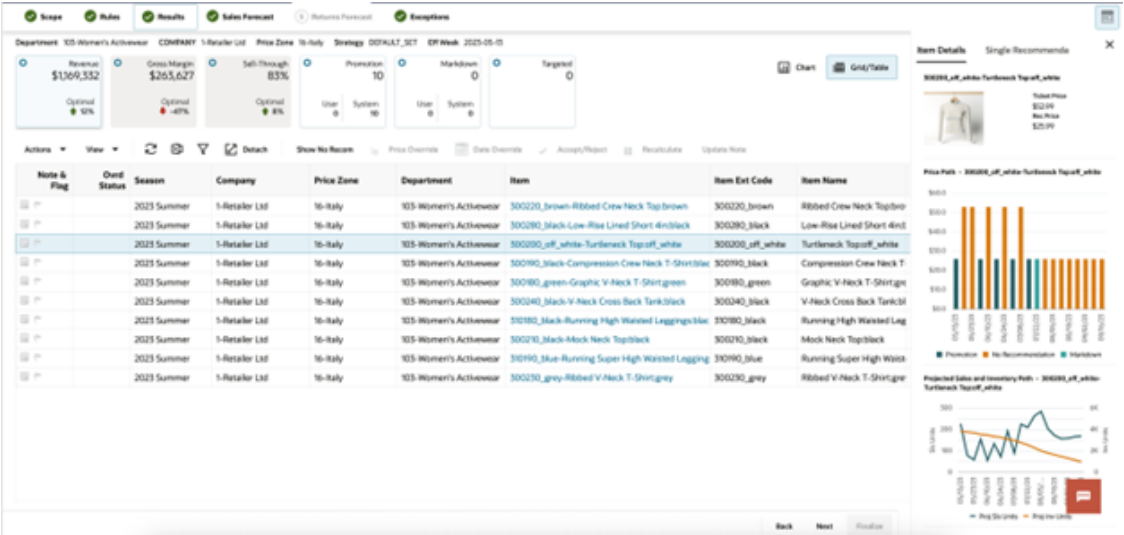
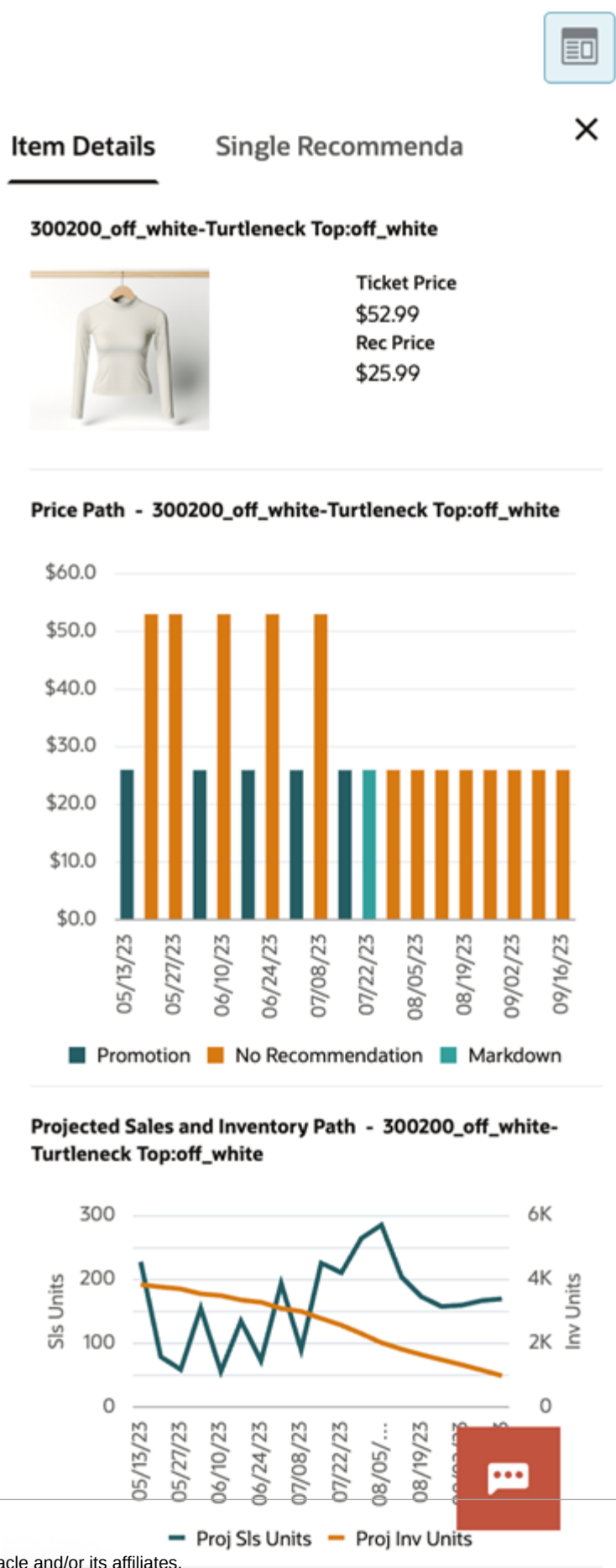


Figure 5-26 Results Contextual Panel



Results - Possible Actions

From the Results stage, you can:

- Recalculate the projected metrics after making price overrides.
Revisit earlier stages in order to make changes to various settings and then re-optimize the run.
- Leave the run in the optimization list without taking any actions. You cannot delete the run; you must be in Run Overview in order to delete a run.
- Accept, reject, or override the price recommendation for the effective week for the recommendations that are in Ready for Review status.

Results - Revenue, Gross Margin, and Sell-Through Tiles

As shown in the following figure, the Revenue, Gross Margin, and Sell-Through tile displays the overall summary of the run in the form of tiles as well as in BI charts. Information displayed in this tile is non-editable.

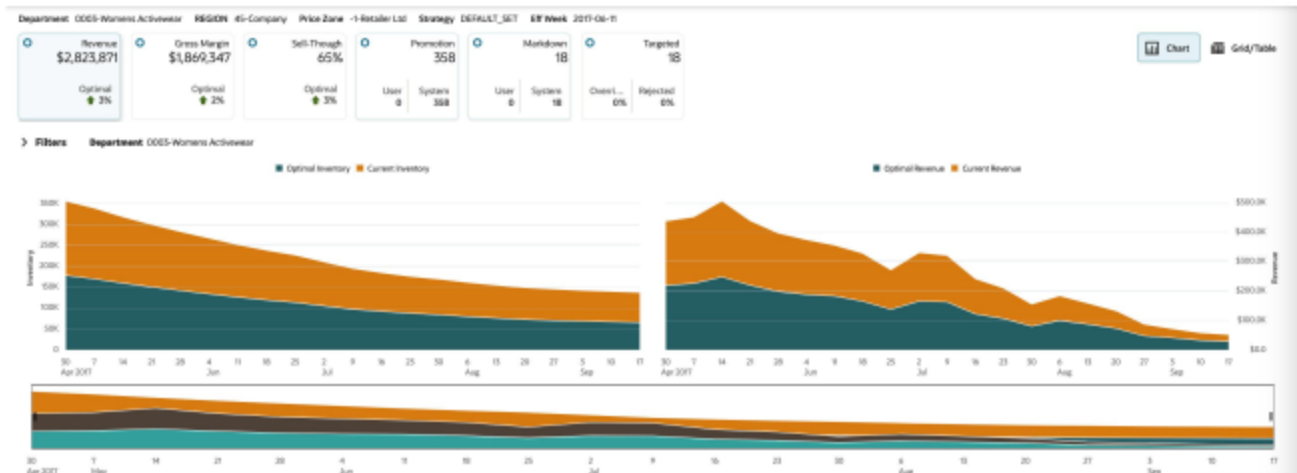
- Revenue. This is the projected revenue over the life of the items, assuming that you accept all recommendations. This is displayed in the local currency defined for the location of the run.
- Revenue Optimal. This is the percentage gain or loss in revenue compared to staying at the current price for all items over a certain period.
- Gross Margin. This is the projected gross margin over the life of the items, assuming that you accept all recommendations. This is shown in the local currency defined for the location of the run.
- Gross Margin Optimal. This is the percentage gain or loss in gross margin, compared to staying at the current price for all items over a certain period.
- Sell Through. This is the projected sell through at the end of the life, assuming that you accept all recommendations. This is shown as a percentage of initial inventory (or inventory at the beginning of the season).
- Sell Through Optimal. This is the percentage gain or loss in end of life sell-through, compared to staying at the current price for all items over a certain period.

Click the Revenue tile to display the bottom panel that contains two BI charts: Optimal Inventory vs. Current Inventory and Optimal Revenue. By default, the information in the chart is at the run's setup level (for example, Department). Note that the Gross Margin and Sell-Through tiles are not clickable.

Figure 5-27 Revenue, Gross Margin, and Sell-Through Tiles



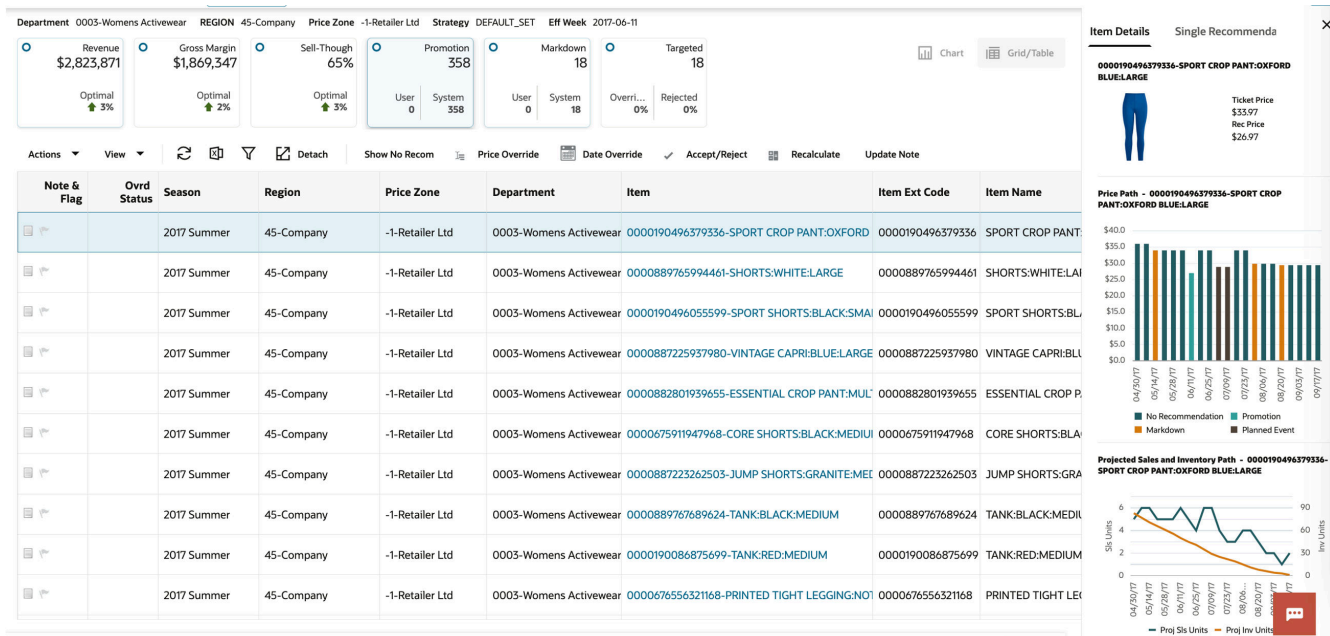
Figure 5-28 Revenue Tile Chart



Results - Promotion Tile

This tile displays the promotion recommendations for the effective week selected. The tile shows the total number of system-recommended promotion recommendations (items) and the total number of user-added promotions (items).

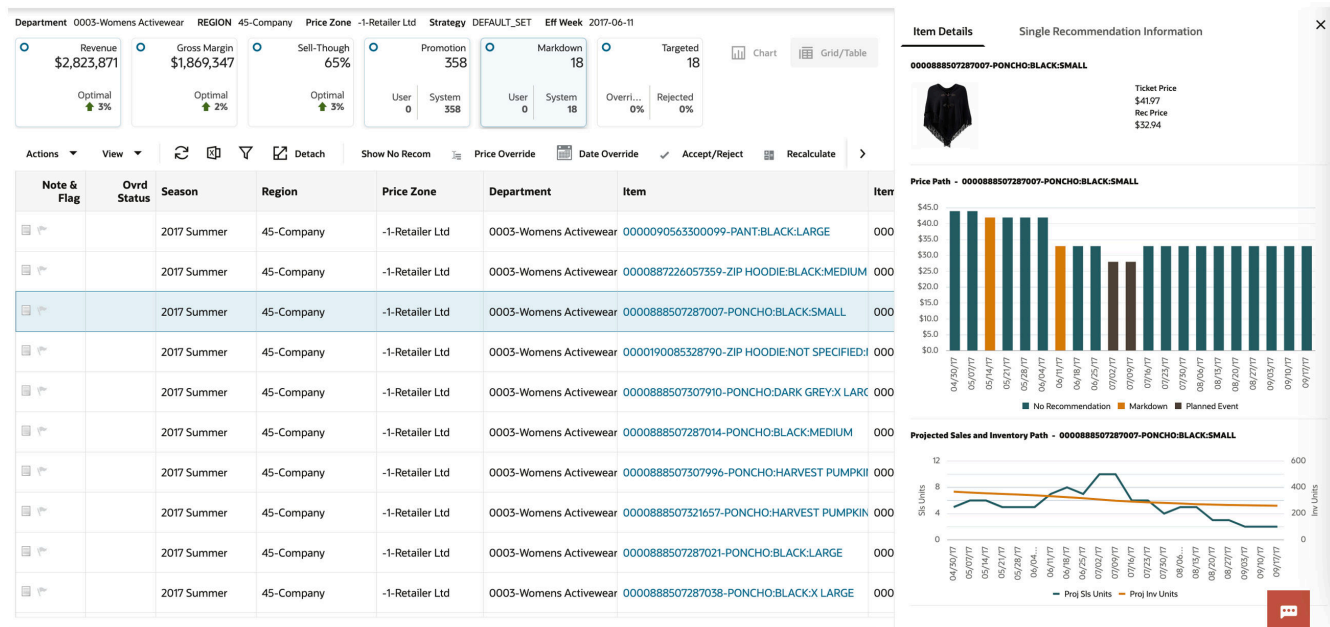
Figure 5-29 Promotion Tile Results



Results - Markdown Tile

The Markdown Tile displays the markdown recommendations for the effective week selected. In the tile, it shows the total number of system markdown recommendations (items) and the total number of user-added markdowns (items).

Figure 5-30 Markdown Tile



Results - Targeted Tile

The Targeted Tile displays the targeted recommendations for the effective week selected. In the tile, it shows the total number of targeted recommendations (items), percentage of recommendations taken or accepted, percentage of recommendations overridden, and percentage of recommendations rejected.

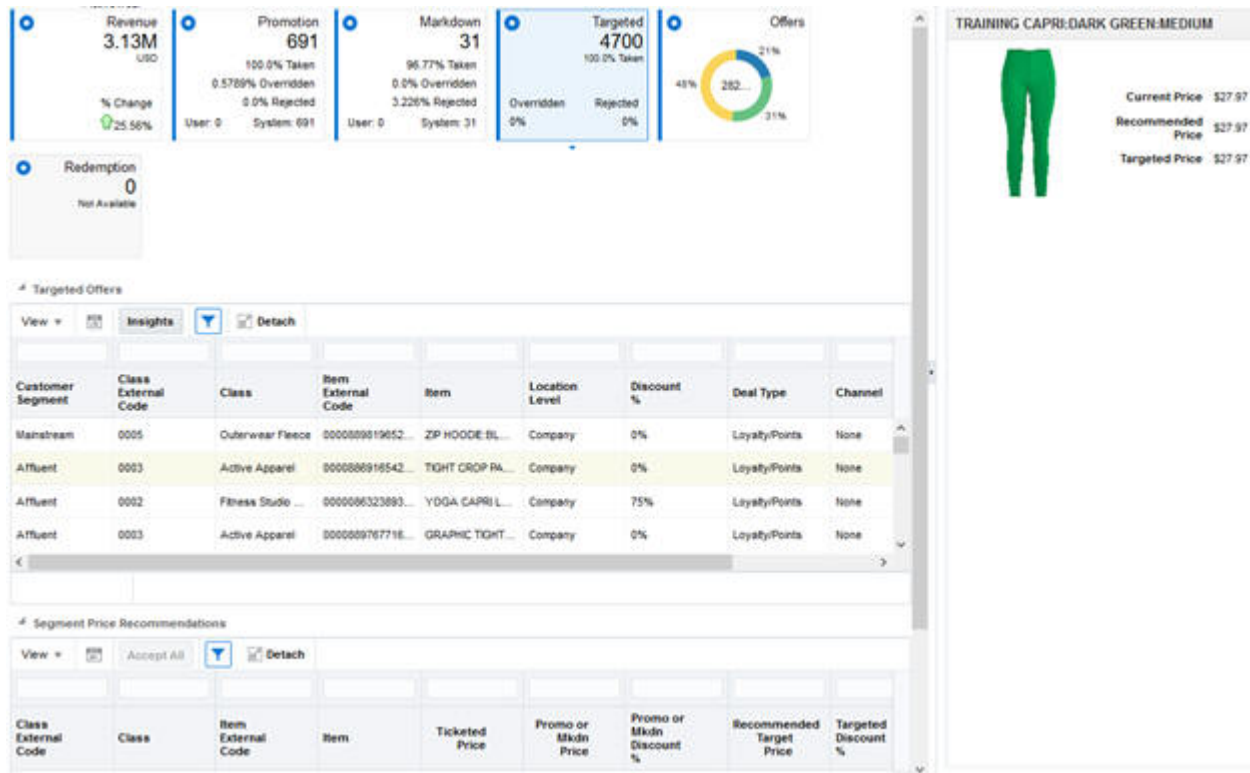
In the Targeted Offers panel, it displays Item, Deal Type, and Channel offers by class and customer segment that result in the best redemption rate. It displays the following metrics (non-editable):

Table 5-11 Targeted Tile Top Panel

Field	Description
Channel	Channel (for example, Email, Mobile) associated with this item that result in a high redemption rate for this segment.
Class	Name of the class.
Customer Segment	Name of the customer segment.
Deal Type	Deal type (for example, Z% Off, Loyalty Points) associated with this item that result in a high redemption rate for this segment.
Discount %	Recommended discount percentage for the item.
Location	Name of the selected location.
Redemption Rate	Predicted redemption rate for this offer.

You can select a class segment in the top targeted offers panel. The bottom Segment price recommendations panel is then populated with all the item level price recommendations for this effective week at the customer segment level. You can override the targeted price recommendations in this panel.

Figure 5-31 Targeted Tile



In the bottom panel, you can accept, reject, or override the targeted price recommendation for the effective week. It contains the following information:

Table 5-12 Targeted Tile Bottom Panel

Field	Description
Accepted	You can uncheck or check the box to denote whether to accept or reject the targeted recommendation. When the recommendation is rejected, it reverts to location-level price recommendation or override.
Class	Name of the class.
Item	Description of the item.
Price Type	Denotes whether the price recommendation is regular, markdown, promotion, or targeted.
Promo or Markdown Discount %	Price recommended by the optimization.
Promo or Markdown Price	
Recommended Target Price	
Targeted Amount	This is calculated as the amount spent due to the discount offered multiplied by the projected sales units at the item-level. This is the amount given towards targeted offers.
Targeted Discount %	You can click the box, and it displays a price ladder assigned for that item. You can select a price from the price ladder.
Targeted Price Override	
Ticket Price	Current ticket price of the item.

Markdown/Promotion - Sales Forecast

The Sales Forecast tile displays the following information across all LPO runs for the next effective date.

- The pie chart displays the various price changes recommended by the LPO system for the effective date.
- The center content of the pie chart displays the percentage of items/products receiving a forecast.

The notification bar on the right displays the same information as the Sales Forecast tile for the most recent successful runs. For each run in the notification bar, the top left corner displays the run ID, and the bottom left corner displays the Location and Department for the run.

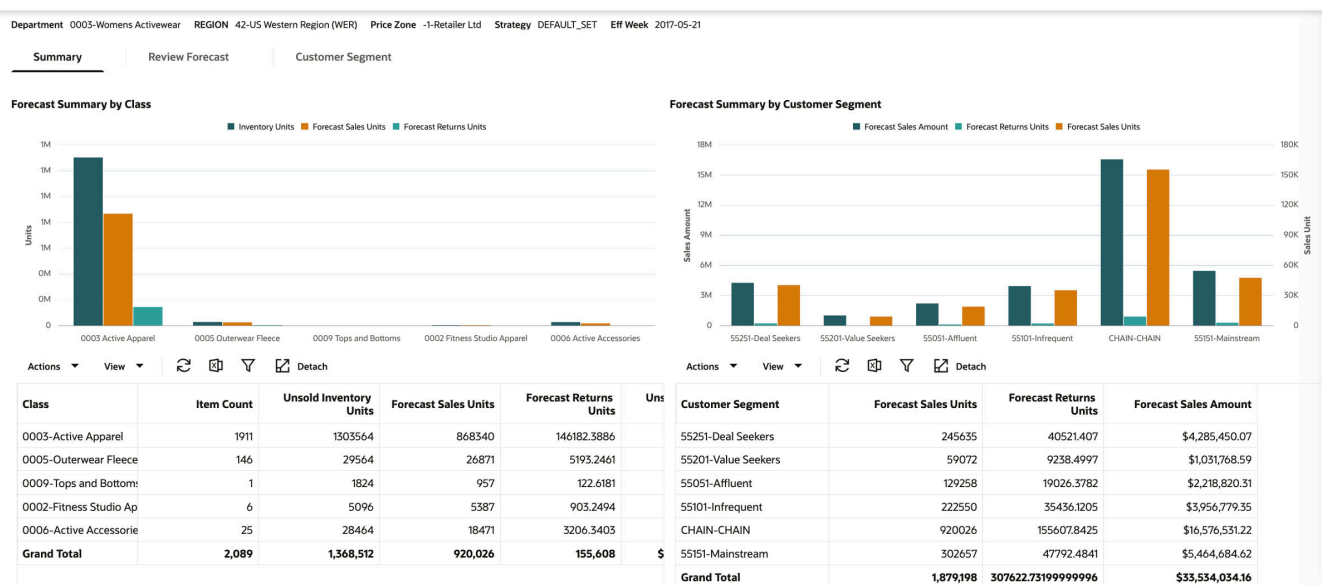
The sales forecast overview table displays the run information corresponding to the run ID from LPO, along with additional metrics such as item count, forecast sales units, returns units, total buy, and projected end of life sell thru.

From the sales forecast run overview table, you can select an individual run by clicking the run name. This opens a new tab, Sales Forecast Details - Run id < ID#>, with three sub-tabs: Summary, Review Forecast, and Customer Segment.

Sales Forecast - Summary

The Summary tab, shown in the following figure, displays additional details at the class level and customer segment level for the selected run ID. It provides aggregate metrics by class and customer segment.

Figure 5-32 Sales Forecast - Summary Tab



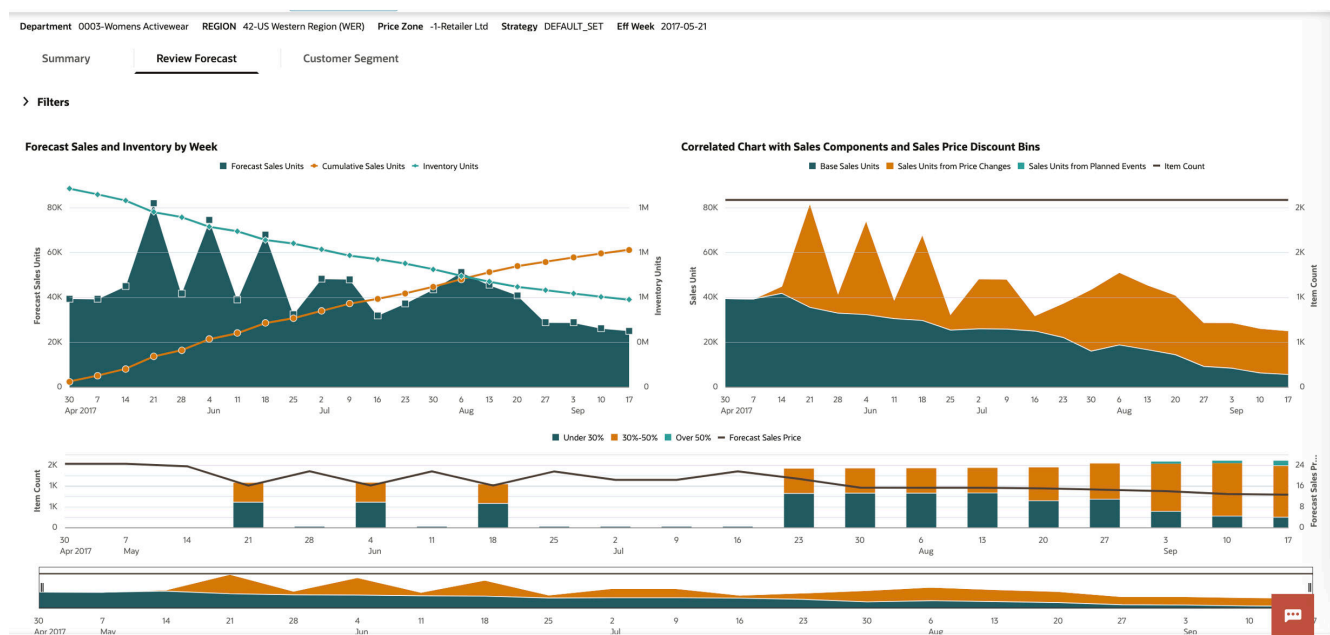
The Summary tab has the following three components:

- Chart for forecast summary by class. This displays the following metrics by class: Inventory units, Forecast sales units, and Forecast return units. The forecast horizon represents all weeks in the future until the exit date for a product.
 - Inventory units represent the total number of unsold inventory units the optimization system is trying to clear, based on the latest sales and inventory information for the run.
 - Forecast sales units is the sum of the forecast sales units over the entire forecast horizon.
 - Forecast return units is the sum of all future expected returns over the entire forecast horizon.
- Table for forecast summary by class. In addition to the metrics displayed in the chart, the following metrics are displayed in the table: item count, unsold inventory value, and forecast sales amount.
 - Item count is the number of products in the class.
 - Inventory value is the total value of unsold inventory units that the optimization system is trying to clear, based on the latest sales and inventory information for the run.
 - Forecast sales amount is the sum of the forecast sales amount over the entire forecast horizon.
- Table for forecast summary by customer segment. This displays the forecast sales units, forecast sales amount, and forecast returns unit by customer segment.

Sales Forecast - Review Forecast

The Review Forecast tab, shown in the following figure, is used to view the forecast information at the week level. It displays a breakdown of the sales forecast into multiple components such as base sales units, sales units from price cuts and sales units from promotion events, and the count of products at various discount levels. This tab displays information for the selected merchandise and customer segment.

Figure 5-33 Sales Forecast - Review Forecast Tab



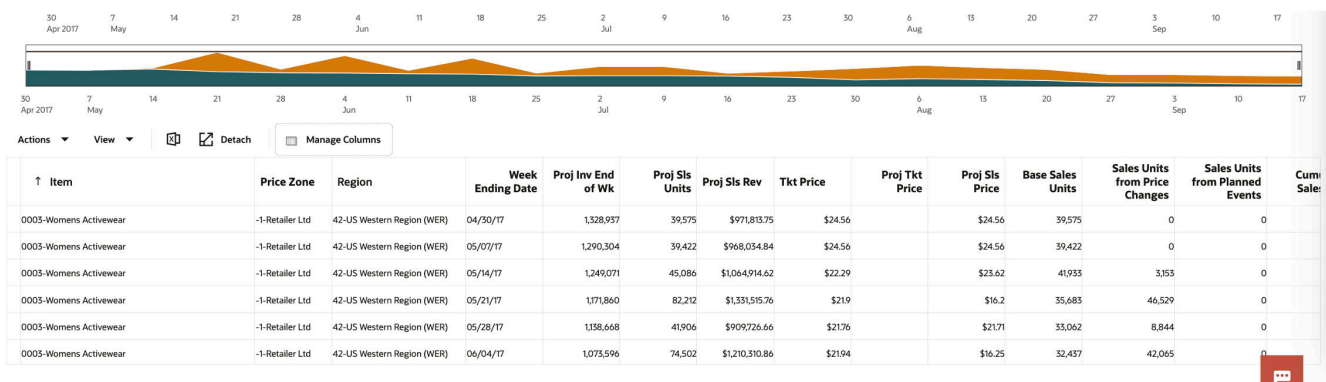
You can review the forecast information for the selected merchandise and customer segment combination. By default, this chart shows the information at the department level for the merchandise hierarchy and across all customer segments. Use the Filters to display and select a specific merchandise and customer segment.

All the merchandise levels below the Lifecycle Pricing Optimization run level can be selected. In this example, you see Class, Subclass, Style, Color, and Size. The selection of merchandise using the filters follows a hierarchical path. First, select a specific class. Then, click **Apply** to review the information for this class or choose a specific subclass within the class and click **Apply**. After selecting a specific subclass, you can choose the styles within the subclass, and so on.

The Review Forecast tab has the following three components:

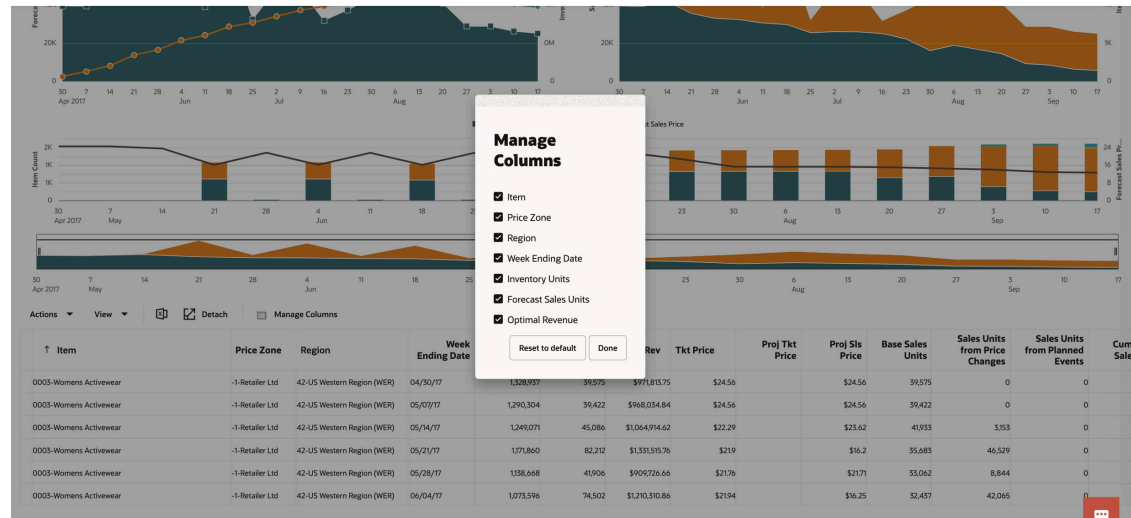
- Chart for forecast sales and inventory by week, as shown in the above figure.
 - Forecast sales units, Inventory units, and Cumulative sales units by week for the merchandise and customer segment selection made in the filters.
- Correlated chart with sales components and discount bins, as shown in the above figure.
 - It breaks down the forecasted sales units into the following components:
 - * Base sales units: future sales at the current ticket price.
 - * Sales units from price changes: additional sales units driven by recommended price changes (that is, promotions and markdowns).
 - * Sales units from planned events: additional sales units driven by traffic associated with planned promotion/holiday event.
 - It shows the breakdown of items into various discount bins for each week. Discount bins are calculated using the forecast sales price and full price.
 - The bottom window of the chart is used to select the time frame used for displaying the top two charts. Use this to focus on the relevant weeks when the forecast horizon is long.
- Table with weekly sales inventory and revenue metrics, as shown in the following figure, can be used to:
 - Examine the weekly metrics displayed in the charts, as shown in the following two figures.
 - Use Manage columns, shown in the second of the following two figures, to select the metrics displayed in the table.
 - Use the Detach button to expand the table into a pop-up window for ease of use.

Figure 5-34 Sales Forecast - Review Forecast Table



For details on calculations, see [Appendix: Promotion and Markdown Review Forecast](#).

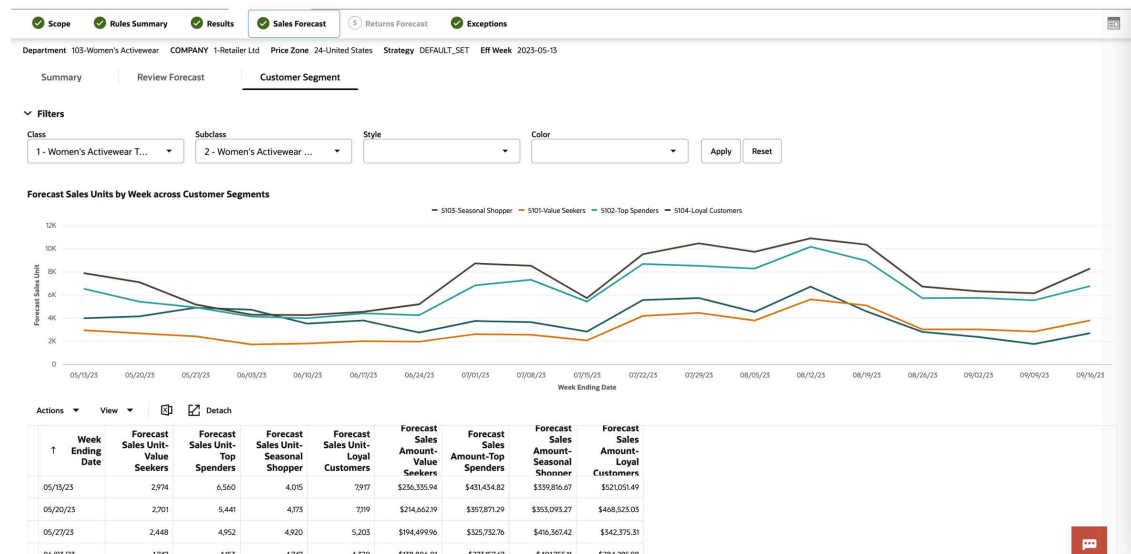
Figure 5-35 Sales Forecast - Review Forecast Table - Manage Columns



Sales Forecast - Customer Segment

The Customer Segment tab, shown in the following figure, is used to compare the sales trends across the various segments.

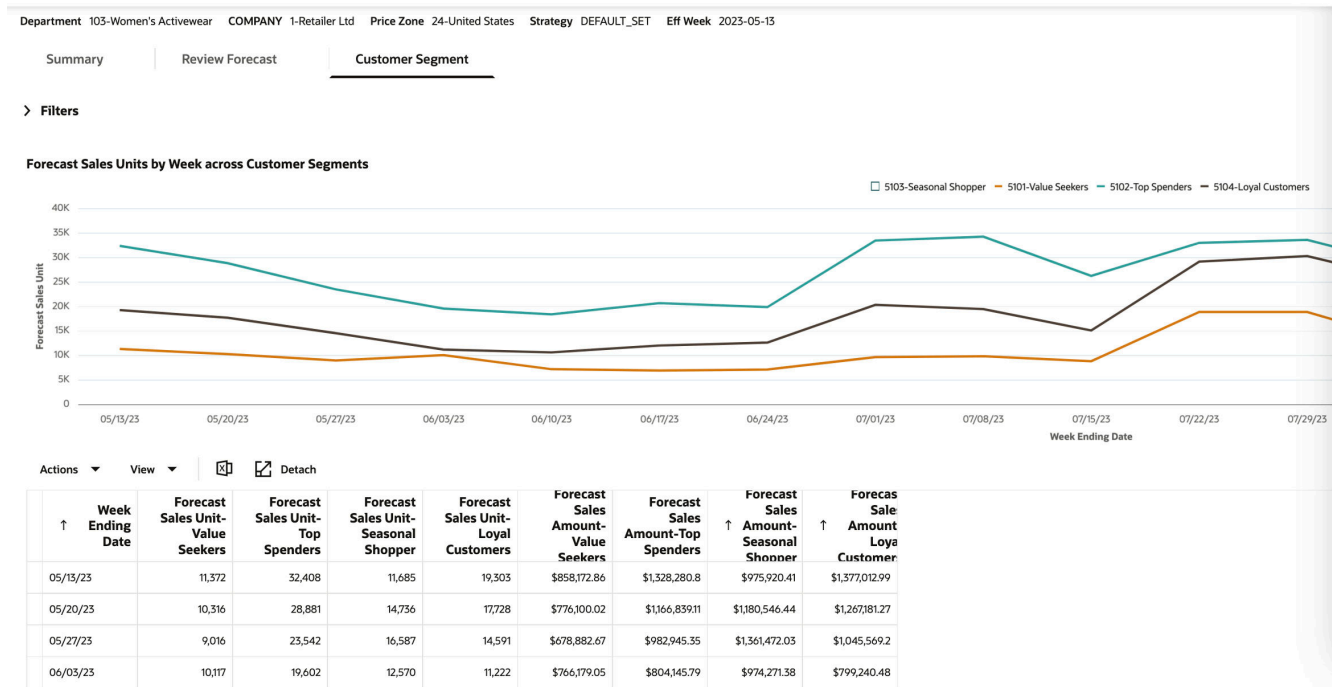
Figure 5-36 Sales Forecast - Customer Segment Tab



Use this tab to compare the sales trends across various customer segments. Similar to the Forecast review tab, you can view the customer segment comparison for selected merchandise. The filtering functionality for merchandise works in the same way as in the Forecast review. In the chart, individual customer segments can be selected and un-selected by clicking on the legend. The chart is rescaled automatically based on the new selection, as

shown in the following figure. Rescaling is useful for reviewing patterns for customer segments with low sales volume.

Figure 5-37 Sales Forecast - Customer Segment Rescaling Based on New Selection



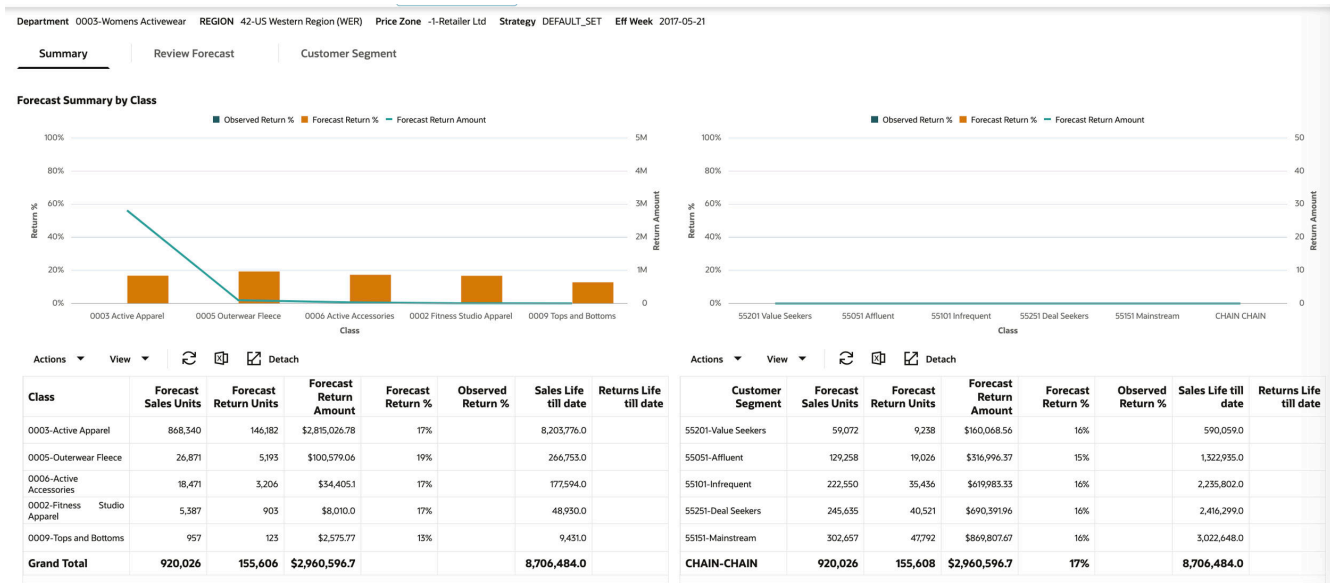
Markdown/Promotion - Returns Forecast

The Returns Forecast tab is used to view the return forecast information at the week level.

Returns Forecast - Summary

The Summary tab, shown in the following figure, displays additional details at the class level and customer segment level for the selected run ID. It provides aggregate metrics by class and customer segment.

Figure 5-38 Returns Forecast - Summary Tab



The Summary tab has the following three components

- Chart for returns summary by class. This displays the following metrics by class across the entire forecast horizon: forecast return % and forecast return amount. The forecast horizon represents all weeks in the future until the exit date for a product.
 - Forecast return % represents the ratio of sum of forecast returns units over the entire forecast horizon across all products to sum of forecast sales units over the entire forecast horizon across all products in the class.
 - Forecast return amount represents the total value of the returned merchandise over the entire forecast horizon across all products in the class.
- Table for returns summary by class. In addition to the metrics displayed in the chart, the following metrics are displayed in the table for every class: forecast sales units, forecast return units, sales units' life till date, returns life till date, and observed return %.
 - Forecast sales units is the sum of forecast sales units over the entire forecast horizon across all products.
 - Forecast return units is the sum of forecast return units over the entire forecast horizon across all products.
 - Sales units life till date is the sum of actual sales units from the first sale date until the most recent week with sales data across all products.
 - Returns life till date is sum of actual return units from the first sale date until the most recent week with sales data across all products.
 - Observed return % is the ratio of returns life till date to Sales units life till date.
- Table for returns summary by customer segment. This displays the following metrics by customer segment: forecast sales units, forecast return units, forecast return amount, forecast return %, sales units' life till date, returns life till date, and observed return %.

Returns Forecast - Review Returns

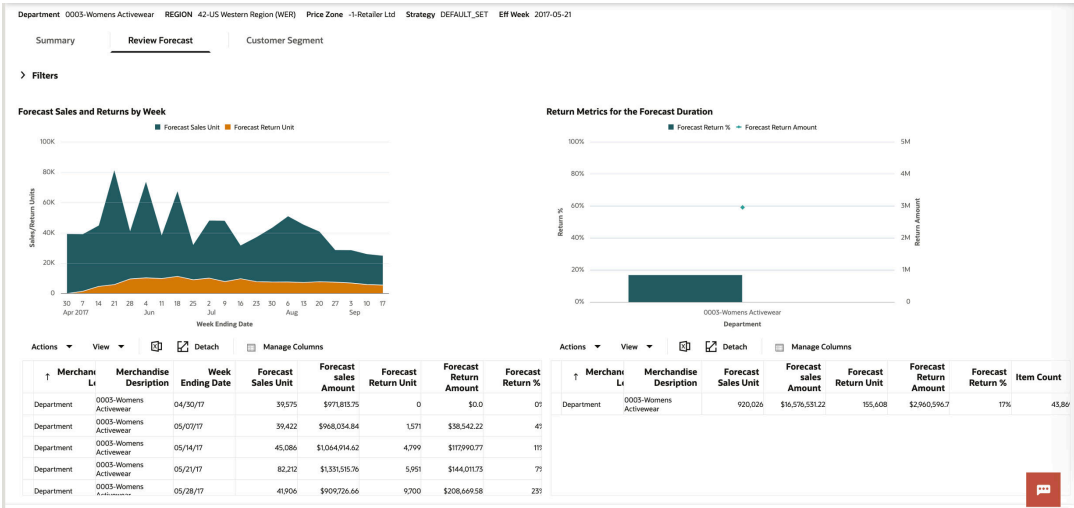
The Review Returns tab is used to view the returns information for the selected merchandise and customer segment.

You can review the returns information for the selected merchandise and customer segment combination. By default, this chart shows the information at the department level for the merchandise hierarchy and across all customer segments. Use the Filters to display the available options to select a specific merchandise and customer segment. Filtering works in the way that it does in the Review forecast tab, where the merchandise selection is made in the order of the merchandise hierarchy.

The Review Forecast tab has the following four components:

- Chart for forecast sales and returns by week.

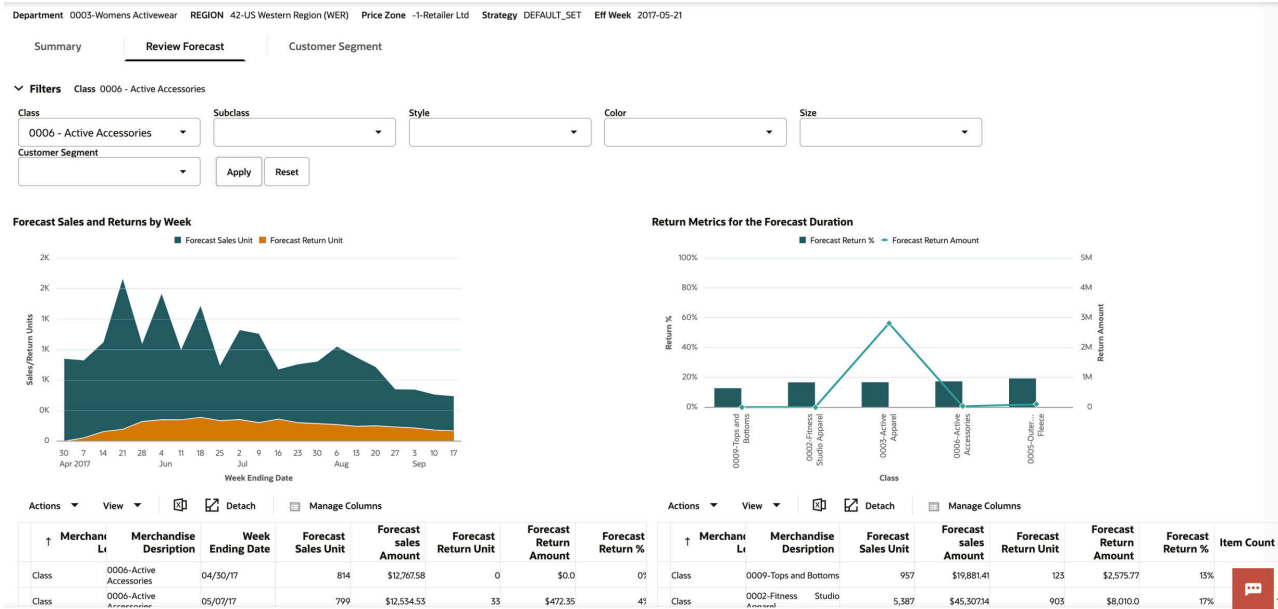
Figure 5-39 Returns Forecast - Review Returns Tab



It displays aggregate forecast sales units and forecasted returns units by week for the merchandise and customer segment selection.

- Chart to compare the return percentage and return amount across merchandise.

Figure 5-40 Returns Forecast - Compare Return Metrics



- Displays the forecast return % and forecast return amount for the selected merchandise along with other merchandise under the same parent. For example, when class 0009 tops and bottoms are selected, this chart displays the above metrics for all classes within the department corresponding to 0009 tops and bottoms.
- The forecast return % is the ratio of the sum of forecast returns units over the entire forecast horizon across all products to the sum of forecast sales units over the entire forecast horizon across all products from the selected merchandise and customer segment.
- The forecast return amount is the total value of the returned merchandise over the entire forecast horizon across all products in the selected merchandise and customer segment.
- Table with forecast sales and returns by week.

Figure 5-41 Returns Forecast - Review Sales and Returns by Week Table

Forecast Sales and Returns by Week

Actions

View

Detach

Manage Columns

	↑ Merchandise Level	Merchandise Description	Week Ending Date	Forecast Sales Unit	Forecast sales Amount	Forecast Return Unit	Forecast Return Amount	Forecast Return %	↑ Item Count
	Department	0003-Womens Activewear	04/30/17	39,575	\$971,813.75	0	\$0.0	0%	2,089
	Department	0003-Womens Activewear	05/07/17	39,422	\$968,034.84	1,571	\$38,542.22	4%	2,089
	Department	0003-Womens Activewear	05/14/17	45,086	\$1,064,914.62	4,799	\$117,990.77	11%	2,089
	Department	0003-Womens Activewear	05/21/17	82,212	\$1,331,515.76	5,951	\$144,011.73	7%	2,089
	Department	0003-Womens Activewear	05/28/17	41,906	\$909,726.66	9,700	\$208,669.58	23%	2,089
	Department	0003-Womens Activewear	06/04/17	74,502	\$1,210,310.86	10,397	\$208,859.42	14%	2,089
	Department	0003-Womens Activewear	06/11/17	39,118	\$846,367.98	9,929	\$201,378.76	25%	2,089
	Department	0003-Womens Activewear	06/18/17	68,209	\$1,109,653.41	11,368	\$209,699.88	17%	2,089
	Department	0003-Womens Activewear	06/25/17	32,639	\$706,303.12	9,172	\$182,087.61	28%	2,089

- Displays the following additional metrics compared to the chart: forecast sales amount, forecast return amount, forecast return %, and item count by week for the selected merchandise and segment combination.
- Table that compares returns metrics across merchandise.

Figure 5-42 Returns Forecast - Return Metrics Across Merchandise Hierarchy Table

Return Metrics for the Forecast Duration

Actions

View

Detach

Manage Columns

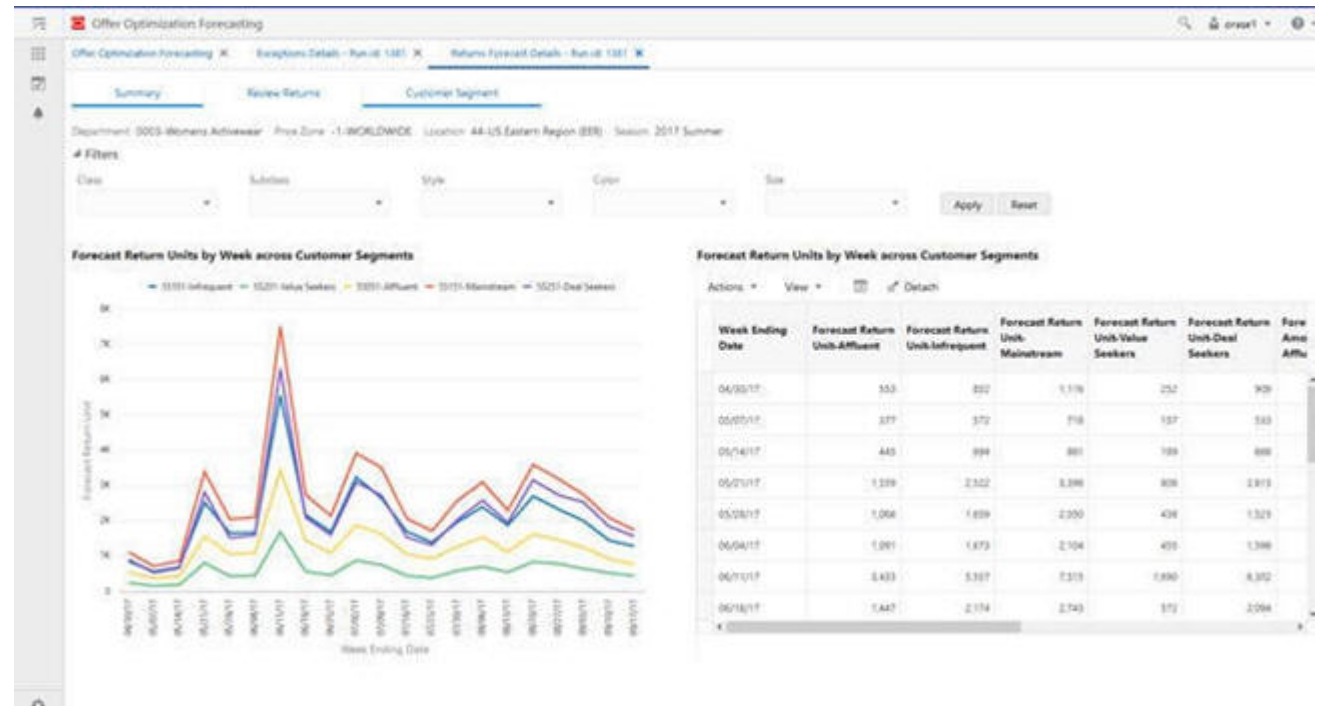
↑ Merchandise Level	Merchandise Description	Forecast Sales Unit	Forecast sales Amount	Forecast Return Unit	Forecast Return Amount	Forecast Return %	Item Count	Actual Return %	Sales Life till date	Returns Life till date
Class	0009-Tops and Bottoms	957	\$19,881.41	123	\$2,575.77	13%	21		9,431.0	
Class	0002-Fitness Studio Apparel	5,387	\$45,307.14	903	\$8,010.0	17%	126		48,930.0	
Class	0003-Active Apparel	868,340	\$15,786,927.5	146,182	\$2,815,026.78	17%	40,131		8,203,776.0	
Class	0006-Active Accessories	18,471	\$211,124.07	3,206	\$34,405.1	17%	525		177,594.0	
Class	0005-Outerwear Fleece	26,871	\$513,291.1	5,193	\$100,579.06	19%	3,066		266,753.0	

- Displays the following additional metrics compared to the chart: forecast sales units, forecast sales amount, forecast return units, item count, sales life till date, returns life till date, and actual return percentage across all products for the selected merchandise and customer segment.

Returns Forecast - Customer Segment

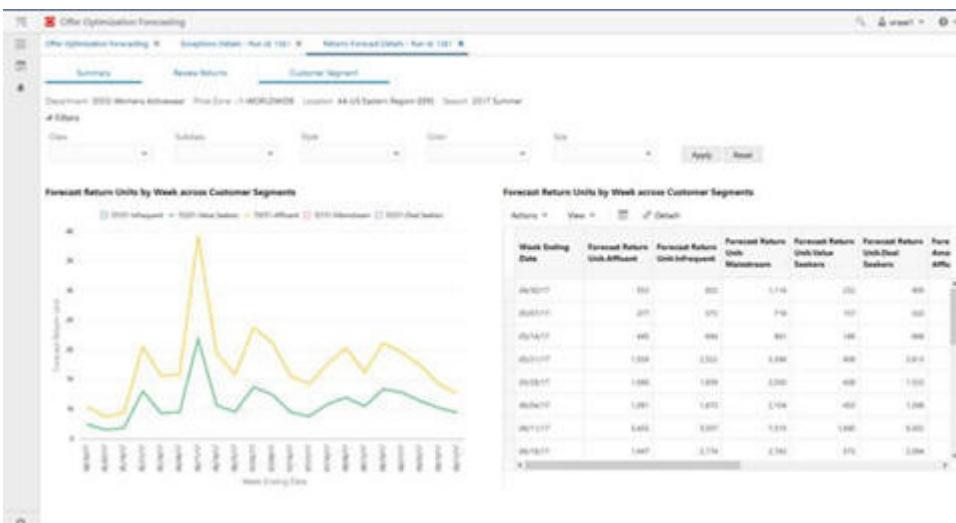
The Customer Segment tab, shown in the following figure, is used to compare the forecast returns trends across the various segments.

Figure 5-43 Returns Forecast - Customer Segment Tab



Use this tab to compare the forecast return units' trends across various customer segments. Similar to Forecast Review and Returns Review tabs, you can view the customer segment comparison for the selected merchandise. The filtering functionality for merchandise works in the same way as in the Forecast Review and Returns Review tabs. In the chart, individual customer segments can be selected and un-selected by clicking the legend. The chart is rescaled automatically based on the new selection, as shown in the following figure. Rescaling is useful for reviewing patterns for customer segments with low sales volume.


Figure 5-44 Returns Forecast - Rescaling Based on New Selection



The table on the right displays the forecast return units and the forecast return amount for all customer segments. The Detach button can be used to expand the table into a pop-up window for ease of use, as shown in the following figure.

Figure 5-45 Returns Forecast - Customer Segment Table

Forecast Return Units by Week across Customer Segments

Actions View  Detach

Week Ending Date	Forecast Return Units: Affluent	Forecast Return Units: Infrequent	Forecast Return Units: Mainstream	Forecast Return Units: Value Seekers	Forecast Return Units: Deal Seekers	Forecast Return Amount: Affluent	Forecast Return Amount: Infrequent	Forecast Return Amount: Mainstream	Forecast Return Amount: Value Seekers	Forecast Return Amount: Deal Seekers
06/02/17	333	332	1,118	232	899	\$10,021.19	\$19,179.53	\$25,772.6	\$3,946.0	\$22,826.62
06/05/17	377	372	1,118	197	919	\$10,040.99	\$19,197.97	\$25,779.4	\$4,402.34	\$14,377.55
06/12/17	445	394	981	199	868	\$11,021.85	\$19,185.92	\$24,768.54	\$5,545.75	\$18,222.79
06/19/17	1,339	2,322	3,586	898	3,819	\$29,780.87	\$49,187.08	\$59,472.32	\$12,921.09	\$46,551.23
06/26/17	1,899	1,899	2,899	438	1,519	\$29,949.19	\$49,225.4	\$57,297.45	\$12,388.94	\$44,908.5
06/26/17	1,899	1,875	2,134	438	1,599	\$28,914.91	\$48,212.71	\$56,793.48	\$12,824.98	\$44,969.5
06/11/17	9,439	1,237	1,519	1,849	8,232	\$37,138.49	\$59,479.36	\$123,247.48	\$28,898.19	\$139,919.43
06/18/17	1,447	2,174	2,749	572	2,294	\$16,450.82	\$19,557.95	\$26,155.55	\$18,194.28	\$38,622.14
06/25/17	1,892	1,892	2,146	441	1,892	\$28,987.11	\$44,334.25	\$49,843.79	\$12,732.91	\$44,107.28
07/02/17	1,892	3,242	2,819	979	2,899	\$45,015.85	\$79,444.31	\$92,154.45	\$21,810.88	\$75,343.54
07/09/17	1,892	2,847	2,911	794	2,129	\$36,799.2	\$42,758.44	\$49,829.82	\$17,894.05	\$34,918.74
07/16/17	1,892	1,892	2,271	451	1,519	\$28,999.41	\$49,899.31	\$59,154.99	\$12,899.27	\$42,245.0
07/23/17	981	1,399	1,719	399	1,219	\$14,949.99	\$19,155.18	\$49,227.46	\$18,889.44	\$27,999.82
07/30/17	1,272	1,847	2,379	394	2,892	\$27,199.28	\$43,439.99	\$59,334.77	\$12,205.52	\$44,999.17
08/06/17	1,599	2,399	2,107	792	2,987	\$29,912.1	\$49,229.4	\$62,979.82	\$14,172.94	\$52,801.88

Markdown/Promotion - Exceptions

LPO Forecasting supports exceptions based on sell thru and returns. This includes the following:

- Sell thru exception. When the Sell thru end of life is lower than the sell thru exception threshold for any product.
- Returns exception. When the Forecast return % is greater than the return exception threshold for any product.

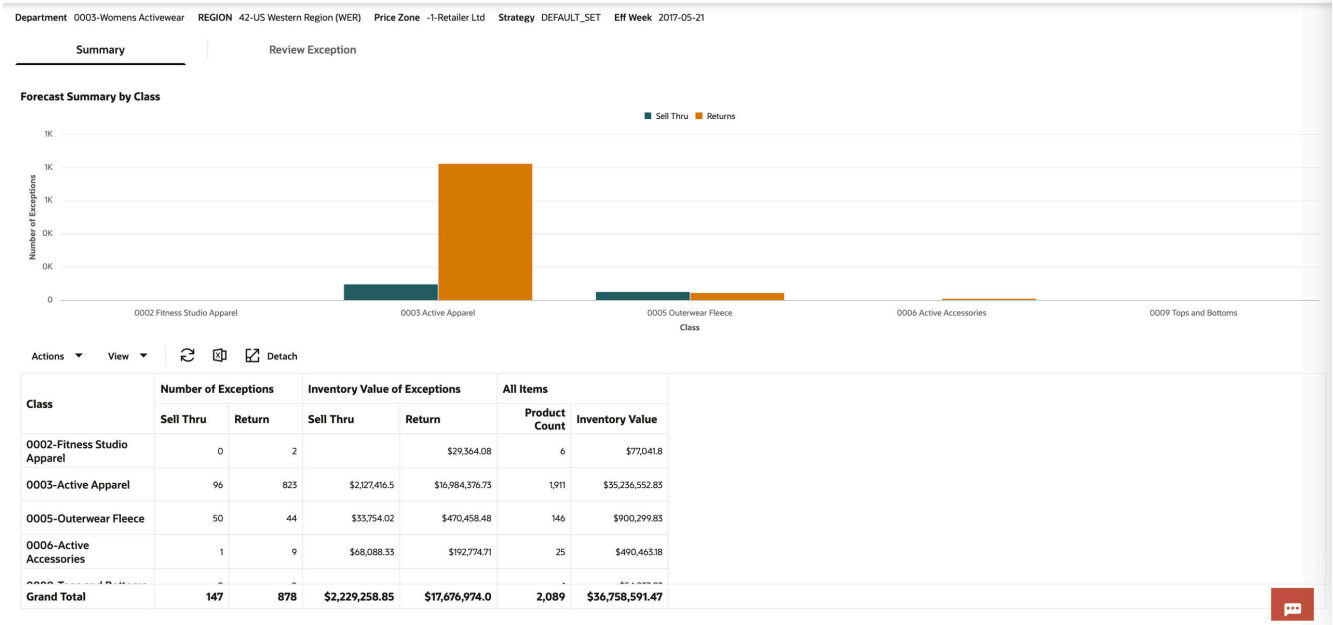
The sell thru exception threshold and return exception threshold are set in the RSE_CONFIG table and are global settings. By leveraging these settings, you can identify products that display outlier behavior, review forecast and returns information corresponding to the product, and take appropriate action.

Exceptions - Summary

The Summary tab provides aggregate metrics by Class. It has the following two components:

- Chart for Exception summary by class: Chart displays the count of sell thru exceptions and returns exceptions by class. Table for Exception summary by class. In addition to the count of exceptions displayed in the chart, the inventory value of the exceptions, product count, and inventory value of all products are present in the table. You can compare the inventory value of exceptions with inventory value of all items.

Figure 5-46 Exceptions - Summary

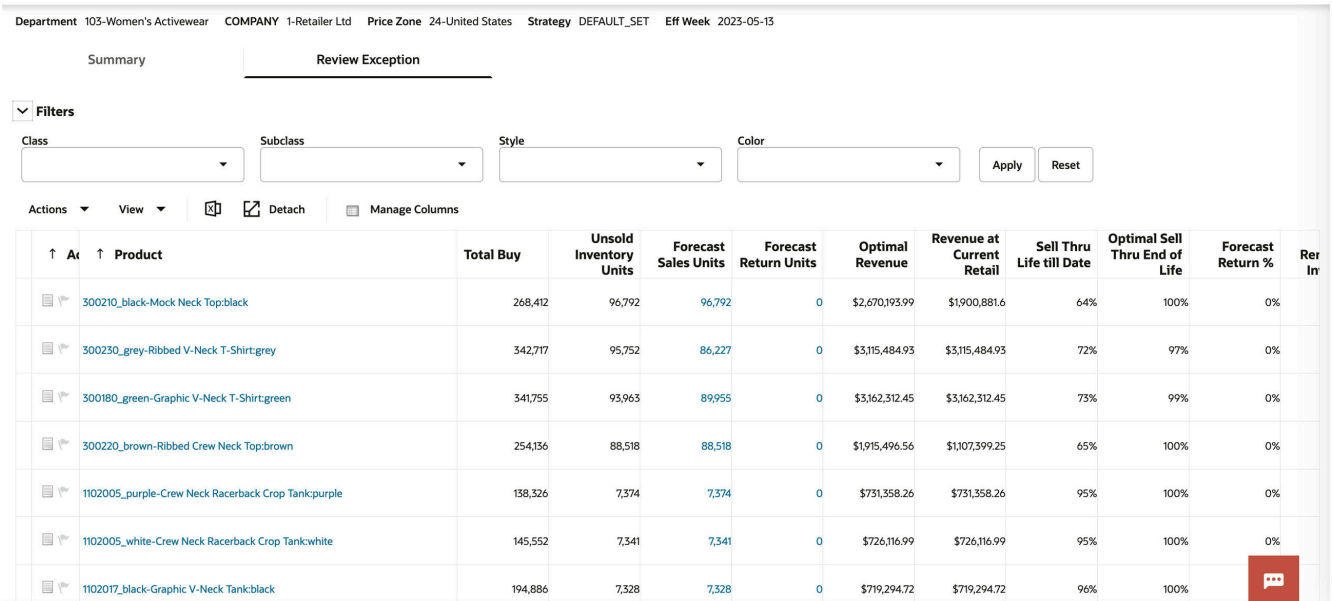


Exceptions - Review

The Review Exceptions table displays all the products that satisfy either the sell thru or return exception criteria. By default, the table displays all the exceptions from the selections run, shortlist products based on the merchandise hierarchy by leveraging the filter criteria.

Use the Filters icon to view and select specific merchandise, similar to the functionality in the Review Forecast and Review Returns tabs.

Figure 5-47 Exceptions - Review Exception



The forecast sales units and forecast return units act as hyperlinks to access the corresponding review forecast and review return screens. The product description acts as a hyperlink to the Manage the Recommendations screen.

Figure 5-48 Exceptions - Review Forecast

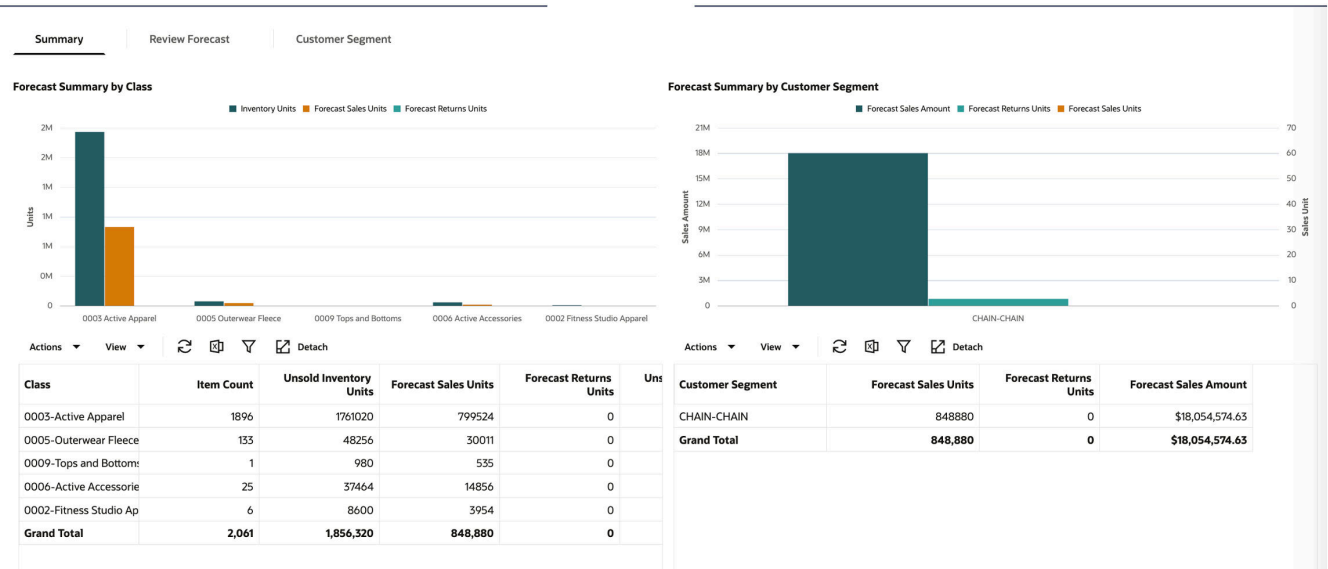
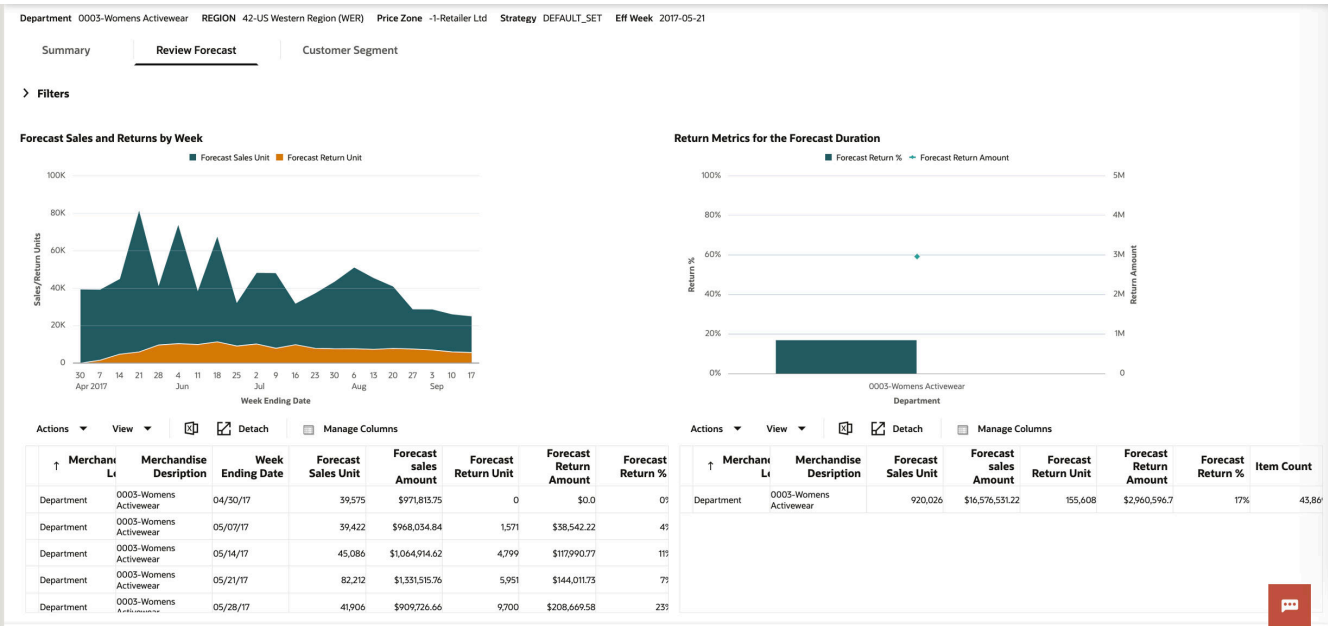


Figure 5-49 Exceptions - Review Returns



After reviewing the information, users can add comments using the Note icon in the Action column.

– The Action column also includes a Flag icon that can be used to mark certain exceptions.

– Both comments and flags are passed forward to the Manage LPO Recommendation screen in LPO.

For example, if a product has a sell-through exception, and after reviewing forecast details the user finds the model was constrained by a max first promotion rule, they may choose to override the recommendation with a deeper promotion.

Users can also click the product description to navigate directly to the Manage LPO Recommendation screen.

Figure 5-50 Exceptions - Review Exception Comments

Department 103-Women's Activewear COMPANY 1-Retailer Ltd Price Zone 24-United States Strategy DEFAULT_SET Eff Week 2023-05-13

Summary **Review Exception**

Filters

Class Subclass Style Color

Actions View Detach Manage Columns

Product	Total Buy	Forecast Return Units	Optimal Revenue
300210_black-Mock Neck Top:black	26	0	\$2,670,193.99
300230_grey-Ribbed V-Neck T-Shirt:grey	34	0	\$3,115,484.93
300180_green-Graphic V-Neck T-Shirt:green	341,755	93,963	\$3,162,312.45
300220_brown-Ribbed Crew Neck Top:brown	254,136	88,518	\$1,915,496.56

Information for Ribbed V Neck T shirt
Enter 3000 or fewer characters.
OK

Figure 5-51 Exceptions - Review Exceptions Flag Exceptions

Department 103-Women's Activewear COMPANY 1-Retailer Ltd Price Zone 24-United States Strategy DEFAULT_SET Eff Week 2023-05-13

Summary **Review Exception**

Filters

Class Subclass Style Color Apply Reset

Actions View Detach Manage Columns

Product	Total Buy	Unsold Inventory Units	Forecast Sales Units	Forecast Return Units	Optimal Revenue	Revenue at Current Retail	Sell Thru Life till Date	Optimal Sell Thru End of Life	Forecast Return %	Re In
300210_black-Mock Neck Top:black	268,412	96,792	96,792	0	\$2,670,193.99	\$1,900,881.6	64%	100%	0%	
300230_grey-Ribbed V-Neck T-Shirt:grey	342,717	95,752	86,227	0	\$3,115,484.93	\$3,115,484.93	72%	97%	0%	
300180_green-Graphic V-Neck T-Shirt:green	341,755	93,963	89,955	0	\$3,162,312.45	\$3,162,312.45	73%	99%	0%	
300220_brown-Ribbed Crew Neck Top:brown	254,136	88,518	88,518	0	\$1,915,496.56	\$1,107,399.25	65%	100%	0%	
1102005_purple-Crew Neck Racerback Crop Tank:purple	158,326	7,374	7,374	0	\$731,358.26	\$731,358.26	95%	100%	0%	

6

Regular Pricing Optimization - What-If Run

To create a what-if run for Regular Pricing Optimization, the pricing analyst must first ensure the Regular tab is selected from the Run Overview page. On clicking the **Create** icon from the Run Overview table, the system opens the Run Overview tab, where the user can define the scope, select the applicable strategy, and view the business rules applied to the run. Before creating the run, it is essential to complete any required forecast configuration steps to ensure accurate demand estimation and enable valid optimization outcomes. Regular Pricing Recommendation can be done in two ways: forecast-based (using historical data) and non-forecast-based (using pre-defined rules).

- To create runs to apply forecast based strategies (for example, revenue, volume, and so on), it is essential to complete any required forecast configuration steps to ensure accurate demand estimation and enable valid optimization outcomes.
- To create runs to apply only rules-based engine that is triggered by pricing conditions, not forecasts, set RSE_CONFIG.PRO_LPO_REGULAR_LITE_ENABLED_FLG to Y.

Prerequisite - Forecast Configuration

Like Markdown/Promotion optimization, the Forecast Configuration is the prerequisite step for Regular Pricing Optimization as well, but not applicable for Regular Lite that uses only rules for price optimization. For more details, see [Prerequisite - Forecast Configuration](#).

Regular - Scope

The Scope stage is used to define the scope of the optimization where the pricing analyst can select a Season, Merchandise (for example, Department), Location (for example, Region), or Prize Zone Effective Week and Strategy (DEFAULT_STRATEGY or Custom Strategy), Start Week, End Week and Base Period for the run. The Best Feasible Solution checkbox is selected by default for Regular Lite.

Click **Save** to apply updates to the Name, Description, and any changes made to proceed to the next stage.

Figure 6-1 Regular Run - Scope

The screenshot shows the 'Regular Run - Scope' configuration page. At the top, there's a header with 'Manage Recommendation' and 'Run Overview' tabs. Below this, the 'RPO: 6956' is displayed. The main section is titled 'Scope' and contains several input fields and a 'Best Feasible Solution' checkbox. The fields are organized into two columns. The left column includes 'Run Name' (Regular Run Test), 'Season' (RPO), 'Company' (1 - Retailer Ltd), and 'Start Week' (14/04/2025). The right column includes 'Run Description' (Regular Run Test Desc), 'Department' (103-Women's Activewear), 'Price Zone Group' (1-Primary Zone Group), 'End Week' (12/07/2025), and 'Base Period' (Last Fiscal Quarter). A 'Strategy' dropdown is set to 'Demo Grp Volume TL 15%'. A 'Best Feasible Solution' checkbox is present. On the right side, there are two buttons: 'Add Strategy' and 'Refresh Strategy'.

Table 6-1 Regular Run - Scope

Name	Description
Run Name	The name identifying the run. The name must be 80 characters or less and use alphanumeric characters only. It is case sensitive.
Run Description	A brief description of the run. The value must be 200 characters or less and use alphanumeric characters only.
Season	The drop-down list of seasons available for the run.
Product Hierarchy (such as Department)	The drop-down list of merchandise available for the run, based on PRO_PROD_HIER_RUN_SETUP_LVL.
Location Hierarchy (such as Region)	The drop-down list of locations available for the run, based on PRO_LOC_HIER_PROCESSING_LVL.
Price Zone	The drop-down list of available price zones for the run. Available set of price zones would be decided based on the forecast run type mapped to Lifecycle Pricing - Promotion/Markdown application.
Strategy	<p>The drop-down list of strategies available. The user can define the set of business rules and associate the set with a strategy (for example, Christmas Specials). By default, there is always strategy named DEFAULT_SET.</p> <p>The user also can create a new strategy by clicking Add Strategy that takes the user to the Control and Tactical Center screen.</p>
Start Week	Starting period for the regular price optimization. This is also the effective week for the regular price recommendation for the run.
End Week	Ending period for the regular price optimization.
Base Period	Can be any of Last Fiscal Quarter, Current Fiscal Year, and so on.

Regular - Rules

Using the selected strategy and the DEFAULT_SET strategy, all the business rules relevant for the run are populated in the Rules screen. For example, if no competitor price constraints are available in the selected strategy but they are available in the DEFAULT_SET, then these constraints are borrowed from the DEFAULT_SET strategy. The specific set of rules associated with the selected strategy are always given preference and used in the run.

This stop is divided into two tabs, Rules and Price Ladder, as shown in the two figures below:

- The Rules tab contains all the rules associated with every item in the run, and the user can only view the different rules associated with items. The Rules tab contains all the rules associated with every item in the run, and the user can only view the different rules associated with items. Rules can be further divided into self-rules, inter-item rules, and inter-location rules.

Self-rules means that the rules are applied within the group and there is no relation to another location/price zone or item. However, inter-item rules are applied between two items, and inter-location rules are applied for the same item but between two locations or price zones.

Note

None of these rules can have RULE_SUBTYPE_ALLOWED_FLG as Y. That is, there cannot be multiple values for the same rule at the same criteria.

- The Price Ladder tab contains the price ladders provided for the run at the PRO_REG_PROD_PROCESSING_LVL (for example, class).

Unlike the Promotion and Markdown rules, there are two distinctions: the rules for a regular pricing optimization are all applied as a soft constraint unless configured, except for price ladder, and the rules for a regular pricing optimization have a rule priority except when it is a hard constraint. Soft constraint means that the optimization will try to satisfy the constraint, but it is allowed to violate the constraint when necessary. Rule priority gives the preference order for the constraint. That is, lower ranked rules are allowed to be violated first before a higher ranked rule is relaxed.

Figure 6-2 Regular Run - Rules

Manage Recomm...		Run Overview		LPO: 5742 (Reg) x	
Scope	Rules	Results			
DEPT 103-Women's Activewear COMPANY 1-Retailer Ltd Price Zone Group 1-Primary Zone Group Strategy DEFAULT_SET Start Week 2025-02-08 End Week 2025-02-15					
Self	Inter Item	Inter Location	Price Ladder	Price Matrix	
Actions	View				
Hard?	Priority	Rule Name	Rule Value	Product Descr	Location Descr
		RPO_LAST_REG_PRICE_MAX_PCT_CHANGE	1		ALL
		RPO_LAST_REG_PRICE_MIN_PCT_CHANGE	0		ALL
	5	RPO_MARGIN_ITEM_PCT_CHANGE_MAX	1		ALL
	5	RPO_MARGIN_ITEM_PCT_CHANGE_MIN	0		ALL

Rule Description**RPO LAST REG PRICE MAX PCT CHANGE**

Item needs to have a maximum percentage price change equal to this value compared to the last known regular price of the same item or a similar item.

Figure 6-3 Regular Run - Price Ladders

Scope	Rules	Results			
DEPT 103-Women's Activewear COMPANY 1-Retailer Ltd Price Zone Group 1-Primary Zone Group Strategy DEFAULT_SET Start Week 2025-02-08 End Week 2025-02-15					
Self	Inter Item	Inter Location	Price Ladder	Price Matrix	
Actions	View				
Product Level	Product	Price Zone Name	Price Ladder Name	Price Ladder Type	Price Ladder
Class	2-Women's Activewear Bottoms	14-France	Regular Prices DEPT-103 Women's Activewear	R	(Price Point - \$) 5.99, 6.99, 7.99, 8.99, 9.99, 10.99, 11.99, 12.99, 13.99, 14.99, 15.99, 16.99, 17.99, 18.99, 19.99, 20....
Class	2-Women's Activewear Bottoms	16-Italy	Regular Prices DEPT-103 Women's Activewear	R	(Price Point - \$) 5.99, 6.99, 7.99, 8.99, 9.99, 10.99, 11.99, 12.99, 13.99, 14.99, 15.99, 16.99, 17.99, 18.99, 19.99, 20....
Class	2-Women's Activewear Bottoms	10-Australia	Regular Prices DEPT-103 Women's Activewear	R	(Price Point - \$) 5.99, 6.99, 7.99, 8.99, 9.99, 10.99, 11.99, 12.99, 13.99, 14.99, 15.99, 16.99, 17.99, 18.99, 19.99, 20....
Class	2-Women's Activewear Bottoms	20-New Zealand	Regular Prices DEPT-103 Women's Activewear	R	(Price Point - \$) 5.99, 6.99, 7.99, 8.99, 9.99, 10.99, 11.99, 12.99, 13.99, 14.99, 15.99, 16.99, 17.99, 18.99, 19.99, 20....
Class	2-Women's Activewear Bottoms	18-Mexico	Regular Prices DEPT-103 Women's Activewear	R	(Price Point - \$) 5.99, 6.99, 7.99, 8.99, 9.99, 10.99, 11.99, 12.99, 13.99, 14.99, 15.99, 16.99, 17.99, 18.99, 19.99, 20....
Class	2-Women's Activewear Bottoms	21-South Korea	Regular Prices DEPT-103 Women's Activewear	R	(Price Point - \$) 5.99, 6.99, 7.99, 8.99, 9.99, 10.99, 11.99, 12.99, 13.99, 14.99, 15.99, 16.99, 17.99, 18.99, 19.99, 20....
Class	2-Women's Activewear Bottoms	22-Sweden	Regular Prices DEPT-103 Women's Activewear	R	(Price Point - \$) 5.99, 6.99, 7.99, 8.99, 9.99, 10.99, 11.99, 12.99, 13.99, 14.99, 15.99, 16.99, 17.99, 18.99, 19.99, 20....
Class	2-Women's Activewear Bottoms	12-Canada	Regular Prices DEPT-103 Women's Activewear	R	(Price Point - \$) 5.99, 6.99, 7.99, 8.99, 9.99, 10.99, 11.99, 12.99, 13.99, 14.99, 15.99, 16.99, 17.99, 18.99, 19.99, 20....
Class	2-Women's Activewear Bottoms	13-China	Regular Prices DEPT-103 Women's Activewear	R	(Price Point - \$) 5.99, 6.99, 7.99, 8.99, 9.99, 10.99, 11.99, 12.99, 13.99, 14.99, 15.99, 16.99, 17.99, 18.99, 19.99, 20....
Class	2-Women's Activewear Bottoms	23-United Kingdom	Regular Prices DEPT-103 Women's Activewear	R	(Price Point - \$) 5.99, 6.99, 7.99, 8.99, 9.99, 10.99, 11.99, 12.99, 13.99, 14.99, 15.99, 16.99, 17.99, 18.99, 19.99, 20....

Figure 6-4 Regular Run - Price Matrix

Manage Recomm...Run OverviewLPO: 7541 (Reg) x

ScopeRulesResults

DEPT 105-Women's ActivewearCOMPANY 1-Retailer LtdPrice Zone Group 1-Primary Zone GroupStrategy AK_Price_Range_STR_01Start Week 2023-07-29End Week 2023-08-19

SelfInter ItemInter LocationPrice LadderPrice Matrix

Price Matrix LeaderPrice Matrix Follower

ActionsViewDetach

Price Matrix Id	Product	Leader Location	Leader Price Zone
1220	1-Women's Activewear Tops	1-Retailer Ltd	10-Australia
1221	1-Women's Activewear Tops	1-Retailer Ltd	23-United Kingdom
1222	1-Women's Activewear Tops	1-Retailer Ltd	24-United States
1241	2-Women's Activewear Bottoms	1-Retailer Ltd	10-Australia
1242	2-Women's Activewear Bottoms	1-Retailer Ltd	23-United Kingdom
1243	2-Women's Activewear Bottoms	1-Retailer Ltd	24-United States

ActionsViewDetach

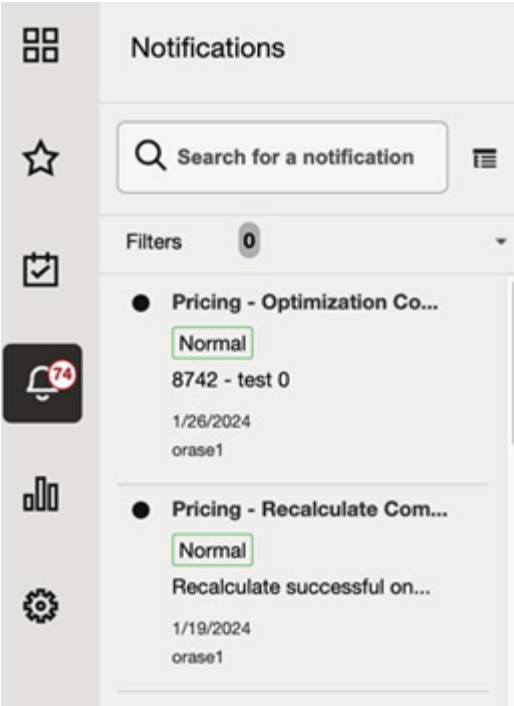
Leader Price	Follower Location	Follower Price Zone	Follower Price
5.99	1-Retailer Ltd	15-China	6.05
5.99	1-Retailer Ltd	17-Japan	6.05
5.99	1-Retailer Ltd	20-New Zealand	6.05
5.99	1-Retailer Ltd	21-South Korea	6.02
6.99	1-Retailer Ltd	15-China	7.06
6.99	1-Retailer Ltd	17-Japan	7.06
6.99	1-Retailer Ltd	20-New Zealand	7.06
6.99	1-Retailer Ltd	21-South Korea	7.03
7.99	1-Retailer Ltd	15-China	8.07
7.99	1-Retailer Ltd	17-Japan	8.07
7.99	1-Retailer Ltd	20-New Zealand	8.07
7.99	1-Retailer Ltd	21-South Korea	8.03
8.99	1-Retailer Ltd	15-China	9.08
8.99	1-Retailer Ltd	17-Japan	9.08
8.99	1-Retailer Ltd	20-New Zealand	9.08
8.99	1-Retailer Ltd	21-South Korea	9.04
9.99	1-Retailer Ltd	15-China	10.09
9.99	1-Retailer Ltd	17-Japan	10.09
9.99	1-Retailer Ltd	20-New Zealand	10.09
9.99	1-Retailer Ltd	21-South Korea	10.04

Regular - Run Optimization

After providing the scope and reviewing or updating the rules, the user can click the **Optimize** button in the footer. This action creates a new row in the Run Overview table, and the run moves to a Running status. Once optimization is complete, the run transitions to either Ready for Review or Failed status, depending on the outcome. If the run does not transition to Ready for Review status, you can update the scope or rules and re-optimize the run by clicking the **Re-Optimize** button in the footer.

A notification is also pushed to the user, informing the status of the optimization as shown in the following figure.

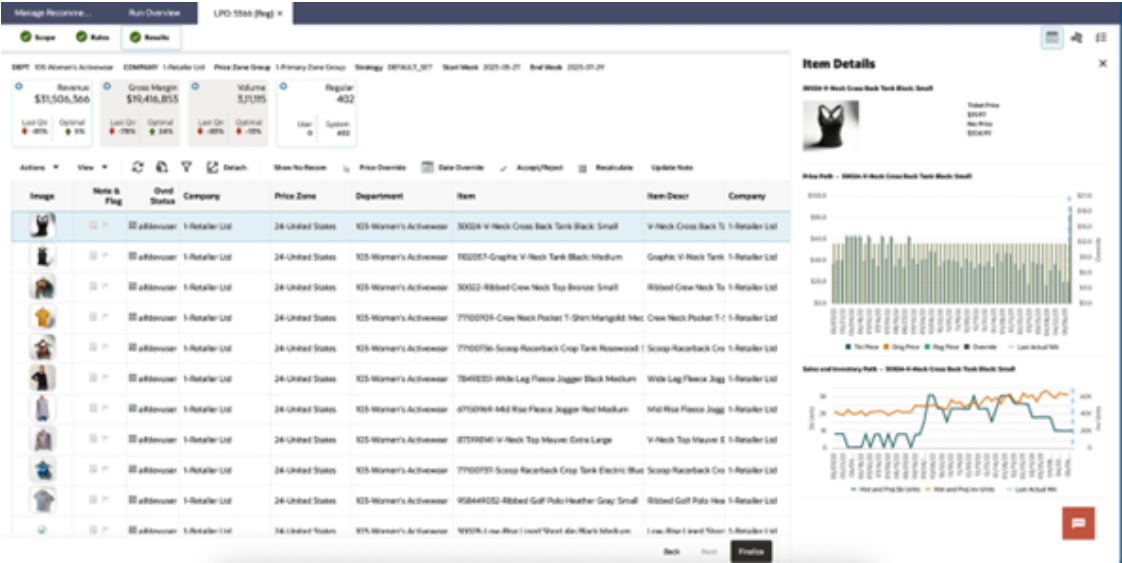
Figure 6-5 Optimization Complete Notification



Regular - Results

After the optimization run is complete and the run is in Ready for Review status, the results are displayed in the Results stage. In this stage, you can accept, reject, override any price recommendation, or add a promotion or markdown for non-recommended items. After you make changes, you can recalculate all the projected metrics.

Figure 6-6 Regular Run Results



Regular - Results - Possible Actions

From the Results stage, you can:

- Recalculate the projected metrics after making price overrides.
- Revisit earlier stages in order to make changes to various settings and then re-optimize the run.
- Leave the run in the optimization list without taking any actions. The user cannot delete the run; the user must be in Overview in order to delete a run.
- Accept, reject, or override the price recommendation for the effective week for the recommendations that are in Ready for Review status.

Regular - Results - Tiles

The results are displayed in four tiles: Revenue Tile, Gross Margin Tile, Volume Tile. Revenue, and Regular Tile. These results are the projected metrics over the life of the items, assuming that the user accept all recommendations. This is displayed in the local currency defined for the location of the run.

Figure 6-7 Results Tiles



Regular - Results - Bi-Contextual Area

In the BI/Contextual area on the right, you can see the item image, Ticket and Recommended Prices of the item, the full price path of the item represented in colors, and the Projected Sales and Inventory Path for the selected item.

Figure 6-8 Regular Run Results Contextual Area Item Details

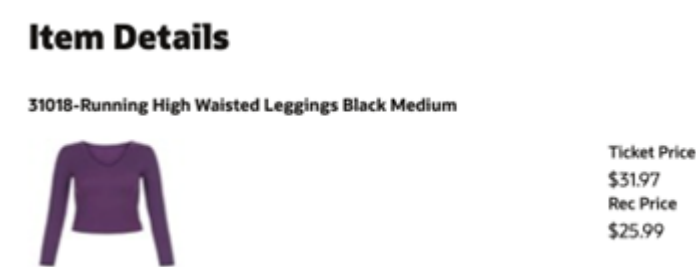


Figure 6-9 BI-Contextual Area Contextual Panel Price Path

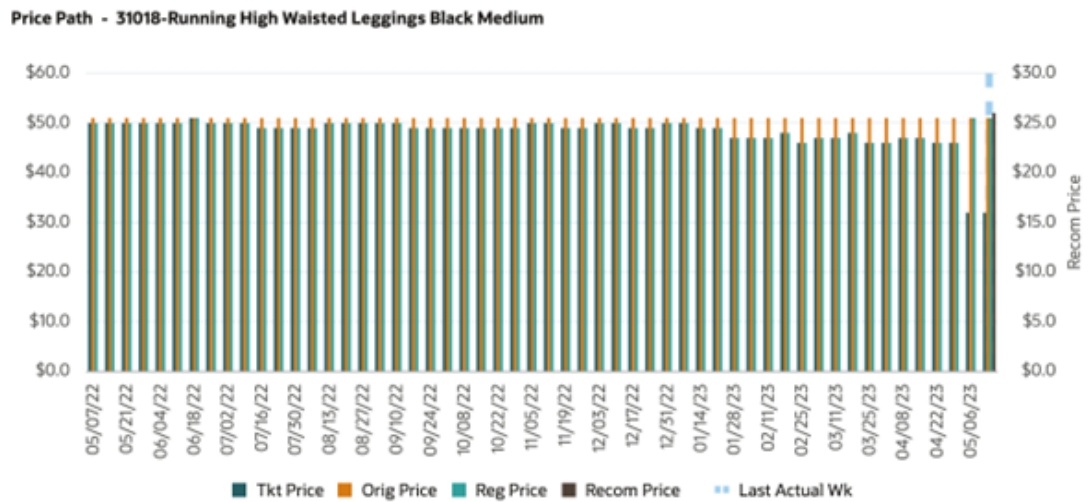
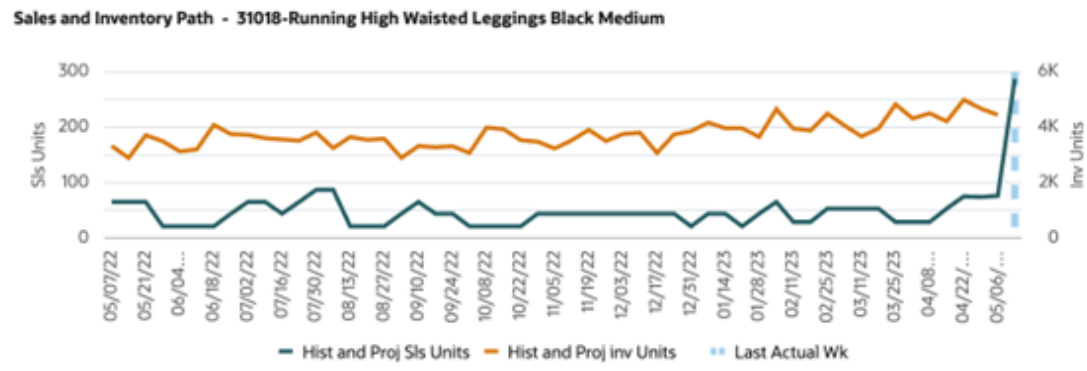


Figure 6-10 Bi-Contextual Area Sales and Inventory Path



Regular - Results - Rules Panel

The Rules panel lists all the Regular Pricing Optimization rule categories, along with the details of the rules applied on the what-if run. The Forecast and Non-Forecast (Regular Lite) rules are displayed in separate tabs and any rule violated is also indicated (marked in orange in following figure).

Figure 6-11 Rules Panel Non-Forecast

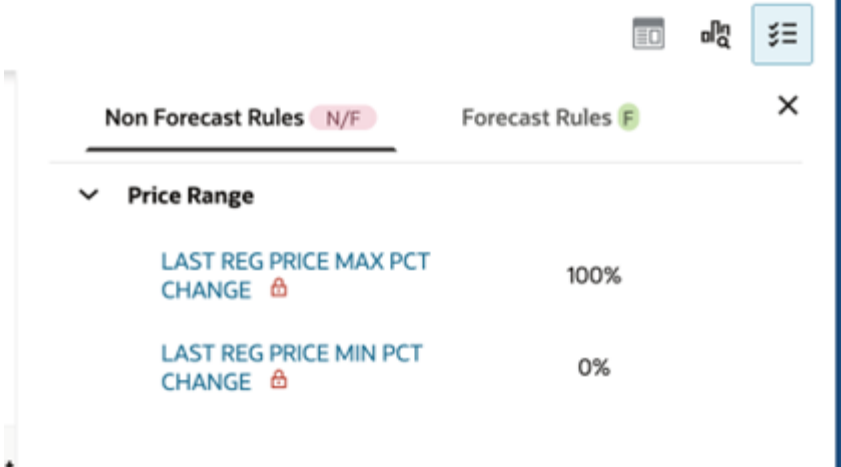
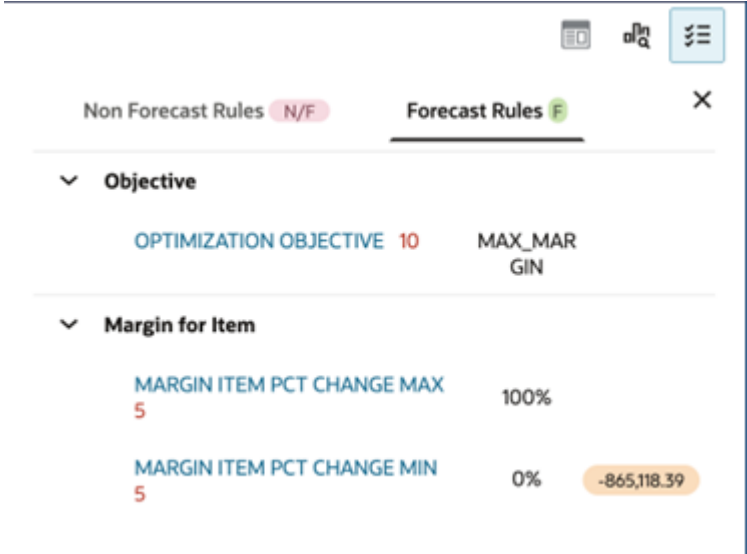


Figure 6-12 Rules Panel Forecast

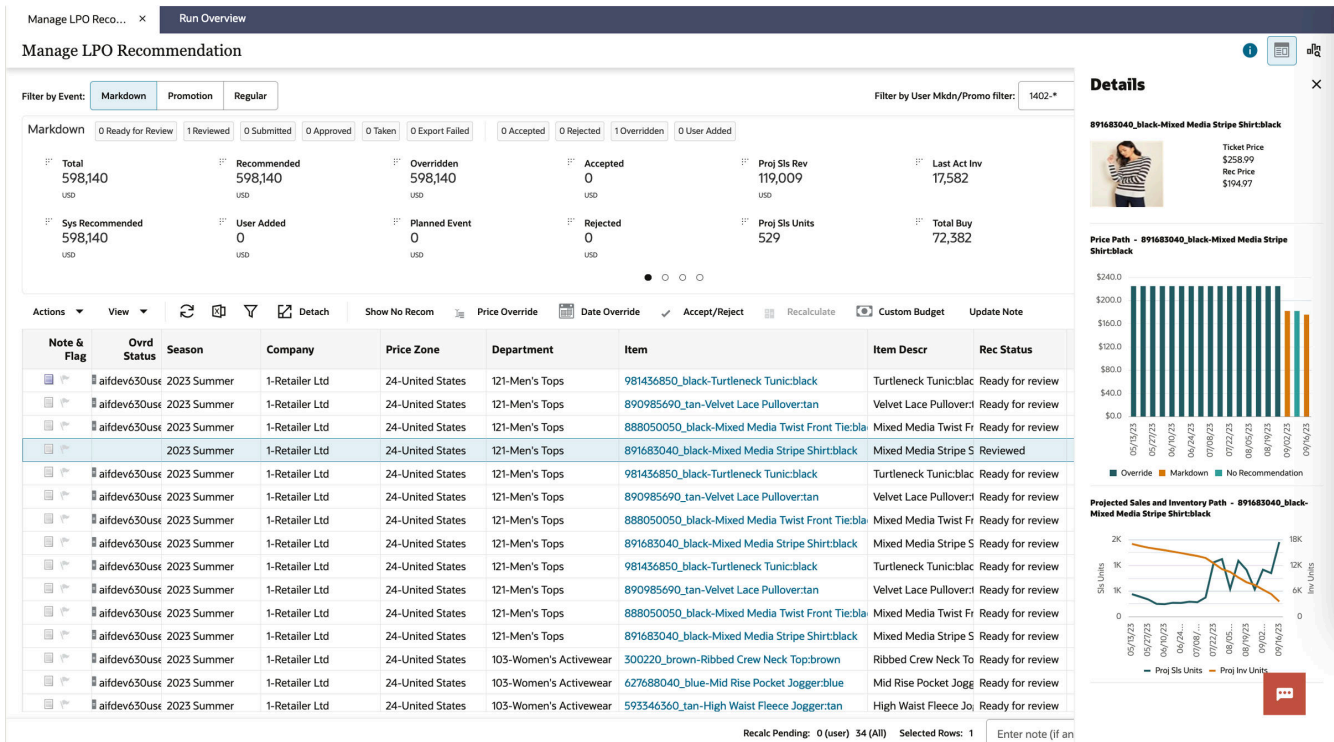


7

Manage LPO Recommendation

The Manage LPO Recommendation screen is used to review the recommendations, modify the recommendations, and send the recommendations to a price execution system. It consists of five components, as shown in the following figure: User Filter, Filter by Event, Summary Metrics, Reports, Item Recommendations table with bulk operations, and BI/Contextual Area.

Figure 7-1 Manage LPO Recommendation



Manage LPO Recommendation - UI Components

This section describes the components of the Manage LPO Recommendation UI.

User Filter

The User Filter, shown in the following figure, is used to filter by location, merchandise, price zone, season, effective week, and product attributes. Users can save multiple filters for each user and separate multiple user filters for promotion/markdown and regular recommendations. You can click the filter icon at the top to expand the panel. This panel is collapsed by default, except for the first time you log in or when you click Create New Filter. When you log in for first time, you must set the filter and select **Apply**. The set of merchandise or locations that will be available to you are based on the data security set for your user ID. For example, if a particular user ID cannot access the Europe locations, then that user will not be able to see any recommendations for Europe locations.

Figure 7-2 Filter by User Mkdn/Promo

Filter by User Mkdn/Promo filter: 1402-*

Last Act Inv
17,582

Total Buy
72,382

Merchandise Level

All

Merchandise

Location Level

All

Location

Season

All

Effective Week

All

Price Zone

All

Product Attributes - 0 Filter(s)

Apples & Pears-Caffeine
0 Filter(s)

Apples & Pears-Calories
0 Filter(s)

Apples & Pears-Color
0 Filter(s)

Apples & Pears-Cut
0 Filter(s)

Reset

Delete

Cancel

Apply

Item Descr	Rec Status	Tk
Turtleneck Tunic:blac	Ready for review	
Velvet Lace Pullover:1	Ready for review	
la Mixed Media Twist Fr	Ready for review	
Mixed Media Stripe S	Reviewed	
Turtleneck Tunic:blac	Ready for review	
Velvet Lace Pullover:1	Ready for review	
la Mixed Media Twist Fr	Ready for review	
Mixed Media Stripe S	Ready for review	
Turtleneck Tunic:blac	Ready for review	
Velvet Lace Pullover:1	Ready for review	
la Mixed Media Twist Fr	Ready for review	
Mixed Media Stripe S	Ready for review	
Ribbed Crew Neck To	Ready for review	
Mid Rise Pocket Jogge	Ready for review	
High Waist Fleece Jo	Ready for review	

Price Zone

All

Product Attributes - 0 Filter(s)

Apples & Pears-Caffeine
0 Filter(s)

Apples & Pears-Calories
0 Filter(s)

Apples & Pears-Color
0 Filter(s)

Apples & Pears-Cut
0 Filter(s)

Reset

Delete

Cancel

Apply

Figure 7-3 Filter by User Regular

Slack

Filter by User Regular filter:

1462-My Filter

0 User Added

Merchandise Level

All

Merchandise

Effective Week

☒ All

Location Level

All

Location

Price Zone

All

Product Attributes - 0 Filter(s)

Reset

Delete

Cancel

Apply

Selected Rows: 0

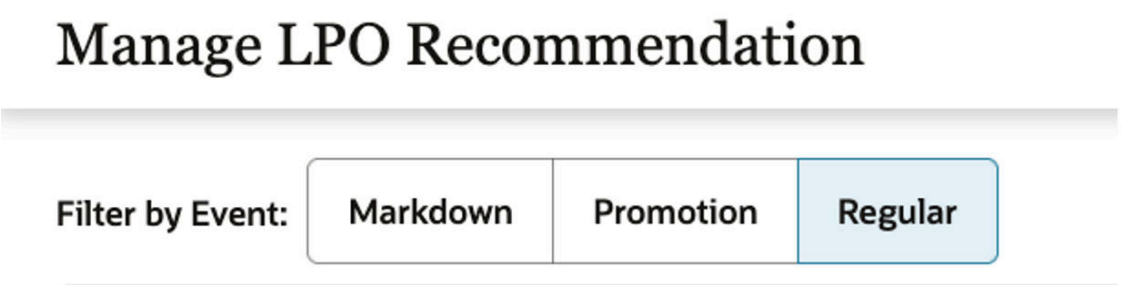
Enter note (if any) for webservice

Finish

Filter by Pricing Event

Filter by Event, shown in the following figure, is used to filter the recommendations by events such as Promotion, Markdown, No Recommendation, or Regular. Clicking each type will add the recommendations of that type to the table below.

Figure 7-4 Manage LPO Recommendations Filter by Event



Summary Metrics

Summary Metrics, shown in the following figure, displays the metrics in a film strip style, for Markdowns, Promotions, No Recommendation, and Regular recommendations. Each summary film strip can be customized to add, delete, or reorder from the list of available metrics. It shows the projected amount (budget used) for Accepted, Overridden, Recommended, User Added, Planned, and Rejected Promotion or Markdown recommendations. It also shows the count of recommendations (items) by recommendation status: Ready for Review, Reviewed, Submitted, and Approved and count of recommendations (items) by price change status: Accepted, Rejected, Overridden, or User Added. Further, this panel shows the running total of all selected item recommendations from the table below.

Figure 7-5 Summary Metrics Markdown

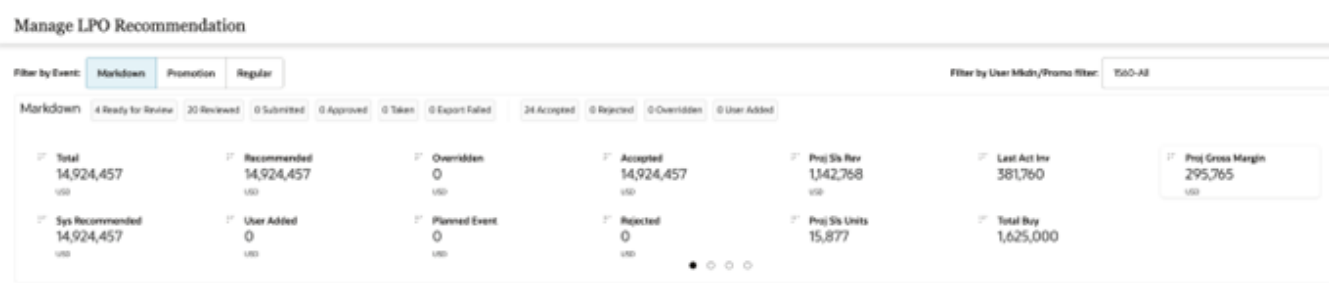


Figure 7-6 Summary Metrics Promotion

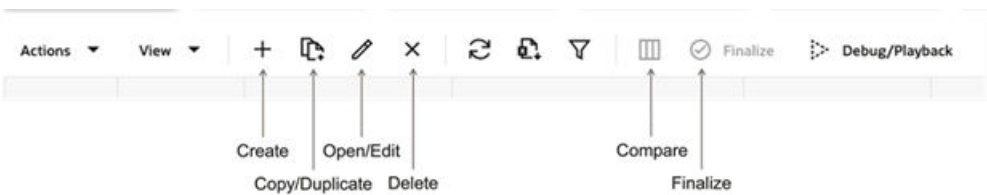
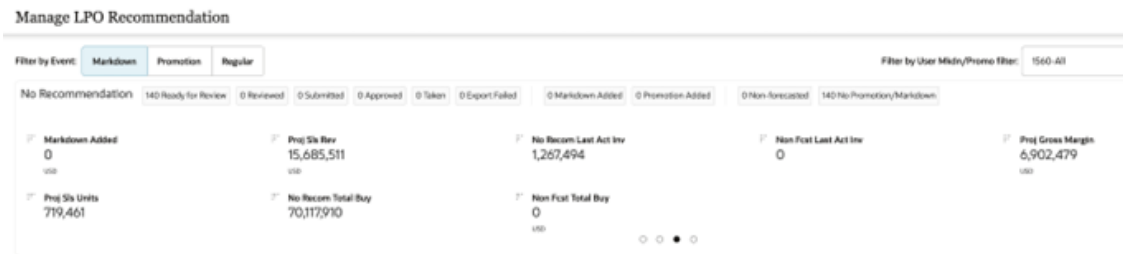


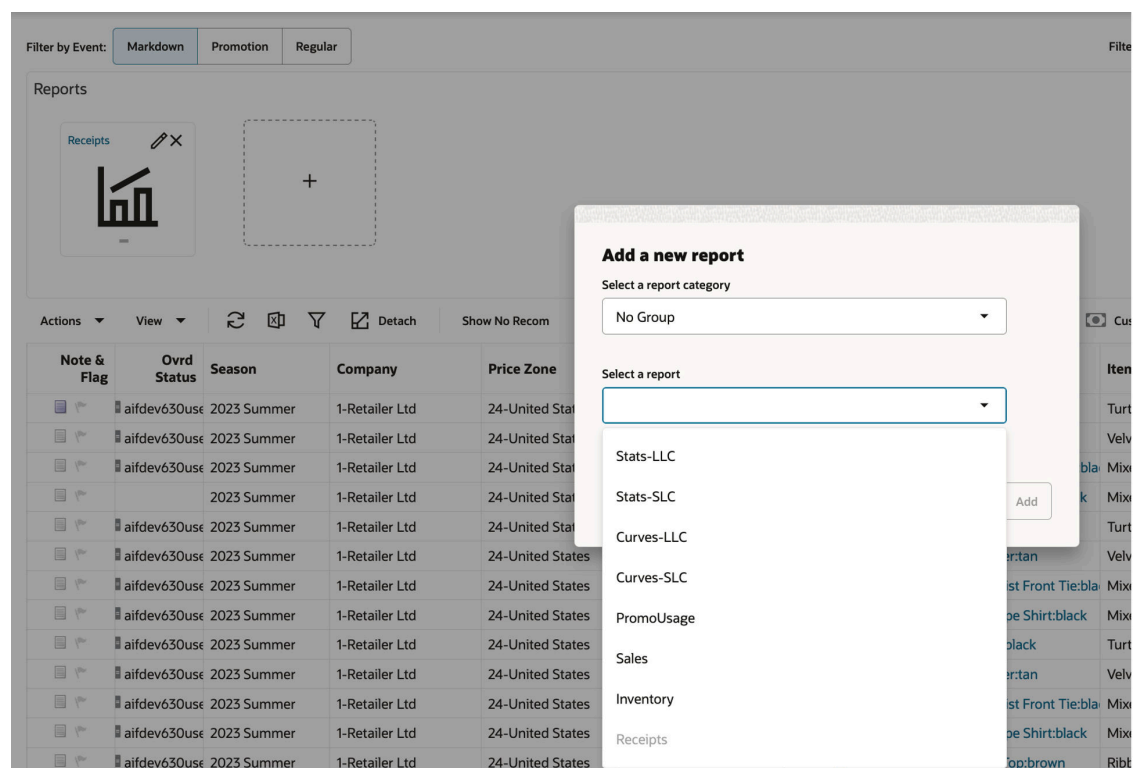
Figure 7-7 Summary Metrics No Recommendation



Reports

The Reports filmstrip allows you to add, delete, or reorder any reports that exist either in the Data Visualizer or in APEX. You must specify the report URLs in Manage System Configurations > RSE_DYNAMIC_URL. Clicking the Report Header link for each report navigates to the respective Data Visualizer or the source report page.

Figure 7-8 Reports



Item Recommendations with Bulk Actions

The Item Recommendations table, shown in the following figure, shows relevant information for each item. The table actions are used to select multiple items for a price change operation such as accept, reject, override, or add a promotion, markdown, or regular price change. A user can also move the effective start/end dates for a promotion/markdown. Once you make the necessary price or date changes, you can click **Recalculate**, which updates all the

projected metrics for the modified items. When you are satisfied with the recommendations, you can perform recommendation status operations such as Review, Submit, or Approve. Submit or Approve not only send recommendation to the Export Interface, but when integrated with RPCS, also push recommendations in corresponding statuses through a web service.

Figure 7-9 Item Recommendations

Actions View Show No Recom Price Override Date Override Accept/Reject Recalculate Custom Budget Update Note											
Note & Flag	Orvd Status	Season	Company	Price Zone	Department	Item	Item Descr	Rec Status	Tkt Price	Reg Price	Orig Price
		aifdev630usr 2023 Summer	1-Retailer Ltd	24-United States	121-Men's Tops	981436850_black-Turtleneck Tunic:black	Turtleneck Tunic:black	Ready for review	\$104.99	\$104.99	\$104.99
		aifdev630usr 2023 Summer	1-Retailer Ltd	24-United States	121-Men's Tops	890985690_tan-Velvet Lace Pullover:tan	Velvet Lace Pullover:tan	Ready for review	\$104.99	\$104.99	\$104.99
		aifdev630usr 2023 Summer	1-Retailer Ltd	24-United States	121-Men's Tops	888050050_black-Mixed Media Twist Front Tie:bla	Mixed Media Twist Fr	Ready for review	\$104.99	\$104.99	\$104.99
		2023 Summer	1-Retailer Ltd	24-United States	121-Men's Tops	891683040_black-Mixed Media Stripe Shirt:black	Mixed Media Stripe S	Reviewed	\$258.99	\$258.99	\$258.99
		aifdev630usr 2023 Summer	1-Retailer Ltd	24-United States	121-Men's Tops	981436850_black-Turtleneck Tunic:black	Turtleneck Tunic:black	Ready for review	\$104.99	\$104.99	\$104.99
		aifdev630usr 2023 Summer	1-Retailer Ltd	24-United States	121-Men's Tops	890985690_tan-Velvet Lace Pullover:tan	Velvet Lace Pullover:tan	Ready for review	\$104.99	\$104.99	\$104.99
		aifdev630usr 2023 Summer	1-Retailer Ltd	24-United States	121-Men's Tops	888050050_black-Mixed Media Twist Front Tie:bla	Mixed Media Twist Fr	Ready for review	\$104.99	\$104.99	\$104.99
		aifdev630usr 2023 Summer	1-Retailer Ltd	24-United States	121-Men's Tops	891683040_black-Mixed Media Stripe Shirt:black	Mixed Media Stripe S	Ready for review	\$258.99	\$258.99	\$258.99
		aifdev630usr 2023 Summer	1-Retailer Ltd	24-United States	121-Men's Tops	981436850_black-Turtleneck Tunic:black	Turtleneck Tunic:black	Ready for review	\$104.99	\$104.99	\$104.99
		aifdev630usr 2023 Summer	1-Retailer Ltd	24-United States	121-Men's Tops	890985690_tan-Velvet Lace Pullover:tan	Velvet Lace Pullover:tan	Ready for review	\$104.99	\$104.99	\$104.99
		aifdev630usr 2023 Summer	1-Retailer Ltd	24-United States	121-Men's Tops	888050050_black-Mixed Media Twist Front Tie:bla	Mixed Media Twist Fr	Ready for review	\$104.99	\$104.99	\$104.99
		aifdev630usr 2023 Summer	1-Retailer Ltd	24-United States	103-Women's Activewear	300220_brown-Ribbed Crew Neck Top:brown	Ribbed Crew Neck To	Ready for review	\$36.99	\$36.99	\$49.99

For details, see [Appendix: Promotion and Markdown Run Overview](#) and [Appendix: Regular Manage LPO Recommendation](#).

Table 7-1 Item Recommendations Actions

Field	Description
Action	Click the Note icon to add any text comment to the recommendation. The Flag icon is used to flag a recommendation. These two icons are also displayed in the Review Exception screen.
Actions	Price or Date override operation for the item is successful. Recalculate icon is added to denote that the recalculation of projected metrics is pending.
Actions	Price or Date override operation for the item is not successful. You must either modify the rounding criteria/tolerance used or modify the pricing logic (percentage versus price point).
Action - Wrap Text	Wrap the longer texts for better viewability.

Table 7-1 (Cont.) Item Recommendations Actions

Field	Description
Action - DD-MM-YY	When clicked, all the dates in the table are displayed in DD-MMM-YY format.

Table 7-2 Item Recommendations Status

Status	Description
Ready for Review	The optimization process is complete, and the run status and item recommendations are ready for review.
Reviewed	The analyst finished reviewing the price recommendations and changes the item recommendation status to Reviewed so that it is sent to the buyer for approvals.
Submitted	The recommendations have been reviewed and submitted or approved for execution. The recommendations are ready for export to other applications.
Approved	The recommendations have been reviewed and approved for execution. The recommendations are ready for export to other applications.
Rejected	The recommendations have been reviewed and rejected for execution.
Export Success	The export of recommendations to other systems have been successful.
Export Failed	The export of recommendations to other systems has failed.
Taken	The recommendations have been approved by an external system (for example, RPCS) and sent to LPO.
Auto Approved	The recommendations have been auto approved for execution as they have met the auto approval criteria.

BI/Contextual Area Components

This section describes the UI components of the BI/Contextual Area.

Bi/Contextual Area Job Status

The Job Status panel can be expanded whenever you select the Job Status icon on the top right corner of the screen. The Job Status panel lists the jobs performed on the items along with their status, date, and timestamps.

Figure 7-10 Job Status

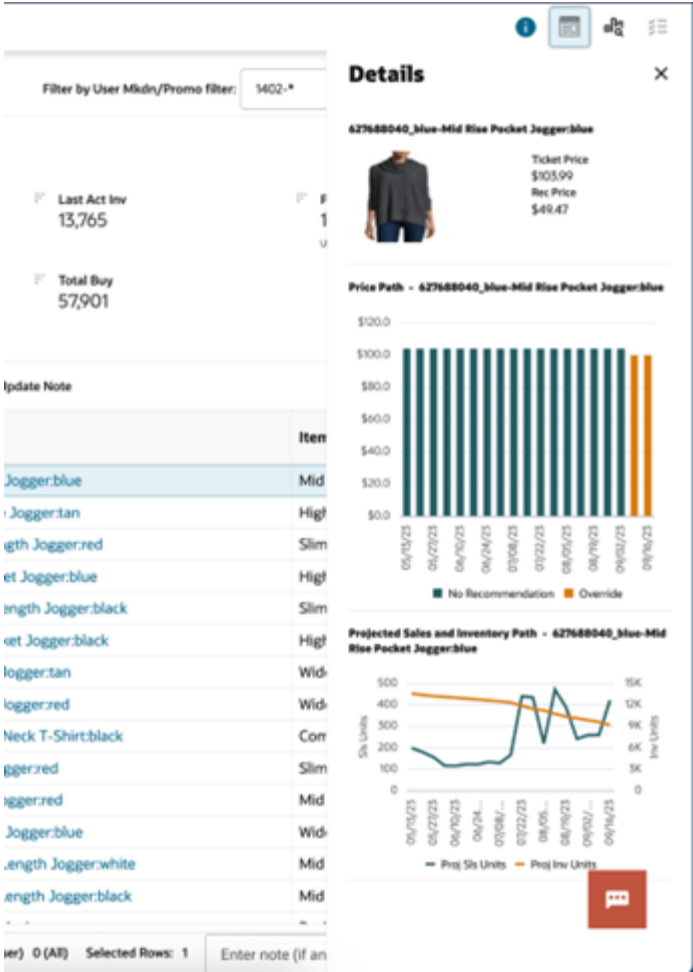
Job Status

Name	Process status	Start Date	End Date
Export To Excel	Successful	2025-05-12 10:00:49	2025-05-12 10:03:04
Export To Excel	Successful	2025-05-12 15:35:22	2025-05-12 15:35:44
Recalculate	Successful	2025-05-19 09:57:11	2025-05-19 09:57:17

Bi/Contextual Area Item Details

The Item Details area can be expanded whenever you select the item and click the Details icon on the top right corner of the screen. For the selected item, you can see the image of the item, projected price path, projected sales, inventory path, and projected budget usage over the life of the item.

Figure 7-11 Item Details



BI/Contextual Area Single Recommendation Information

The Single Recommendation Information area can be expanded whenever you select the item and click the Single Recommendation Information icon on the top right corner of the screen. For the selected item, you can a summary of the details, current and projected metrics, dates, run details, and so on, of the item.

Figure 7-12 Single Recommendation Information

Single Recommendation ...

Recommendation

Item

627688040_blue-Mid Rise Pocket Jogger:blue

Item Descr

Mid Rise Pocket Jogger:blue

Season

2023 Summer

Company

1-Retailer Ltd

Price Zone

24-United States

Tkt Price

\$103.99

Rec Price

\$49.47

Rec % off Tkt

52%

Rec Type

Markdown

Eff Start Dt

09/04/23

Eff End Dt

Ovrd Price

\$99.97

Ovrd Price % off Tkt

4%

Ovrd Price Type

Markdown

Mkdn Cnt

1

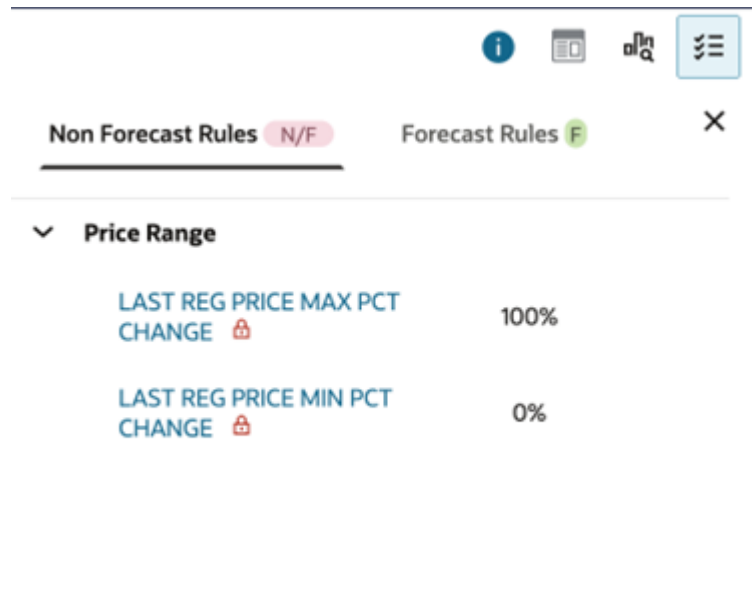
Promo Cnt

0

BI/Contextual Area Rules Panel

The Rules panel can be expanded whenever you select the item and click the Rules icon on the top right corner of the screen. For the selected item, you can see a summary of the rules applied on the item recommendation.

Figure 7-13 Rules Panel Regular



Manage LPO Recommendation User Actions

This section describes the user actions available for managing LPO recommendations.

Show No Recom

When the Show No Recom button on the table toolbar is clicked, the table displays all recommendations with the status Non-Forecasted or No Recommendation, as indicated in the Eff Rec Type column. For Regular Lite, only items with No Recommendation are shown.

- Non-Forecasted: Items that cannot be forecasted.
- No Recommendation: Items that have valid forecast data, but LPO does not recommend a new price and suggests retaining the current retail price.

Figure 7-14 Show No Recom

Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
Note & Flag	Order Status	Season	Company	Price Zone	Department	Item	Item Descr	Rec Status	ERP Rec Type	Tkt Price	Reg Price	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	988654950_black-Ribbed Scoop Neck T-Shirt/black	Ribbed Scoop Neck T-Shirt/black	Ready for review	No Recommendation	\$105.99	\$105.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	300280_black-Low Rise Lined Short 4in/black	Low Rise Lined Short 4in/black	Ready for review	No Recommendation	\$24.97	\$88.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	954329040_green-Golf Polo/green	Golf Polo/green	Ready for review	No Recommendation	\$105.99	\$105.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	966644320_blue-Ribbed Crew Neck T-Shirt/blue	Ribbed Crew Neck T-Shirt/blue	Ready for review	No Recommendation	\$109.99	\$109.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	1822007_grey-Ribbed Crew Neck Tank/grey	Ribbed Crew Neck Tank/grey	Ready for review	No Recommendation	\$71.97	\$105.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	895084440_grey-V Neck T-Shirt/grey	V Neck T-Shirt/grey	Ready for review	No Recommendation	\$105.99	\$105.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	1822007_green-Ribbed Crew Neck Tank/green	Ribbed Crew Neck Tank/green	Ready for review	No Recommendation	\$65.97	\$105.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	852666450_yellow-Sweatshirt/yellow	Sweatshirt/yellow	Ready for review	No Recommendation	\$144.99	\$144.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	852666450_red-Sweatshirt/red	Sweatshirt/red	Ready for review	No Recommendation	\$105.99	\$105.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	1822018_yellow-Graphic Crew Neck Tank/yellow	Graphic Crew Neck Tank/yellow	Ready for review	No Recommendation	\$105.99	\$105.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	3002005_off_white-Turtleneck Top/off_white	Turtleneck Top/off_white	Ready for review	No Recommendation	\$11.99	\$11.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	1822323_grey-Cinch Scoop Neck Crop Tank/grey	Cinch Scoop Neck Crop Tank/grey	Ready for review	No Recommendation	\$105.99	\$105.99	
		2023 Summer	1-Retailer Ltd	24-United States	105-Women's Activewear	91848910_white-V Neck Sweatshirt/tee/white	V Neck Sweatshirt/tee/white	Ready for review	No Recommendation	\$105.99	\$105.99	

Price Override

Price Override is used to either modify the discount (or price) for an item for which the system recommends a promotion or markdown or add a promotion or markdown to an item that did not receive a promotion or markdown. The former is counted towards Overrides, and the latter is counted towards User Added.

When you select recommendations and click **Price Override**, it displays a Price Override screen. You can select Price Type as Promotion or Markdown. Then, you can use either a percentage logic or a Price point logic. Depending on the supplied price ladders (options are price point or % off ladder), the price override is applied as follows:

Table 7-3 Price Override

Price Type	Logic	Price Ladder Assigned	Calculation of Override Price
Promotion	Percentage	Percent Off Original or Ticket Price ladder (for example, 5%, 10%, ...)	First % off ladders are converted into amounts either using the original or current price specified in the UI. After applying the discount as specified, the nearest price on the ladder subject to rounding criteria and tolerance is used.
Promotion	Percentage	Price point ladder (for example, 13.97, 15.97, 16.97, ...)	After applying the discount as specified, the nearest price on the ladder subject to rounding criteria and tolerance is used.
Promotion	Price point	Price point ladder (for example, 13.97, 15.97, 16.97, ...)	Price point is applied as selected from the drop-down list. If a price point higher than the current ticket price is selected, that item's price override will not be successful.
Markdown	Percentage	Percent off Original Price or Current ticket price ladder (for example, 10%, 20%, 30%...)	First % off ladders are converted into amounts either using the original or current price specified in the UI. After applying the discount as specified, the nearest price on the ladder subject to rounding criteria and tolerance is used.

Table 7-3 (Cont.) Price Override

Price Type	Logic	Price Ladder Assigned	Calculation of Override Price
Markdown	Percentage	Price point ladder (for example, 13.97, 15.97, 16.97...)	After applying the discount as specified, the nearest price on the ladder subject to rounding criteria and tolerance is used.
Markdown	Price point	Price point ladder (for example, 13.97, 15.97, 16.97, ...)	Price point is applied as selected from the drop-down list. If a price point higher than the current ticket price is selected, that item's price override will not be successful.

This can be illustrated through an example. Consider Original Price as 159.99 and Ticket Price as 127.99 (20% Off). Suppose the price ladder supplied is of type PT (Percentage Off Ticket Price), with points {0%, 5%, 15%, 20%, 25%, 30%}. If the user requests 22% and uses Original Price, then translating the PT ladder with % off from the Original Price provides the following results: {159.99, 151.99, 135.99, 127.99, 119.99, 111.99}. So, 22% off on the Original Price would give us 124.792. Depending on the tolerance and rounding criteria, different results are possible, as explained below.

- If tolerance is 0%, then 124.792 is not on the price ladder and the price override is unsuccessful.
- If tolerance is 3%, then the tolerance is $3\% \times 159.99 = 4.7997$. 124.792 ± 4.7997 gives a lower bound of 119.99 and upper bound of 129.59. This means that price points 119.99, 127.99 are available for to be selected, depending on the rounding logic. If rounding is up, then best price that is close to 124.792 and within tolerance of 3% would give 127.99. If rounding is down, then best price that is close to 124.792 and within tolerance of 3% would give 119.99

Similar to Accept/Reject operation errors, the price override can only be calculated on items that do not have pending calculations and are in Ready for Review status only.

Figure 7-15 Override Price percentage

Override Price

Select the set of recommendations

☐ All (35) ☒ Selected (1)

Specify the price override type (OR) recommendation type for revert

Markdown ▼

☒ Percentage ☐ Price Point ☐ Custom

Percentage Off

Ticket Price ▼

Percent

1 ▼ ^

Rounding

☒ Down ☐ Up

% Tolerance

5 ▼ ^

Revert Cancel Ok

Figure 7-16 Manage Override Price for Price Point

Override Price

Select the set of recommendations

☐ All (35) ☐ Selected (1)

Specify the price override type (OR) recommendation type for revert

Markdown ▼

☐ Percentage ☒ Price Point ☐ Custom

Price Ladder ▼ Price ▼

Required

Revert Cancel Ok

Date Override

Date Override is used to adjust the effective start and end dates for a promotion or the effective start date for a markdown recommendation. You can select the recommendations that are in Ready for Review status and click **Date Override**, which displays the Override Effective Dates screen, as shown in the following figure. You can select **Price Type** and then pick the corresponding dates from the date picker. The Price Type can be either Promotion or Markdown.

Figure 7-17 Date Override

Override Effective Dates

Select the set of recommendations

☐ All (35) ☒ Selected (1)

Select the price type of the recommendations

Markdown

Eff Start Dt

Input Date

<

September 2023

>

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

CancelOk

If you wanted to modify the effective start date for a Markdown recommendation, but accidentally selected both Promotion and Markdown recommendations, after the Date Override operation, the system will return a failure for the Promotion recommendation, as shown in the following figure. Successful date overrides are shown with a green check mark and a recalculate icon; the latter indicates that this item must be submitted for a recalculation in order to adjust the projected metrics due to the date override.

Figure 7-18 Results for Date Override Action

<div> <div>Actions</div> <div>View</div> <div> <div></div> <div></div> <div></div> <div></div> </div> <div>Details</div> <div>Price Override</div> <div>Date Override</div> <div>Accept</div> <div>Reject</div> <div>Recalculate</div> <div>Undo Review</div> <div>OK Custom Budget</div> </div>									
Actions	Item	Recommendation Status	Recommended Price Type	Effective Start Date	Effective End Date	Current Price	Recommended Price	Delta	Order
	0000190085435565-LONG SLEEVE TEE/BARY BLUE/SMALL	Ready for review	Promotion	04/24/17	04/30/17	\$35.97	\$21.58		
	0000190085326769-ZIP HOODIE/NOT SPECIFIED-SMALL	Ready for review	Markdown	04/26/17		\$35.97	\$31.47		
	0000190085302776-SHINY SHORTS/NOT SPECIFIED-X-LARGE	Ready for review	Promotion	04/24/17	04/30/17	\$19.97	\$11.98		
	0000190088913902-TRAINING CAPRI/LAVENDER-X-LARGE	Ready for review	Promotion	04/24/17	04/30/17	\$27.97	\$16.78		

Accept or Reject

Accept or Reject can be used to accept or reject the recommended price. Accept means that recommended price will be used for that item. Reject means that the item will be kept at its current ticket price. Accept or Reject operations can only be performed on items that do not have a Recalculate pending icon and are in Ready for Review status only; otherwise, it throws an error as shown in the following figures.

Figure 7-19 Accept/Reject Recommendation

Accept/Reject

Select the set of recommendations

☒ All (35) ☐ Selected (1)

Select the action to be performed

☐ Accept ☐ Reject

Cancel

Ok

Figure 7-20 Reject Recommendation Error

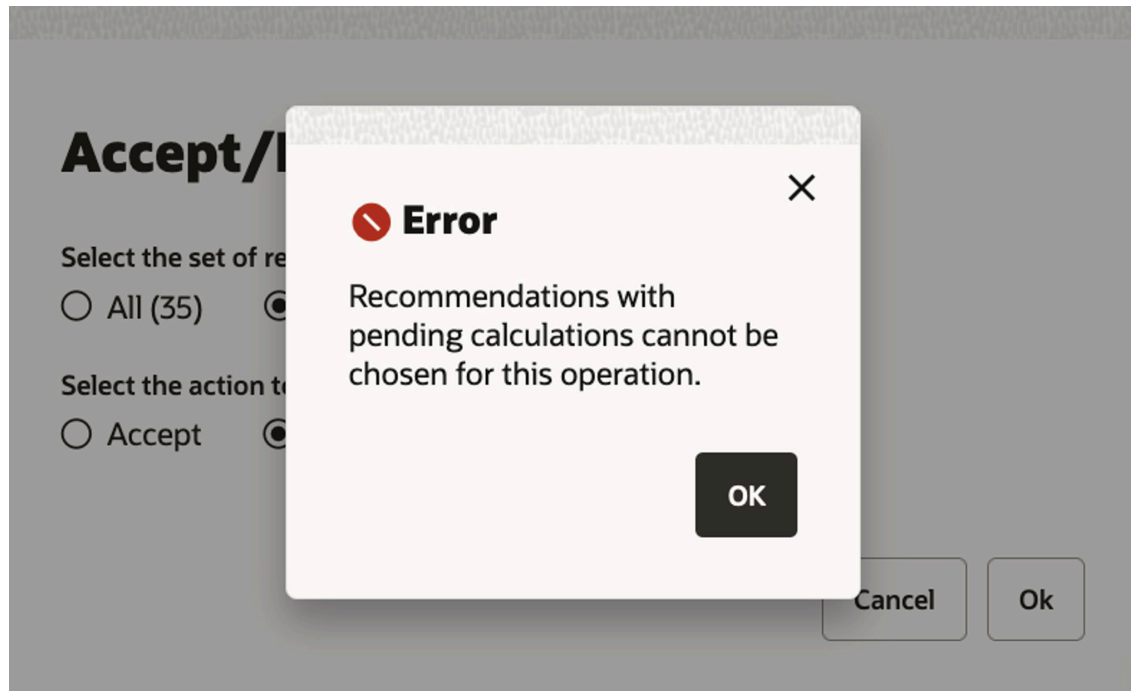
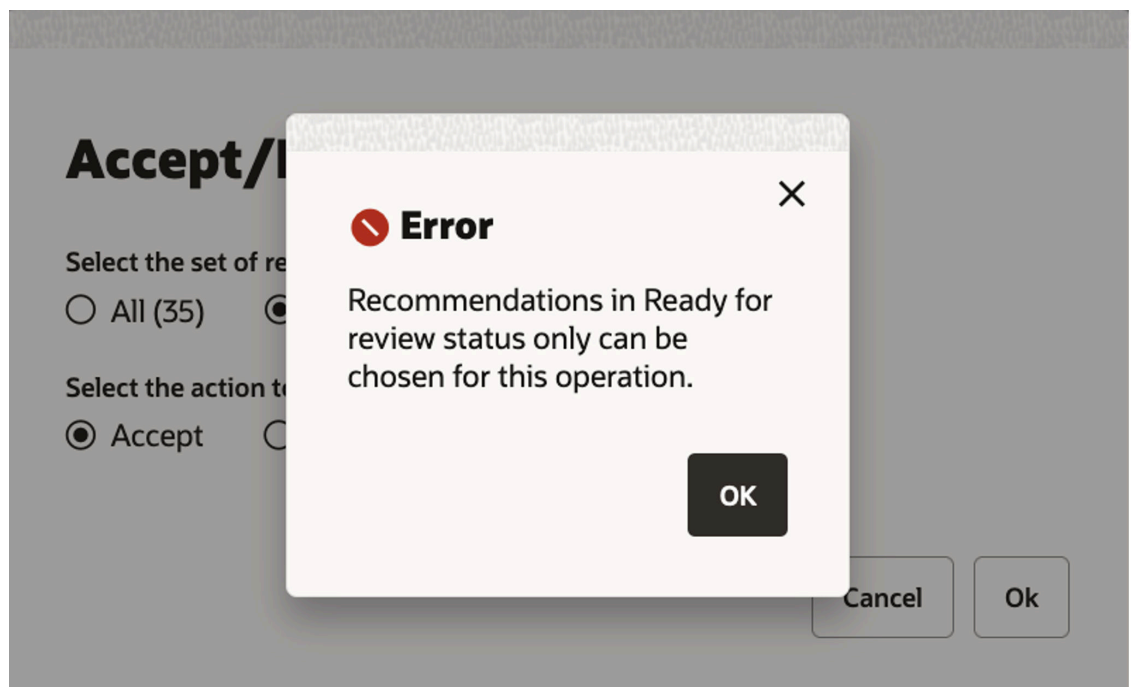


Figure 7-21 Accept Recommendation Error



Recalculate

After the price or date override is completed, clicking **Recalculate** recalculates all of the projected metrics, based on the overrides. A confirmation message is displayed once the button is clicked, and the projected metrics override is performed.

Custom Budget

The Custom Budget functionality allows you to pick recommendations that meet the budget for the specified time frame. For example, you might know the markdown budget for only the effective period or perhaps for the next two months and would like the system to pick recommendations that meet these criteria.

The user is not required to select recommendations for this operation, as this functionality considers all the items that satisfy the criteria specified in the User Filter. Clicking **Custom Budget** opens the Custom Optimize to Budget screen. Here, you can specify a budget for both promotions and markdowns together or separately, specify the time frame for this budget, specify the objective, and specify whether you want to retain any of the work done on the recommendations. By default, all the work done, such as Overrides, Accepted, Reviewed, and Submitted are retained and Planned Promotions are not included. Note that the Approved recommendations are always retained. Reset lets you reset prices back to the batch recommendations.

Figure 7-22 Custom Optimize to Budget

Custom Optimize to Budget

Specify all inputs for optimize or retain flags for revert. Max allowed recommendations is 500,000.

Total Budget \$266,570,000.0	Separate budgets <input type="checkbox"/>
Promotion Budget \$9,710,000.0	Markdown Budget \$256,860,000.0
Effective Week All	Ending Week 09/10/23 - 09/16/23
Budget Objective	

☒ Retain Overridden Promotions

☒ Retain Overridden Markdowns

☐ Include Planned Promotions

☒ Retain Approved

☒ Retain Reviewed

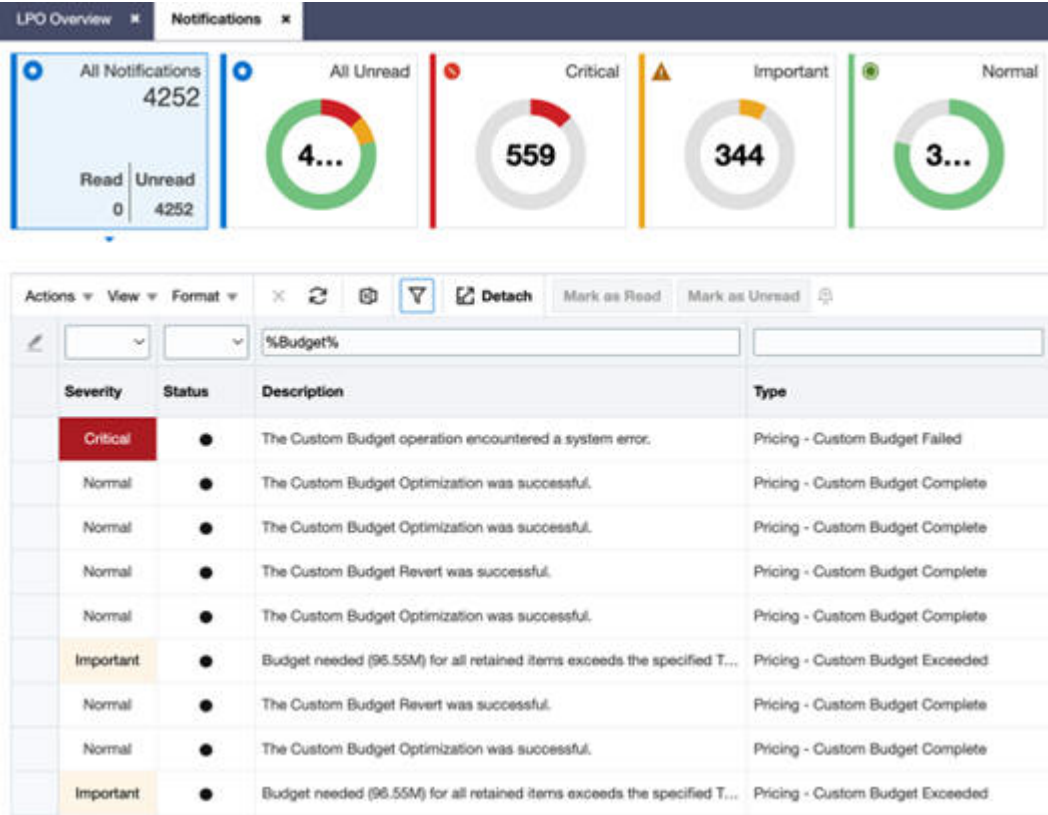
☒ Retain Submitted

RevertOptimizeCancel

When you select Reset or Optimize, the custom budget optimization job is submitted, and a push notification is sent to you to indicate the status of this job. It can be one of the following:

- Custom Budget Reset was successful.
- The Custom Budget Optimization was successful.
- Budget needed (1,234,567) for all retained items exceeds the specified Total Budget.
- Budget needed (1,234,567) for all retained items exceeds the specified Promotion Budget.
- Budget needed (1,234,567) for all retained items exceeds the specified Markdown Budget.
- The Custom Budget operation encountered a system error.

Figure 7-23 Custom Budget Notifications



Update Note

When you enter a note using abbreviations or short cuts (or even typos), you can select Generate, which make a GenAI call to expand or elaborate on the note, whenever possible.

Figure 7-24 Update Note

The screenshot shows the 'Update Note' form. It includes a title 'Note', a selection for the set of recommendations (All (562) or Selected (1)), and a text input field for the note. The note content is 'the invtry cnt of the item is 100 and unfulfilled'. Below the input field is a character count 'Enter 953 or fewer characters.' and three buttons: Generate, Cancel, and Save.

Note

Select the set of recommendations
☐ All (562) ☒ Selected (1)

Enter the note below:

the invtry cnt of the item is 100 and unfulfilled

Enter 953 or fewer characters.

Figure 7-25 Update Note Generate

The screenshot shows a dialog box titled "Note". It contains a section "Select the set of recommendations" with two radio buttons: "All (562)" and "Selected (1)". The "Selected (1)" option is selected. Below this is a text area labeled "Enter the note below:" containing the text "The inventory count of the item is 100 and unfulfilled orders are being requested by the buyer." At the bottom right are three buttons: "Generate", "Cancel", and "Save".

Finish

Clicking **Finish** in the footer allows the user to Review/Submit/Approve the item recommendation for selected items or all items.

Once the review of recommendations is complete by a user with the role of Analyst or Super User, the user can select the recommendations (items) and click Review. All reviewed recommendations are sent to the user with the Buyer role for Submit or Approve operations.

Figure 7-26 Finish

The screenshot shows a dialog box titled "Finish". It contains a section "Select the set of recommendations" with two radio buttons: "All (12)" and "Selected (1)". The "Selected (1)" option is selected. Below this is a section "Select the action to be performed" with three radio buttons: "Review", "Submit", and "Approve". The "Submit" option is selected. Below these are three more radio buttons: "Undo Review", "Undo Submit", and "Undo Approve". At the bottom right are two buttons: "Cancel" and "Ok".

Select the action to be performed:

- Review

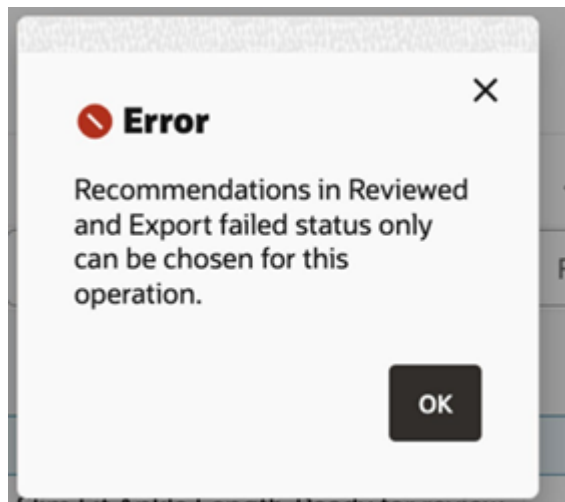
Once the review of recommendations is complete by a user with the role of Analyst or Super User, the user can select the recommendations (items) and click Review. All

reviewed recommendations are sent to the user with the Buyer role for Submit or Approve operations.

- Submit or Approve

A user with the Buyer role can Submit or Approve recommendations. An item that is in Reviewed status can only be Submitted or Approved; otherwise, it throws an error, as shown in the following figures.

Figure 7-27 Finish Reviewed and Export Failed Status



When you want to make further changes to the recommendations, you have the option to select the recommendations and click **Undo Review** / **Undo Submit** / **Undo Approve**, which will revert the recommendation status to Ready for Review.

Export

Once the recommendation has been Submitted or Approved, the recommendation goes to the export view and will be available for exporting as a flat file. When integrated with Oracle Pricing Cloud Service, the web service request is initiated when the user clicks the Approve or Submit button. There are two options for flat files, one at the STORE-level and another at the recommendation level on the location or price zone dimension, depending on the parameter (store or zone) specified for the export job. Export data is available in these views: PRO_PRICE_RECOM_INT_VW (store-level), PRO_PRICE_RECOM_LVL_INT_VW OR PRO_REG_PRICE_RECOM_INT_VW (store-level), and PRO_REG_PRICE_RECOM_LVL_INT_VW.

8

Innovation Workbench

The Innovation Workbench tables follow this convention: RSE prefix is used for core tables, PRO prefix is used for Promotion and Markdown Optimization tables, and PRO_REG prefix is used for Regular Pricing Optimization tables.

The following validation and result tables that are applicable for optimization are exposed in read-only mode. You can rearrange and analyze the results table for reporting purposes and examine the validation table to determine why a particular run has ended in Failed status. The tables are:

- PRO_RUN_SANITY_CHECK_RES_VW contains information on the errors/alerts/warnings generated.
- PRO_RUN_RECOM_OPT_RESULT contains all the results associated with lifecycle pricing: promotions, markdowns, and targeted pricing recommendations.
- PRO_REG_RUN_RECOM_OPT_RESULT contains all the results associated regular pricing recommendations.
- PRO_REG_RUN_SANITY_CHECK_RES_VW contains all the errors/alerts/warnings that were generated for the run.

Integration with Oracle Digital Assistant

LPO is integrated with a voice assistant such as Oracle Digital Assistant to handle complex workflow and business process questions. The functionality integrates voice assistants, machine learning techniques such as NLP, and a pricing solution such as LPO. This reduces the workflow for a typical user of such software and helps in handling complex business process use cases. For example, buyers or managers who manage price recommendations for retail apparel might be interested in use cases such as:

- Chain/country-level view. For example, a user can ask to see the performance of a department or all departments at the country level.

Exception management. For example, a user can ask to see the locations for a department where the margin improvements are lower than 5%.

- Approval process. A few use cases are possible. A user can approve all batch runs or select specific runs for approval. For example, a user can reject the price recommendations for runs that have a discount higher than 40% or approve all batch runs that show an improvement of 5% for revenue.
- Recalculate the key performance metrics. For example, a user can reject recommendations that have a discount higher than 70% and recalculate the metrics.
- Q&A. This integration helps in answering a user's most frequently asked questions. For example, a user can ask about promotions and the Q&A tab brings up the relevant questions and answers related to the term promotions.

A user can enable the Oracle Digital Assistant by clicking the microphone symbol. A user can say a particular question (utterance) to a voice-enabled device, and the utterance is converted into text and mapped to an intent/entity using existing Natural Language Processing algorithms such as Oracle Intelligent Bots. Once the intent/entity has been identified, it is sent to a pricing solution such as LPO, which then performs the appropriate processes and returns information.

Some examples of the conversation for the above use cases are provided below. The user utterance is prefixed with User and the response from ODA is prefixed with Bot.

Sample Conversation:

User: Give me optimal revenue for 310200_black across all price zones?

Bot: The optimal revenue for 310200_black across all price zones is \$6,037,232.19. Explain Show SQL

User: Explain

Bot: The optimal revenue for 310200_black is \$6,037,232.19, indicating a potential maximum earnings for this product. This value can serve as a benchmark for evaluating the product's current performance. To further optimize revenue, it may be beneficial to analyze pricing strategies across different zones and adjust them accordingly to maximize earnings. Additionally, monitoring sales trends and adjusting inventory levels can help to minimize losses and ensure the product is meeting its full revenue potential. Show SQL

User: Show SQL

Bot: Bot: Please give me a few moments to generate your query. Query Generated

User: What is the performance at loc 1 for 310190_blue?

Bot: The performance at loc 1 for 310190_blue is a revenue of \$30,432,810.86, which is higher than the optimal revenue of \$29,780,414.02. Explain Show SQL

User: Explain

Bot: The current revenue of \$30,432,810.86 for 310190_blue is 1.8% higher than the optimal revenue of \$29,780,414.02. This suggests that the product is performing better than expected. However, without historical data, it's difficult to determine if this is a trend or an anomaly. Nevertheless, the positive difference between current and optimal revenue indicates a strong performance at loc 1 for 310190_blue.

User: Give me optimal revenue for 310200_black for each price zone?

Bot: The optimal revenue for 310200_black varies across different price zones. The highest optimal revenue is \$5,862,708.03 in price zone 24, followed by \$78,640.64 in price zone 16, \$52,362.44 in price zone 19, \$25,502.90 in price zone 20, and \$18,018.18 in price zone 22.

User: Can you give me from highest to lowest?

Bot: The optimal revenue from highest to lowest is \$5,862,708.03 in price zone 24, \$78,640.64 in price zone 16, \$52,362.44 in price zone 19, \$25,502.90 in price zone 20, and \$18,018.18 in price zone 22.

User: Can you aggregate it over all price zones?

Bot: The aggregated optimal revenue across all price zones is \$6,037,232.19.

User: Give me the number of promotions used for 627688040_blue

Bot: Please provide either price zone or location to proceed.

User: Price zone 24

Bot: The number of promotions used for 627688040_blue at price zone 24 is 10523.788. Explain Show SQL

User: Explain

Bot: The total promotions used for 627688040_blue at price zone 24 is 10523.788, indicating a significant promotional activity for this product at this price zone. This high number of promotions could be a strategic move to drive sales, clear inventory, or increase brand visibility. However, without prior data, it's difficult to determine if this is an optimal performance or if there's room for improvement. Further analysis on sales data and customer response to these promotions would provide more insights on the effectiveness of this strategy.

User: How about markdowns?

Bot: The total markdowns used is \$17,188,948.53.

User: What departments are present in this division?

Bot: The departments present in this division are Women's Activewear, Women's Tops, Women's Bottoms, Beverages, Men's Activewear, Kitchen Appliances, and Men's Tops.

User: What is the optimal revenue for Beverages department?

Bot: The optimal revenue for the Beverages department is \$5,349,576.20.

User: Give me the remaining inventory for item 310200_black in all price zones except ones starting with s and i?

Bot: The total remaining inventory for item 310200_black in all price zones except ones starting with s and i is 71091 units.

User: Give me the remaining inventory for item 310200_black for price zone 19?

Bot: The remaining inventory for item 310200_black in price zone 19 is 3682.

Sample Conversation: Country-Level View for All Departments

User: "I would like to see how my stores in US are performing."

Bot: "Okay. It seems as if you want to take a look at the country-level metrics for stores. Please specify the location from the following: <America, Europe, E-commerce US>?"

User: "America."

Bot: "Do you want to review a specific department or all departments?"

User: "All departments."

Bot: "Aggregated metrics for the specified location(s) and all departments are: Revenue is 2756451.736, Change in Revenue is -1.49%, Gross Margin is 1868901.003, Change in Gross Margin is -3% , Sell Through is 0.6861, Change in Sell Through is 1.28%."

Sample Conversation: Country-Level View for Selected Departments

User: "I would like to see how my stores in US are performing."

Bot: "Okay. It seems as if you want to take a look at the country-level metrics for stores. Please specify the location from the following: <America, Europe, E-commerce US>?"

User: "America."

Bot: "Do you want to review a specific department or all departments?" **User:** "Specific Department."

Bot: "Which department are you interested in?"

User: "Womens Activewear"

Bot: "Aggregated metrics for the specified location(s) and department(s) are: Revenue is 2756451.736, Change in Revenue is -1.49%, Gross Margin is 1868901.003, Change in Gross Margin is -3% , Sell Through is 0.6861, Change in Sell Through is 1.28%."

Sample Conversation: Exception Management

User: "I want to see the locations that do not meet the approval criteria."

Bot: "Okay. It seems as if you are interested in finding exceptions. First, which department are you interested in?"

User: "Womens Activewear."

Bot: "What metric are you looking for: Revenue Improvement, Margin Improvement, Sellthrough Improvement, or Sellthrough?"

User: "Sellthrough."

Bot: "Please specify the threshold (for example, 15%) for identifying the poorly performing locations."

User: "10%."

Bot: "The location for Department Womens Activewear with Sellthrough below 10% is Company."

Bot: "Would you like to see the run summary for this Department and the location?"

User: "Yes."

Bot: "The metrics for run Copy_Of_test are: Revenue is 2756451.736, Change in revenue is -1.49%, Gross Margin is 1868901.003, Change in gross Margin is -3% , Sell through is 0.6861, Change in sell through is 1.28%."

Bot: "Would you like to approve the run - Yes/No?"

Depending on what the user answers here, the flow will be different. If the user says "Yes," then the user is taken to the Approval Use Case. If the user says "No," then the user is taken to Recalculate Use Case.

Sample Conversation: Approval Use Case-Single Run

User: "I want to review the metrics and would like to take care of run approvals today."

Bot: "Okay. It seems as if you are interested in approving runs. Do you want to approve all batch runs or a single location?"

User: "Single location."

Bot: "Which location are you interested in?"

User: "Company."

Bot: "Which department are you interested in?"

User: "Womens Activewear."

Bot: "The metrics for the run Weekly Run 04242017 are: Revenue is 2756451.736, Change in Revenue is -1.49%, Gross Margin is 1868901.003, Change in Gross Margin is -3% , Sell Through is 0.6861, Change in Sell Through is 1.28%."

Bot: "Would you like to approve the run - Yes/No?"

User: "Yes."

Bot: "The run has been approved, and the offers have been sent to the customers."

Bot: "Please let me know how can I help you with the LPO application."

Sample Conversation: Approval Use Case-All Batch Runs

User: "I want to review the metrics and would like to take care of run approvals today."

Bot: "Okay. It seems as if you are interested in approving runs. Do you want to approve all batch runs or a single location?"

User: "All batch runs."

Bot: "Which department are you interested in?"

User: "Womens Activewear."

Bot: "All five batch runs have been approved."

Bot: "Please let me know how can I help you with the LPO application."

Sample Conversation: Recalculate Use Case

User: "I want to review the metrics and would like to see whether to make any changes to the recommendations."

Bot: "Okay. It seems as if you are interested in accepting or rejecting recommendations. First, which location are you interested in?"

User: "Company."

Bot: "Which department are you interested in?"

User: "Womens Activewear."

Bot: "The metrics for run Copy_Of_test are Revenue is 2756451.736, Change in revenue is -1.49%, Gross Margin is 1868901.003, Change in gross Margin is -3% , Sell through is 0.6861, Change in sell through is 1.28%."

Bot: "Would you like to approve the run - Yes/No?"

User: "No."

Bot: "Would you like to ACCEPT/REJECT available recommendations? - ACCEPT/REJECT."

User: "ACCEPT."

Bot: "Would you like to ACCEPT promotion/markdown recommendation? - PROMOTION/MARKDOWN."

User: "Promotion."

Bot: "What is the maximum% discount criterion to accept Promotion recommendations?"

User: "40%."

Bot: "Promotion Price recommendations below 40% have been accepted."

Bot: "Would you like to recalculate the metrics again - Yes/No?"

User: "Yes."

Bot: "The run has been submitted for recalculating the metrics. To see the new metrics, please query the bot."

Bot: "Please let me know how I can help you next with the LPO application."

Sample Conversation: Department or Zone-Level Performance Analysis with Explainability

User: Give me optimal revenue for 310200_black across all price zones?

Bot: The optimal revenue for 310200_black across all price zones is \$6,037,232.19. Explain Show SQL

User: Explain

Bot: The optimal revenue for 310200_black is \$6,037,232.19, indicating a potential maximum earnings for this product. This value can serve as a benchmark for evaluating the product's current performance. To further optimize revenue, it may be beneficial to analyze pricing strategies across different zones and adjust them accordingly to maximize earnings.

Additionally, monitoring sales trends and adjusting inventory levels can help to minimize losses and ensure the product is meeting its full revenue potential. Show SQL

User: Show SQL

Bot: Please give me a few moments to generate your query. Query Generated

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Bot: The performance at loc 1 for 310190_blue is a revenue of \$30,432,810.86, which is higher than the optimal revenue of \$29,780,414.02. Explain Show SQL

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Nevertheless, the positive difference between current and optimal revenue indicates a strong performance at loc 1 for 310190_blue.

User: Give me optimal revenue for 310200_black for each price zone?

Bot: The optimal revenue for 310200_black varies across different price zones. The highest optimal revenue is \$5,862,708.03 in price zone 24, followed by \$78,640.64 in price zone

16, \$52,362.44 in price zone 19, \$25,502.90 in price zone 20, and \$18,018.18 in price zone 22.

User: Can you give me from highest to lowest?

Bot: The optimal revenue from highest to lowest is \$5,862,708.03 in price zone 24, \$78,640.64 in price zone 16, \$52,362.44 in price zone 19, \$25,502.90 in price zone 20, and \$18,018.18 in price zone 22.

User: What is the optimal revenue for Beverages department?

Bot: The optimal revenue for the Beverages department is \$5,349,576.20.

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Bot: The total remaining inventory for item 310200_black in all price zones except ones starting with s and i is 71091 units.

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User: How about markdowns?

Bot: The total markdowns used is \$17,188,948.53.

User: What departments are present in this division?

Bot: The departments present in this division are Women's Activewear, Women's Tops, Women's Bottoms, Beverages, Men's Activewear, Kitchen Appliances, and Men's Tops.

User: Give me the remaining inventory for item 310200_black for price zone 19?

Bot: The remaining inventory for item 310200_black in price zone 19 is 3682.

Sample Conversation: Department or Zone-Level Performance Analysis with Explainability

User: What is life cycle optimization?

Bot: Lifecycle optimization, also known as Lifecycle Pricing Optimization (LPO), is used to determine the optimal pricing recommendations for promotions, markdowns, or targeted offers. It provides answers to questions such as which items to promote, when to promote, how deep to promote, and who to target. LPO caters to retailers interested in optimizing their pricing strategies to maximize profits.

User: How can I delete a run?

Bot: Runs can be deleted, depending on the status of the run and the permissions a specific user has. A user with Administrator permissions can delete any run except for one that has a status of Running. Users can delete any runs they have created that do not have a status of Running. They cannot delete runs created by another user or runs with an Auto run status. More than one run can be selected for deletion at the same time.

User: where is the task pane located?

Bot: The Task Pane is located on the left side of the application. It is used to navigate between LPO Overview, Forecasting, and Manage Recommendations. Users can also use this to navigate between the applications.

User: why am I getting a run not optimized error?

Bot: You are getting a "Run Not Optimized" error because the optimization is not complete. This error occurs when the run is in the "Worksheet" status, and you try to go to the "Results" stage. The optimization process is not finished, and therefore, the results are not available. Additionally, the error can also occur if there are mapping errors in the assortment data, or if the POG set has multiple assortments mapped to it and at least one of them has mapping errors.

User: what is pro_merch_rpm_flg, whats the default value?

Bot: PRO_MERCH_RPM_FLG is a configuration parameter that serves as a flag to identify whether to publish markdown recommendations to RPM. The default value of PRO_MERCH_RPM_FLG is N.

User: what are the configurations for integrating with pricing cloud services

Bot: To integrate with Pricing Cloud services, additional configuration parameters must be set. These parameters include the Pricing CS username and password, which must be added under the credential store for Merchandise Pricing CS Access. The credential store can be managed using the UI screen for Control and Tactical Center -> Manage Credential Stores.

The configuration parameters for integration with Retail Pricing Cloud Service are listed in Table 12-5, which includes parameters such as IO_MERCH_RMS_REPL_PATH, IO_MERCH_RMS_VERSION, and IO_MERCH_RMS_AUTH_SERVICE_TYPE. These parameters are used to determine the path of the Rest service, the RMS version to use for publishing replenishment parameters, and the authentication type to use for IPO-IO RMS integration.

User: what are the configuration parameters for integrating with pricing cloud services

Bot: The configuration parameters for integrating with Pricing Cloud services are listed in Table 12-5. These parameters include PRO_MERCH_RPM_FLG, PRO_MERCH_RPM_HOSTNAME, PRO_MERCH_RPM_CONTEXT_ROOT, PRO_MERCH_RPM_CLEARANCE_PATH, PRO_MERCH_RPM_PORT, PRO_MERCH_RPM_HTTP_PROXY_HOSTNAME, PRO_MERCH_RPM_HTTP_PROXY_PORT, and PRO_MERCH_RPM_HTTPS_PROXY_PORT. Additionally, the Pricing CS username and password must be added under the credential store for Merchandise Pricing CS Access.

User: what exceptions does LPO Forecasting support?

Bot: LPO forecasting supports exceptions based on sell thru and returns. This includes the sell thru exception, which occurs when the Sell thru end of life is lower than the sell thru exception threshold for any product, and the returns exception, which occurs when the Forecast return % is greater than the return exception threshold for any product.

User: what are the Foundation jobs in POM

Bot: The Foundation jobs in POM are not explicitly listed in your data. However, it does mention that batch jobs are necessary to put the system on a batch schedule and that some of the jobs require relevant configuration parameters to be specified with client-specific values.

User: what are the Foundation jobs in POM that load product hierarchy

Bot: The foundation jobs in POM that load product hierarchy are:

- ORASE_START_BATCH_JOB
- ORASE_START_BATCH_REFRESH_RESTRICTION_JOB
- ORASE_START_BATCH_SET_ACTIVE_JOB
- ORASE_START_BATCH_END_JOB
- RSE_WEEKLY_INPUT_FILES_START_JOB
- WEEKLY_INPUT_FILES_WAIT_JOB
- WEEKLY_INPUT_FILES_VAL_JOB
- WEEKLY_INPUT_FILES_COPY_JOB
- RSE_WEEKLY_INPUT_FILES_END_JOB

- RSE_DIMENSION_LOAD_START_END_JOB
- RSE_DIMENSION_LOAD_START_START_JOB
- RSE_REGULAR_MAIN_LOAD_JOB
- RSE_LOC_SRC_XREF_LOAD_JOB
- RSE_PROD_SRC_XREF_LOAD_JOB
- RSE_LOC_HIER_LOAD_JOB
- RSE_LOC_HIER_TC_LOAD_JOB
- RSE_LOC_HIER_DH_LOAD_JOB
- RSE_FISCAL_MAIN_LOAD_JOB
- RSE_PROD_HIER_LOAD_JOB
- RSE_PROD_TC_LOAD_JOB
- RSE_PROD_DH_LOAD_JOB
- RSE_PROD_GROUP_LOAD_JOB
- RSE_PRICE_ZONE_LOAD_START_JOB

User: How can I allocate budgets for markdowns and promotional activities in our retail strategy?

Bot: To allocate budgets for markdowns and promotional activities in a retail strategy, the system allows for separate budgets for promotions and markdowns. A budget can be fed in at the run's merchandise setup level or it can be fed in at the run's merchandise processing-level. The interface allows the user to provide separate budgets or a combined budget for promotions and markdowns. The relevant fields from the interface are: slspr_rtl_amt (promotion budget), slscl_rtl_amt (clearance budget), loc_exchange_rate, mcal_wid, delete_flg, prod_dh_wid, org_dh_wid.

10

Common UI Components

This chapter describes the common UI components.

Icons

The following icons are used in the user interface. Certain icons have slightly different definitions, depending on the context.

Table 10-1 Icons





















Icon	Description
	Copy a run.
	Create. Create a row. Create a run.
	Detach
	Delete. The object deleted depends on the context.
	Edit. Change status.
	Embedded help.
	Export to Excel. Export all.
	Freeze.
	Go to top.
	Go up.
	Go to bottom.
	Go down.
	Move selected item to another list.
	Progress indicator. The indicator changes mode when the application is processing data.
	Filter/Query by example.
	Refresh.
	Remove all items form list.
	Remove selected items from list.
	Required.
	Select date.

Table 10-1 (Cont.) Icons

Icon	Description
	Wrap.

Buttons

Buttons are used to perform certain actions and for navigation.

Table 10-2 Buttons

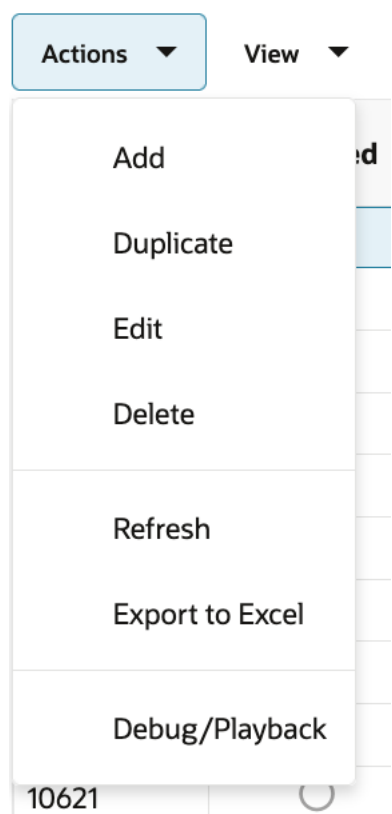
Button	Description
Action	Provides access to the following actions: Save, Optimize, Re-Optimize, Reviewed, Save, Recalculate, and Submit.
Back	Used to return to the previous train stop.
Cancel	Used to close a dialog box without making a selection.
Clear Selection	Clears the selected rows list.
Next	Moves to the next train stop.
Save	Saves the existing settings.
Select All	In Business Rules - Pricing Groups, selects the entire set of rows displayed.
Accept All	In Results, accepts all the price recommendations.

Pull-Down Menus

The user interface has two pull-down menus that provide access to a variety of functionality.

The Actions pull-down menu provides functionality that you use to manipulate the application data.

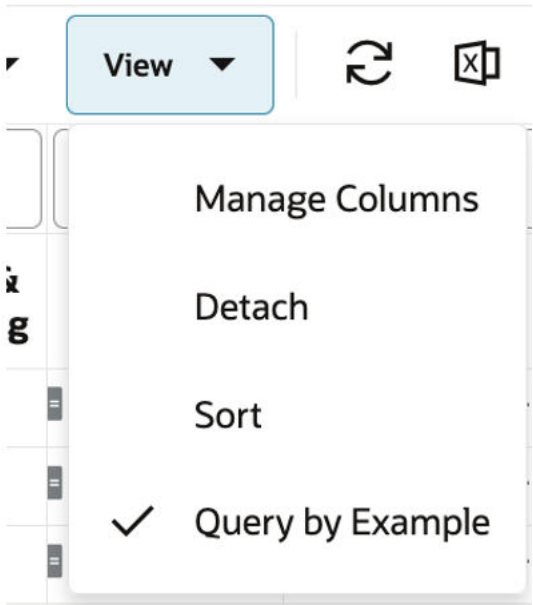
Figure 10-1 Actions Pull-Down Menu



Action	Description
Create Run	In Run Overview, takes you to the Optimization Setup train stop.
Copy Run	In Run Overview, used to create a duplicate of an existing run.
Delete Run	In Run Overview, used to delete a run.
Export to Excel	Used to export the set of rows displayed to Excel.
Add	In Business Rules-Pricing Groups, used to add data.
Edit	In Business Rules-Pricing Groups, used to edit data.
Delete	In Business Rules-Pricing Groups, used to delete data.
Create	In Fixture and Product Data, used to create.

The View pull-down menu can be used to adjust how the display is organized.

Figure 10-2 View Pull-Down Menu



The options provided are:

Action	Description
Manage Columns	Provides the ability to choose/hide columns and reorder them.
Detach	Maximizes the table to fit your browser.
Sort	Provides the ability to specify up to three columns to sort the data in ascending or descending order for each column.
Query by Example (Filter Options)	Query by Example can be turned off or on by clicking the option in View menu or by clicking the Query by Example icon in the table toolbar. Clicking the icon displays empty text boxes over the table. You can filter the table data based on the filter on each column.

Query Builder

The Query Builder allows you to build a complex query, with a grouping of columns in the Manage LPO Recommendation and AND/OR logical operators within and between groups (for example, Recommended Price Type = Markdown and (Brand = Green or Markdown Number <= 2) and Remaining Inventory (at BOP>5) between 10 and 20).

Figure 10-3 Access Query Builder

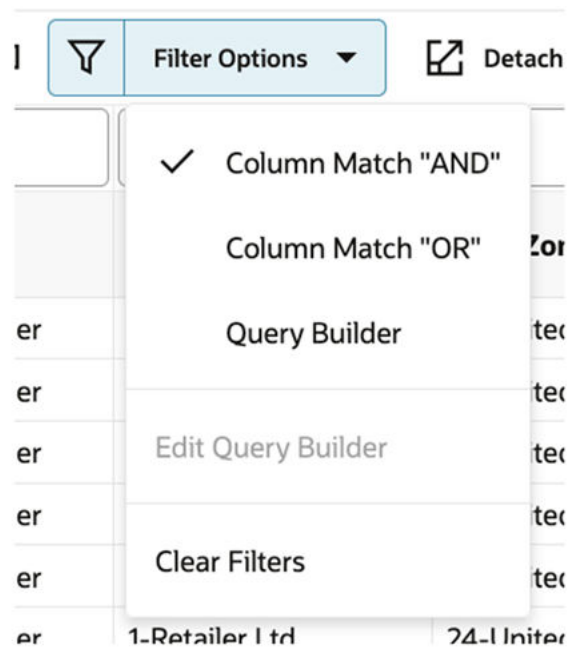


Figure 10-4 Query Builder

Query Builder

Filter Column Names

Column Name	Add All
Note & Flag	Add
Ovrd Status	Add
Season	Add
Company	Add
Price Zone	Add
Department	Add
Item	Add
Item Ext Code (Hidden)	Add
Item Name (Hidden)	Add
Item Descr	Add
Rec Status	Add
Tkt Price	Add
Reg Price	Add
Orig Price	Add
Eff Price	Add
Eff Rec Type	Add

Selected Columns

Clear Selections

Item

=

Required

AND OR

Department

=

Required

AND OR

Rec Status

=

Required

Load Query

Save Query

Cancel

OK

Charts

Certain stages have associated charts available on the right-hand side of the display that list data in a tabular format.

Process Train

The process train displays the stages of LPO. The current stage is highlighted.

Embedded Help

Embedded help, which you access by clicking the Question Mark icon, provides additional information about the details required by certain fields.

Process Indicator

At the top of the user interface, the red horizontal line is a process indicator (that goes from left to right) that you can use to monitor the status of a user action such as clicking Refresh to refresh the table or screen.

Search

In certain cases, you can customize your search, using advanced search capabilities to specify the search criteria.

A

Appendix: Oracle Retail AI Foundation Cloud Services Overview

Oracle Retail AI Foundation Cloud Services provides advanced analytical insights to drive the end-to-end retail process. The foundation provides out-of-the-box analytics that are purpose built for end business users with a workflow and a user experience. The foundation also provides the ability to create a retailer's own AI/ML models and then invoke and infuse those results into the business process as well as create application extensions with Oracle's Application Express.

For information about the Control and Tactical Center, see the latest AIF User Guide on the Oracle Help Center.

Oracle Retail AI Foundation Cloud Services includes the features described below.

Advanced Clustering utilizes machine learning techniques to cluster stores based upon similar selling patterns, providing a more customer-centric set of clusters to drive assortment decisions. The capability also provides the ability to cluster based upon other metrics and attributes such as space to drive assortment space optimization.

Customer Segmentation provides the ability to utilize historical performance, customer loyalty information and demographics to segment customers to utilize in downstream processes.

Attribute Extraction automates the attribution process by extracting attributes from product descriptions.

Customer Decision Trees provide the ability to understand exactly how your customer is shopping their assortment. Are they coming in for a specific brand, product, size? This then enables you to utilize these insights within planning as dynamic attributes to pivot from your static merchandise hierarchy to analyze your assortment decisions in the way in which your customer is shopping.

Demand Transference drives insights into the overall uniqueness of items and the potential demand transferable to other items which is then utilized in assortment recommendations for both assortment planning as well as space optimization.

Profile Science helps retailers understand how to break their buys by size, looking at not just historical sales but also where there were stock outs and missed opportunities.

Affinity Analysis identifies associations across products and product types such as halo and cannibalization. These insights can help drive the overall decisioning of process of promotion planning and impact analysis.

Innovation Workbench enables data scientists to create their own AI/ML models with open-source programming language as well as SQL.

Each of these capabilities can further fuel data-driven decisions for retailers.

B

Appendix: Promotion and Markdown Pricing Optimization Rules

This table provides information about the Promotion and Markdown Pricing Optimization rules.

Rule Category	RULE_NAME	Rule Description	Type
Budget	PRO_BUDGET_FLG	Allocate Budget	SWITCH - Yes/No
	SWITCH - Yes/No	Planned Promotions Included in Budget	SWITCH - Yes/No
	PRO_BASE_TOTAL_BUDGET	Total Budget for Base Scenarios	NUMBER
Exit Date	ABSOLUTE_EXIT_DATE	Date that an item must exit by.	DATE
	REFERENCE_DATE_TYPE_FOR_EXIT	Reference Date (Choose Options) <ul style="list-style-type: none"> Model Start Date First Receipt Date Final Shipment Date 	RADIO BUTTON
	EXIT_FISCAL_WEEK	Specify the weeks to exit or fiscal week for exit (Choose Options) <ul style="list-style-type: none"> All Start Months Each Start Month Separately Exit Fiscal Week 	RADIO BUTTON, followed by NUMBER depending on the option chosen
	PRO_PRICING_OBJECTIVE	Choose one of the objectives: <ul style="list-style-type: none"> Maximize Revenue Maximize Gross Margin Maximize Revenue from Salvage Maximize Gross Margin from Salvage 	RADIO BUTTON
Post-Processing	PRO_RUNG_TIER_DISC_PCT	The descriptions and ranges for the discount tier labels	PERCENTAGE
Sell-Through	MIN_OH_INV_PCT	Minimum on hand inventory threshold percentage for the item to be eligible for a recommendation	PERCENTAGE
	PRO_SALVAGE_VALUE	Salvage value of the product after the season ends (default is 0)	PERCENTAGE
	PRO_ST_HARD_TGT_FLG	Default value for sell-through hard target flag	Yes/No
	PRO_ST_END_REGULAR_SEASON	Percentage of sell-through for each individual product at end of regular periods	PERCENTAGE

Rule Category	RULE_NAME	Rule Description	Type
Targeted Offer Temporal	PRO_ST_END_CLEARANCE_SEASON	Percentage of sell-through for each product at end of clearance season	PERCENTAGE
	PRO_OFFERMAX	Maximum No. of Offers	NUMBER
	PRO_TR_NO_TOUCH_END_LIFE	No touch period at the end of life	NUMBER (1-52)
Pricing Group	PRO_TR_NO_TOUCH_AFTER_LANDING	No touch period after landing	NUMBER(1-52)
	MKDN_ALL_NOTHING	Markdown all or nothing	Yes/No
	MKDN_NONE	No markdown	Yes/No
	PROM_ALL_NOTHING	Promote all or nothing	Yes/No
	PROM_ATMOST_ONE	Promote at most one	Yes/No
	SAME_PROMO_MKDN_DISC	Impose same promotion and markdown discount	Yes/No
	PRO_SAME_PRICING_TOLERANCE	Percentage difference allowed between two or more product for same Pricing Group	PERCENTAGE
	SAME_MKDN_DISC	Impose same markdown discount	Yes/No
Markdown	SAME_PROMO_DISC	Impose same promotion discount	Yes/No
	PROM_NONE	No promotion	Yes/No
	PRO_MAX_ABSOLUTE_MKDN	Absolute maximum discount percentage for markdowns over the entire season	PERCENTAGE
	PRO_MR_MKDN_START_DAY	Day of the week markdown starts	DAYS OF THE WEEK
	PRO_TR_LENGTH_OF_MKDN	Length of markdown as a percentage of the whole season	percentage
	PRO_MR_MIN_COST	Markdown recommendations at least equal to the cost of the product	Yes/No
	PRO_MR_ABS_MAX_MKDN_DISC_PCT	Maximum absolute markdown discount percentage	PERCENTAGE
	PRO_MR_OTHER_MKDN_MAX_DISC_PCT	Maximum discount percentage for markdowns other than the first one	PERCENTAGE
	PRO_MR_FIRST_MKDN_MAX_DISC_PCT	Maximum discount percentage for the first markdown	PERCENTAGE
	PRO_MR_MAX_NUM_MKDN	Maximum number of markdowns allowed for an item in the life or season	NUMBER
	PRO_MR_OTHER_MKDN_MIN_DISC_PCT	Minimum discount percentage for markdowns other than the first one	PERCENTAGE
	PRO_MR_FIRST_MKDN_MIN_DISC_PCT	Minimum discount percentage for the first markdown	percentage

Rule Category	RULE_NAME	Rule Description	Type
Promotion	PRO_MIN_NUM_OF_MKDN_ITEMS	Minimum number of markdown items	NUMBER
	PRO_MR_MIN_TIME_BETWEEN_MKDN	Minimum time separation between any two consecutive markdowns	NUMBER
	PRO_PR_PROMO_END_DAY	Day of the week promotions ends	DAYS OF THE WEEK
	PRO_PR_PROMO_START_DAY	Day of the week promotions starts	DAYS OF THE WEEK
	PRO_PR_FIRST_PROMO_MAX_DISC_PCT	Default maximum discount percentage for the first promotion	percentage
	PRO_PR_FIRST_PROMO_MIN_DISC_PCT	Default minimum discount percentage for the first promotion	PERCENTAGE
	PRO_TR_LENGTH_OF_PROMOTIONS	Length of promotion as a percentage of the whole season	PERCENTAGE
	PRO_PR_OTHER_PROMO_MAX_DISC_PCT	Maximum discount percentage for promotions other than the first one	PERCENTAGE
	PRO_TR_MAX_LENGTH_OF_PROMOTION	Maximum length (weeks) of a promotion	NUMBER
	PRO_PR_MAX_NUM_PROMOS	Maximum number of promotions allowed for an item in the life or season	NUMBER
	PRO_PR_OTHER_PROMO_MIN_DISC_PCT	Minimum discount percentage for promotions other than the first one	PERCENTAGE
	PRO_MIN_NUM_OF_PROMOTION_ITEMS	Minimum number of promotion items	NUMBER
	PRO_PR_MIN_TIME_BETWEEN_PROMOS	Minimum time separation between any two consecutive promotions	NUMBER
	PRO_PR_MIN_COST	Promotions recommendations cannot be lower than the cost of the product.	Yes/No

C

Appendix: Regular Pricing Optimization Rules

This table provides information about the Regular Pricing Optimization rules.

Rule Sub Category	Rule Name	Rule Description	Rule Datatype	Requires Forecast?
Pack Pricing	RPO_SIMPLE_PACK_SELLABLE	Total price of the simple pack (multiple units of the same item) should be lower than the total price of the single item but at least this fixed value.	NUMBER	N/F
	RPO_SIMPLE_PACK_SELLABLE_PCT	Total price of the simple pack (multiple units of the same item) should be lower than the total price of the single item but at least this percentage value of the total price of the single item.	PERCENTAGE	N/F
	RPO_COMPLEX_PACK_SELLABLE	Total price of the complex pack should be lower than the total price of its components by at least this fixed value.	NUMBER	N/F
	RPO_COMPLEX_PACK_SELLABLE_PCT	Total price of the complex pack should be lower than the total price of its components by at least this percentage value of the total price of its components.	PERCENTAGE	N/F
Competitor and CPI	RPO_COMP_MATCH_HIGHER	Price of the item needs to be higher than the competitor price by this value.	NUMBER	N/F
	RPO_COMP_MATCH_HIGHER_PCT	Price of the item will need to be this much percentage higher than the competitor price.	PERCENTAGE	N/F

Rule Sub Category	Rule Name	Rule Description	Rule Datatype	Requires Forecast?
	RPO_COMP_MATCH_LOWER	Price of the item needs to be lower than the competitor price by this value.	NUMBER	N/F
	RPO_COMP_MATCH_LOWER_PCT	Price of the item will need to be this much percentage lower than the competitor price.	PERCENTAGE	N/F
	RPO_CPI_PCT_CHANGE_MAX	Consumer Price Index will need to be within this maximum percentage tolerance of a base historical CPI (e.g. previous year).	PERCENTAGE	F
	RPO_CPI_PCT_CHANGE_MIN	Consumer Price Index will need to be within this minimum percentage tolerance of a base historical CPI (e.g. previous year).	PERCENTAGE	F
Cost Change	RPO_COST_CHANGE	If the cost of the item increases/decreases by this amount, regular price for the item must increase or decrease accordingly.	NUMBER	N/F
	RPO_COST_PCT_CHANGE	Percentage of the cost change passed on to the regular price for the item. 100% means the regular price of the item must reflect the entire cost increase/decrease	PERCENTAGE	N/F

Rule Sub Category	Rule Name	Rule Description	Rule Datatype	Requires Forecast?
Goal	RPO_OPTIMIZATION_OBJECTIVE	Optimization goal for pricing. Required for running optimization. RULE_VALUE should be set as one of the following: MAX_MARGIN, MAX_REVENUE, MAX_VOLUME.	TEXT	F
Inter-Item	RPO_INTER_ITEM_DIFF_MAX	Products in Set A need a price less or equal than this value compared to items in Set B.	NUMBER	N/F
	RPO_INTER_ITEM_DIFF_MAX_PCT	Products in Set A need a price percentage less or equal than this value compared to items in Set B.	PERCENTAGE	N/F
	RPO_INTER_ITEM_DIFF_MIN	Products in Set A need a price greater or equal than this value compared to items in Set B.	NUMBER	N/F
	RPO_INTER_ITEM_DIFF_MIN_PCT	Products in Set A need a price percentage greater or equal than this value compared to items in Set B.	PERCENTAGE	N/F
Inter-Loc/PZ	RPO_INTER_LOC_DIFF_MAX	Regular price for the same product in location A need a price less or equal by this value compared to same product in location B.	NUMBER	N/F
	RPO_INTER_LOC_DIFF_MAX_PCT	Regular price for the same product in location A need a percentage price less or equal by this value compared to same product in location B.	PERCENTAGE	N/F

Rule Sub Category	Rule Name	Rule Description	Rule Datatype	Requires Forecast?
Margin for Item	RPO_INTER_LOC_DIFF_MIN	Regular price for the same product in location A need a price greater or equal by this value compared to same product in location B.	NUMBER	N/F
	RPO_INTER_LOC_DIFF_MIN_PCT	Regular price for the same product in location A need a percentage price greater or equal by this value compared to same product in location B.	PERCENTAGE GE	N/F
	RPO_LIST_MARGIN_ITEM_MAX	List Margin for each item in the group/product hierarchy node needs to be less or equal than this value.	NUMBER	N/F
	RPO_LIST_MARGIN_ITEM_MAX_PCT	List Margin for each item in the group/product hierarchy node needs to be less or equal than this percentage value.	PERCENTAGE GE	N/F
	RPO_LIST_MARGIN_ITEM_MIN	List Margin for each item in the group/product hierarchy node needs to be greater or equal than this value.	NUMBER	N/F
	RPO_LIST_MARGIN_ITEM_MIN_PCT	List Margin for each item in the group/product hierarchy node needs to be greater or equal than this percentage value.	PERCENTAGE GE	N/F
	RPO_MARGIN_ITEM_MAX	Margin for each item in the group/product hierarchy node needs to be less or equal than this value.	NUMBER	F

Rule Sub Category	Rule Name	Rule Description	Rule Datatype	Requires Forecast?
Margin for Group	RPO_MARGIN_ITEM_MAX_PCT	Margin for each item in the group/product hierarchy node needs to be less or equal than this percentage value.	PERCENTAGE	F
	RPO_MARGIN_ITEM_MIN	Margin for each item in the group/product hierarchy node needs to be greater or equal than this value.	NUMBER	F
	RPO_MARGIN_ITEM_MIN_PCT	Margin for each item in the group/product hierarchy node needs to be greater or equal than this percentage value.	PERCENTAGE	F
	RPO_MARGIN_ITEM_PCT_CHANGE_MAX	Margin for each item in the group/product hierarchy node needs to have a maximum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F
	RPO_MARGIN_ITEM_PCT_CHANGE_MIN	Margin for each item in the group/product hierarchy node needs to have a minimum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F
	RPO_LIST_MARGIN_MAX	List Margin for group of items needs to be less or equal than this value.	NUMBER	N/F
	RPO_LIST_MARGIN_MAX_PCT	List Margin for group of items needs to be less or equal than this percentage value.	PERCENTAGE	N/F
	RPO_LIST_MARGIN_MIN	List Margin for group of items needs to be greater or equal than this value.	NUMBER	N/F

Rule Sub Category	Rule Name	Rule Description	Rule Datatype	Requires Forecast?
	RPO_LIST_MARGIN_MIN_PCT	List Margin for group of items needs to be greater or equal than this percentage value.	PERCENTAGE	N/F
	RPO_MARGIN_MAX	Margin for group of items needs to be less or equal than this value.	PERCENTAGE	F
	RPO_MARGIN_MAX_PCT	Margin for group of items needs to be less or equal than this percentage value.	PERCENTAGE	F
	RPO_MARGIN_MIN	Margin for group of items needs to be greater or equal than this value.	NUMBER	F
	RPO_MARGIN_MIN_PCT	Margin for group of items needs to be greater or equal than this percentage value.	NUMBER	F
	RPO_MARGIN_PCT_CHANGE_MAX	Margin for group of items needs to have a maximum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F
	RPO_MARGIN_PCT_CHANGE_MIN	Margin for group of items needs to have a minimum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F
Price Range	RPO_LAST_REG_PRICE_MAX_CHANGE	Item needs to have a maximum price change equal to this value compared to the last known regular price of the same item or a similar item.	NUMBER	N/F

Rule Sub Category	Rule Name	Rule Description	Rule Datatype	Requires Forecast?
	RPO_LAST_REG_PRICE_MAX_PCT_CHANGE	Item needs to have a maximum percentage price change equal to this value compared to the last known regular price of the same item or a similar item.	PERCENTAGE	N/F
	RPO_LAST_REG_PRICE_MIN_CHANGE	Item needs to have a minimum price change equal to this value compared to the last known regular price of the same item or a similar item.	NUMBER	N/F
	RPO_LAST_REG_PRICE_MIN_PCT_CHANGE	Item needs to have a minimum percentage price change equal to this value compared to the last known regular price of the same item or a similar item.	PERCENTAGE	N/F
	RPO_PRICE_MAX	Price of item needs to be less or equal than this value.	NUMBER	N/F
	RPO_PRICE_MIN	Price of item needs to be greater or equal than this value.	NUMBER	N/F
Pricing Group	RPO_WITHIN_GROUP_AVERAGE_TOLERANCE	Price for the products within the group must be the average current regular price of the group, subject to tolerance equal to this value. To set equal to the average, tolerance should be set to 0.	NUMBER	N/F

Rule Sub Category	Rule Name	Rule Description	Rule Datatype	Requires Forecast?
	RPO_WTHN_GROUP_AVERAGE_TOLERANCE_PCT	Price for the products within the group must be the average current regular price of the group, subject to tolerance as percentage of the average price. To set equal to the average, tolerance should be set to 0.	PERCENTAGE	N/F
	RPO_WTHN_GROUP_DIFF_TOLERANCE	Products within a single group need to have similar price with a tolerance equal to this value. To set equality within the group, tolerance should be set to 0.	NUMBER	N/F
	RPO_WTHN_GROUP_DIFF_TOLERANCE_PCT	Products within a single group need to have similar price with a percentage tolerance equal to this value. To set equality within the group, tolerance should be set to 0.	PERCENTAGE	N/F
	RPO_WTHN_GROUP_HIGHEST_TOLERANCE	Price for the products within the group must be the highest current regular price of the group, subject to tolerance equal to this value. To set equal to the highest, tolerance should be set to 0.	NUMBER	N/F
	RPO_WTHN_GROUP_HIGHEST_TOLERANCE_PCT	Price for the products within the group must be the highest current regular price of the group, subject to tolerance as percentage of the highest price. To set equal to the highest, tolerance should be set to 0.	PERCENTAGE	N/F

Rule Sub Category	Rule Name	Rule Description	Rule Datatype	Requires Forecast?
	RPO_WTHN_GROUP_LOWEST_TOLERANCE	Price for the products within the group must be the lowest current regular price of the group, subject to tolerance equal to this value. To set equal to the lowest, tolerance should be set to 0.	NUMBER	N/F
	RPO_WTHN_GROUP_LOWEST_TOLERANCE_PCT	Price for the products within the group must be the lowest current regular price of the group, subject to tolerance as percentage of the lowest price. To set equal to the lowest, tolerance should be set to 0.	PERCENTAGE	N/F
	RPO_WTHN_ZONE_DIFF_TOLERANCE	Locations within a single group need to have similar prices, subject to a tolerance level equal to this amount. Equality within the group, tolerance should be set to 0.	NUMBER	N/F
	RPO_WTHN_ZONE_DIFF_TOLERANCE_PCT	Locations within a single group need to have similar prices, subject to a tolerance percentage level equal to this amount. Equality within the group, tolerance should be set to 0.	PERCENTAGE	N/F
Revenue for Item	RPO_REVENUE_ITEM_MAX	Revenue for each item in the group/product hierarchy node needs to be less or equal than this value.	NUMBER	F
	RPO_REVENUE_ITEM_MIN	Revenue for each item in the group/product hierarchy node needs to be greater or equal than this value.	NUMBER	F

Rule Sub Category	Rule Name	Rule Description	Rule Datatype	Requires Forecast?
Revenue for Group	RPO_REVENUE_ITEM_PCT_CHANGE_MAX	Revenue for each item in the group/ product hierarchy node needs to have a maximum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F
	RPO_REVENUE_ITEM_PCT_CHANGE_MIN	Revenue for each item in the group/ product hierarchy node needs to have a minimum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F
	RPO_REVENUE_MAX	Revenue for group of items needs to be less or equal than this value.	NUMBER	F
	RPO_REVENUE_MIN	Revenue for group of items needs to be greater or equal than this value.	NUMBER	F
	RPO_REVENUE_PCT_CHANGE_MAX	Revenue for group of items needs to have a maximum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F
	RPO_REVENUE_PCT_CHANGE_MIN	Revenue for group of items needs to have a minimum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F
Volume for Item	RPO_VOLUME_ITEM_MAX	Volume for each item in the group/ product hierarchy node to be less or equal than this value.	INTEGER	F

Rule Sub Category	Rule Name	Rule Description	Rule Datatype	Requires Forecast?
Volume for Group	RPO_VOLUME_ITEM_MIN	Volume for each item in the group/ product hierarchy node needs to be greater or equal than this value.	INTEGER	F
	RPO_VOLUME_ITEM_PCT_CHANGE_MAX	Volume for each item in the group/ product hierarchy node needs to have a maximum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F
	RPO_VOLUME_ITEM_PCT_CHANGE_MIN	Volume for each item in the group/ product hierarchy node needs to have a minimum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F
	RPO_VOLUME_MAX	Volume for group of items needs to be less or equal than this value.	INTEGER	F
	RPO_VOLUME_MIN	Volume for group of items needs to be greater or equal than this value.	INTEGER	F
	RPO_VOLUME_PCT_CHANGE_MAX	Volume for group of items needs to have a maximum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F
	RPO_VOLUME_PCT_CHANGE_MIN	Volume for group of items needs to have a minimum percentage increase compared to base period (e.g. last year, last quarter).	PERCENTAGE	F

D

Appendix: Promotion and Markdown Run Overview

This table provides information about table columns and calculations for Promotion and Markdown Optimization runs.

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation Table Name: PRO_RUN_HDR_VW
Run Id	Y	System-generated unique identifier for the run.	RUN_HDR_ID
Finalized	Y	This flag indicates that recommendations from this run are finalized and used in the Manage LPO Recommendation screen	FINALIZED_FLG
Run Name	Y	User provided name for the run.	RUN_NAME
Run Description	N	User provided description for the run.	RUN_DESCR
Pricing Objective	Y	A description of the objective used for the run. For example, Increase Gross Margin.	PRICING_OBJECTIVE_DESCR
Season	Y	A description of the Season.	SEASON_NAME
Department	Y	A description of the Department.	CONCAT(PROD_HIER_EXT_CODE,"-",PROD_HIER_NAME)
Price Zone	Y	Price zone of the item recommendation. Corresponds to the run setup level.	CONCAT(PRICE_ZONE_GRP_EXT_CODE,"-",PRICE_ZONE_GRP_NAME)
Company	Y	Location of the item recommendation. (For example, Region, Channel, and so on). Corresponds to the run location setup level. Will be chain when using price zones. PRO_DB_PARAMETER_VW; #PRO_LOC_HIER_PROCESSING_LVL = 1 (RSE_HIER_LVL)	CONCAT(PRICE_ZONE_EXT_CODE,"+",PRICE_ZONE_NAME)
Effective Week	Y	The week ending date for which the run was executed.	CONCAT(LOC_HIER_EXT_CODE,"+",LOC_HIER_NAME)

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation Table Name: PRO_RUN_HDR_VW
Strategy	Y	The strategy used for the optimization of the run. It can be either the DEFAULT STRATEGY or other custom strategy.	RULE_SET_NAME
Proj Rev	Y	Projected Revenue (AMT) for the run is the revenue generated by optimization in the run's currency.	REVENUE
Rev %CHG	Y	Projected Revenue (%CHG) is the% revenue gain compared to the current price policy.	PCT_REVENUE_CHG
Proj Gross Margin	Y	Projected Gross Margin (AMT) for the run is the gross margin generated by optimization in the run's currency.	GROSS_MARGIN
GM %CHG	Y	Projected Gross Margin (CHG) is the% gross margin gain compared to the current price policy.	PCT_GMARGIN_CHG
Proj Sell Thru	Y	Projected Sell Through (PCT) for the run is the sell-through generated by optimization.	SELLTHROUGH
Sell Thru %CHG	Y	Projected Sell Through (%CHG) is the% gain in sell-through over the current price policy.	PCT_SELLTHROUGH_CHG
Proj Sls Units	Y	Project sales unit generated by optimization.	OPTIMAL_FORECASTED_SALES
Proj Promo Budget (Life)	Y	Projected lifetime promotion budget by optimization.	PROMO_BUDGET_USED
Proj Mkdn Budget (Life)	Y	Projected lifetime markdown budget by optimization.	MKDN_BUDGET_USED
Total Item Cnt	Y	Total item count	ITEM_OPTIMIZED_COUNT
No Rec Item Cnt	Y	Total items that are in 'No Recommendation' status	ITEM_NOREC_COUNT
Non-fcst Item Cnt	Y	Total items not included in forecast.	ITEM_NONFCST_COUNT
Promo Item Cnt	Y	Total items included in promotion.	ITEM_PROMO_COUNT
Mkdn Item Cnt	Y	Total items included in markdown.	ITEM_MKDN_COUNT
Plan Event Item Cnt	Y	Total items included in planned events.	ITEM_PLAN_PROMOTION_COUNT
Usr Ovr Item Cnt	Y	Total items that are overridden by user	ITEM_USR_OVRD_COUNT

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation Table Name: PRO_RUN_HDR_VW
Sell Thru Fcst	Y	Projected Sell Through Forecast (PCT) for the run is the sell-through generated by optimization.	SELL_THRU_FCST
Sell Thru Fcst %CHG	Y	Projected Sell Through Forecast (%CHG) is the% gain in sell-through over the current price policy.	PCT_SELL_THRU_FCST_C HG
Run Status	Y	Status of the run.	RUN_STATUS_DESCR
Status Update	Y	The date when the run status was updated.	CHANGED_ON_DT
Optimized On	Y	The date when the run was optimized.	LAST_EXECUTION_DATE
Modified By	Y	Login ID of the user who modified the run.	CHANGED_BY_USER
Created By	Y	Login ID of the user who created the run.	CREATED_BY_USER
Created Date	Y	The date when the run was first created.	CREATED_ON_DT

E

Appendix: Regular Run Overview

This table provides information about table columns and calculations for Regular Optimization runs.

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation Table Name: PRO_REG_RUN_HDR_VW
Run Id	Y	System-generated unique identifier for the run.	RUN_HDR_ID
Finalized	Y	This flag indicates that recommendations from this run are finalized and used in the Manage LPO Recommendation screen.	FINALIZED_FLG
Run Name	Y	User provided name for the run.	RUN_NAME
Run Description	Y	User provided description for the run.	RUN_DESCR
Pricing Objective	N	The goal selected for the run, outlining the desired pricing strategy or target to be achieved.	PRICING_OBJECTIVE_DESCR
Season	N	A description of the Season.	SEASON_NAME
Department	Y	A description of the Department.	CONCAT(PROD_HIER_EXT_CODE,"-",PROD_HIER_NAME)
Price Zone Group	Y	Price zone group of the item recommendation. Corresponds to the run setup level.	CONCAT(PRICE_ZONE_GRP_EXT_CODE,"-",PRICE_ZONE_GRP_NAME)
Price Zone	Y	Price zone of the item recommendation. Corresponds to the run setup level.	CONCAT(PRICE_ZONE_EXT_CODE,"+",PRICE_ZONE_NAME)
Company	Y	Location of the item recommendation. (For example, Region, Channel, and so on). Corresponds to the run location setup level. Will be chain when using price zones. PRO_DB_PARAMETER_VW; #PRO_LOC_HIER_PROCESSING_LVL = 1 (RSE_HIER_LVL)	CONCAT(LOC_HIER_EXT_CODE,"+",LOC_HIER_NAME)
Opt Start Dt	Y	The start date of optimization.	START_CAL_FROM_DT
Opt End Dt	Y	The end date of optimization.	END_CAL_TO_DT

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation Table Name: PRO_REG_RUN_HDR_VW
Strategy	Y	The strategy used for the optimization of the run. It can be either the DEFAULT STRATEGY or other custom strategy.	RULE_SET_NAME
Proj Rev	Y	Projected Revenue (AMT) for the run is the revenue generated by optimization in the run's currency.	REVENUE
Rev %CHG	Y	Projected Revenue (%CHG) is the% revenue gain compared to the current price policy.	PCT_REVENUE_CHG
Proj Gross Margin	Y	Projected Gross Margin (AMT) for the run is the gross margin generated by optimization in the run's currency.	GROSS_MARGIN
GM %CHG	Y	Projected Gross Margin (CHG) is the% gross margin gain compared to the current price policy.	PCT_GMARGIN_CHG
Proj Sell Thru	Y	Projected Sell Through (PCT) for the run is the sell-through generated by optimization.	SELLTHROUGH
Sell Thru %CHG	Y	Projected Sell Through (%CHG) is the% gain in sell-through over the current price policy.	PCT_SELLTHROUGH_CHG
Volume	Y	Projected Volume for the run is the number of items to be sold generated by optimization.	OPTIMAL_FORECASTED_SALES
Volume %CHG	Y	Projected Volume (CHG) is the% volume gain compared to the current price policy.	OPTIMAL_FORCASTED_SALES_CHANGE
Total Item Cnt	Y	Total item count.	ITEM_OPTIMIZED_COUNT
No Rec Item Cnt	Y	Total items that are in 'No Recommendation' status.	ITEM_NOREC_COUNT
Non-fcst Item Cnt	Y	Total items not included in forecast.	ITEM_NONFCST_COUNT
Reg Item Cnt	Y	Regular items count.	ITEM_REGULAR_COUNT
User Ovrdr Item Cnt	Y	Total items that are overridden by user	ITEM_USR_OVRD_COUNT
Run Status	Y	Status of the run.	RUN_STATUS_DESCR
Optimized On	Y	The date when the run was optimized.	LAST_EXECUTION_DATE
Modified By	Y	Login ID of the user who modified the run.	CHANGED_BY_USER

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation Table Name: PRO_REG_RUN_HDR_VW
Created By	Y	Login ID of the user who created the run.	CREATED_BY_USER
Created Date	Y	The date when the run was first created.	CREATED_ON_DT

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Appendix: Promotion and Markdown Manage LPO Recommendation

This table provides information about table columns and calculations for Promotion and Markdown Optimization recommendations.

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Flag	Y	Users can flag the recommendation for further review.	PRO_RUN_RECOM_OPT_R ESULT.FCST_REVIEW_CODE
Notes	Y	Users can enter any comment for the recommendation. For example, Additional Budget received so overriding to a deeper markdown	PRO_RUN_RECOM_OPT_R ESULT.FCST_NOTE
Ovrd Status	Y	Shows whether the item has any pending recalculate. It shows which user requested it.	PRO_RUN_RECOM_OPT_R ESULT.CHANGED_BY_USER
Ext Code, Name, Descr of - Item / Division / Group / Department / Class / Sub Class / Style / Style Color	Y	Product Hierarchy	CONCAT(RSE_PROD_HIER. PROD_EXT_CODE,',',RSE_ PROD_HIER.NAME)Based on RSE_PROD_HIER.HIER_LEVEL_ID
Item Descr	Y	Item description, external code, and name separated in different columns.	RSE_PROD_HIER.DESCR RSE_PROD_HIER.HIER_LEVEL_ID=8
Brand Name	Y		RSE_PROD_GRP.NAME
Price Zone	Y	Price zone of the item recommendation. Corresponds to the run setup level.	RSE_PRICE_ZONE and RSE_PRICE_ZONE_GRP
Chain Ext Code/Name/Descr > Area > Region > District > Location Ext Code / Name / Descr	Y	Location Hierarchy. N/A with Price Zones.	RSE_LOC_HIER_DH
Rec Status	Y	Recommendation status of the item, which says Ready for Review> Reviewed > Approved/Submitted/Taken > Export Failed	PRO_RUN_RECOM_OPT_R ESULT.RECOMMENDATION_STATUS_IDJoin With PRO_RECOMMENDATION_STATUS on ID to get UI_NAME.
Season	Y	Season. For example, Fall 2024 Merchandise	PRO_SEASON.NAME

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Company - Dynamic level (clean up)	Y	Location of the item recommendation. (For example, Region, Channel, and so on). Corresponds to the run location setup level. Will be chain when using price zones. PRO_DB_PARAMETER_VW; #PRO_LOC_HIER_PROCES SING_LVL = 1 (RSE_HIER_LVL)	RSE_LOC_HIER
Tkt Price	Y	Ticket Price of the item. Reflects TRAN TYPE 0, 4, 8. Rolled up from leaf node levels (for example, SKU-STORE) using Most Common Value	PRO_RUN_RECOM_OPT_R ESULT.CURRENT_PRICE
Reg Price	Y	Regular Price of the item. Reflects TRAN TYPE 0, 4. Rolled up from leaf node levels (for example, SKU-STORE) using Most Common Value	PRO_RUN_RECOM_OPT_R ESULT.LAST_REGULAR_PRICE
Orig Price	Y	Original Price of the item. Reflects TRAN TYPE 0. Rolled up from leaf node levels (for example, SKU-STORE) using Most Common Value	PRO_RUN_RECOM_OPT_R ESULT.REGULAR_PRICE
Eff Price	Y	Effective Price of the item - it will reflect either the recommended or the overridden/user added price. If the recommendation is rejected, then it will reflect the ticket price of the item.	Determined during run-time and displayed in UI.
Eff Rec Type	Y	Effective Recommendation Type of the item. It will be recommended, or the overridden/user added or rejected action.	Determined during run-time and displayed in UI.
Eff Start Dt	Y	Effective start date of the recommendation. Reflect user date override as well.	PRO_RUN_RECOM_OPT_R ESULT.EFF_START_DT
Eff End Dt	Y	Effective end date of the recommendation. Not applicable for Markdowns. Reflect user date override as well.	PRO_RUN_RECOM_OPT_R ESULT.EFF_END_DT
Eff % off Tkt	Y	Effective Price as % off of Ticket Price.	Determined during run-time and displayed in UI.
Eff % off Orig	Y	Effective Price as % off of Original Price.	Determined during run-time and displayed in UI.
Eff % off Regular	Y	Effective Price as % off of Regular Price.	Determined during run-time and displayed in UI.

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Rec Price	Y	Recommended Price of the Item	PRO_RUN_RECOM_OPT_R ESULT.RECOM_PRICE
Rec Type	Y	Recommendation Type of the Item. Markdown, Promotion, No Recommendation, Non-forecasted	PRO_RUN_RECOM_OPT_R ESULT.PRICE_RECOM_TYP E_ID Join with PRO_PRICE_RECOM_TYPE on ID to get DESCR
Rec % off Tkt	Y	Recommended Price as % off of the Ticket Price.	PRO_RUN_RECOM_OPT_R ESULT
Rec % off Orig	Y	Recommended Price as % off of the Original Price.	PRO_RUN_RECOM_OPT_R ESULT
Mkdn Cnt	Y	Markdown Number. If the item is marked down, this number will go up by 1.	PRO_RUN_RECOM_OPT_R ESULT.MKDN_COUNT
Promo Cnt	Y	Promotion Number. If the item is promoted, this number will go up by 1.	PRO_RUN_RECOM_OPT_R ESULT.PROMO_COUNT
Price Rung	Y	Rungs that are defined in the rules table for rule name PRO_RUNG_TIER_DISC_PCT. It is calculated with respect to the basis defined in PRO_DISC_TIER_BASIS.	PRO_RUN_RECOM_OPT_R ESULT.DISC_TIER
Proj Sls Units	Y	Projected Sales Units for the Effective Week, including any applied overrides.	PRO_RUN_RECOM_OPT_R ESULT.OPTIMAL_FORECAS TED_SALES
Proj Sls Rev	Y	Projected Sales Revenue for the Effective Week.	PRO_RUN_RECOM_OPT_R ESULT.OPTIMAL_REVENUE
Proj GM	Y	Projected Gross Margin \$ for the Effective Week, including any applied overrides.	PRO_RUN_RECOM_OPT_R ESULT.OPTIMAL_GROSS_M ARGIN
Proj Sls Units (Last Act to EW)	Y	Projected Sales Units from the Last Actual Week (or Processing Week) and until the Effective Week, including any applied overrides. It does not include the Last Actual Week and Effective Week.	PRO_RUN_RECOM_OPT_R ESULT.OPTIMAL_FORECAS TED_SALES
Proj Inv Beg of EW	Y	Projected inventory position at the beginning of the Effective Week, including any applied overrides.	PRO_RUN_RECOM_OPT_R ESULT.OPTIMAL_FORECAS TED_SALES+OPTIMAL_RE MAINING_INVENTORYPRO_ RUN_RECOM_OPT_RESUL T.TOT_PROJ_OPT_SALES_ QTY
Last Act Inv	Y	Inventory for the Last Actual Week (or Processing Week). It is the sum of all inventory components that are configured to be used for optimization.	PRO_RUN_RECOM_OPT_R ESULT.INV_QTY_LAD

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Total Buy	Y	It is sum of Cumulative Sls Units and the Last Act Inv. Cumulative Sls Units is calculated from the first receipt date.	PRO_RUN_RECOM_OPT_R ESULT.INITIAL_INVENTORY
Promo Bdgt Used	Y	This is calculated as the Proj Sls Units * (ticket price - recom price).	PRO_RUN_RECOM_OPT_R ESULT.PROMO_BUDGET_USED
Mkdn Bdgt Used	Y	This is calculated as the Proj Inv Beg of EW * (ticket price - recom price)	PRO_RUN_RECOM_OPT_R ESULT.MKDN_BUDGET_USED
Start Dt	Y	Start date of the Item. For example, 2% ST or 3 weeks from first receipt date.	PRO_RUN_RECOM_OPT_R ESULT.MODEL_START_DT
Exit Dt	Y	Exit date of the item.	PRO_RUN_RECOM_OPT_R ESULT.EXIT_DT
Run Id and Name	Y	ID of optimization run generating rec.	CONCAT(PRO_RUN_HDR.ID ,',',PRO_RUN_HDR.NAME)
Optimization Date	Y	Date of optimization run.	PRO_RUN_HDR.LAST_EXECUTION_DATE
Recalculation Date	Y	Date when the item is recalculated.	PRO_RUN_RECOM_OPT_R ESULT.RECALCULATE_DT
Recalculation User	Y	User who last requested the recalculate.	PRO_RUN_RECOM_OPT_R ESULT.RECALCULATE_BY_USER
Exported On Date	Y	Date when the item is Approved.	PRO_RUN_RECOM_OPT_R ESULT.EXPORTED_ON_DT
Approved By User	Y	User who approved the recommendation.	PRO_RUN_RECOM_OPT_R ESULT.EXPORTED_BY_USER
Net Sales Units (Last Week)	Y	Number of product units sold in the last completed week.	PRO_RUN_RECOM_DENORMALIZE.SLS_QTY_LAST_WEEK
Curr Sls Units	Y	Projected Sales Units for the Effective Week at Current Price.	PRO_RUN_RECOM_OPT_R ESULT.CURRENT_FORECASTED_SALES
Curr Sls Rev	Y	Projected Sales Revenue for the Effective Week at Current Price.	PRO_RUN_RECOM_OPT_R ESULT.CURRENT_REVENUE
Curr GM	Y	Projected Sales Margin for the Effective Week at Current Price.	PRO_RUN_RECOM_OPT_R ESULT.CURRENT_GROSS_MARGIN
Ovrd Price	N	Overridden price for the item.	PRO_RUN_RECOM_OPT_R ESULT.USR_OVRD_RECOM_PRICE
Ovrd Price Type	N	Override price type for the item.	PRO_RUN_RECOM_OPT_R ESULT.USR_OVRD_PRICE_RECOM_TYPE_ID JOIN WITHPRO_PRICE_RECOM_TYPE ON ID to get DESCR
Rec Accepted?	N	Y or No flag to denote whether recommendation was accepted as is or not.	PRO_RUN_RECOM_OPT_R ESULT.ACCEPTED_FLG

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Proj Inv End of EW	N	Projected inventory at the end of the effective week, including any applied overrides.	PRO_RUN_RECOM_OPT_RESULT.OPTIMAL_REMAINING_INVENTORY
Final Ship Dt	N	Denotes the calculated final ship date of the item. Last inventory change date that is older than x weeks (configuration) is assigned as the final ship date for the item	PRO_RUN_RECOM_OPT_RESULT.FINAL_SHIP_DT
Proj Inv EOL	N	Projected inventory at end of the life, including any applied overrides.	PRO_RUN_RECOM_OPT_RESULT.PROJ_OPT_EOL_INV
Proj ST EOL	N	Projected sell through at end of life, including any applied overrides.	1-(PRO_RUN_RECOM_OPT_RESULT.PROJ_OPT_EOL_INV / PRO_RUN_RECOM_OPT_RESULT.INITIAL_INVENTORY)
Curr Proj Inv EOL	N	Projected inventory with current price at end of life, including any applied overrides.	PRO_RUN_RECOM_OPT_RESULT.PROJ_CURR_EOL_INV
Curr Proj ST EOL	N	Projected sell through at end of life with current price, including any applied overrides.	1-(PRO_RUN_RECOM_OPT_RESULT.PROJ_CURR_EOL_INV / PRO_RUN_RECOM_OPT_RESULT.INITIAL_INVENTORY)
Proj Sls Units EOL	N	Total projected sales units at end of life, including any applied overrides. It is calculated as the sum of cumulative sales units until the last actual week and projected sales units for the remainder of the life at the optimal price path, including any applied overrides.	PRO_RUN_RECOM_DENORMALIZE.CUM_TOT_SLS_QTY + PRO_RUN_RECOM_OPT_RESULT.TOT_PROJ_OPT_SALES_QTY
Proj Rev EOL	N	Total projected revenue at end of life, including any applied overrides. It is calculated as the sum of cumulative sales revenue until the last actual week and projected sales revenue for the remainder of the life at the optimal price path.	PRO_RUN_RECOM_DENORMALIZE.CUM_TOT_SLS_AMT + PRO_RUN_RECOM_OPT_RESULT.TOT_PROJ_OPT_REVENUE

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Proj GM EOL	N	Total projected gross margin at end of life, including any applied overrides. It is calculated as the sum of cumulative sales gross margin until the last actual week and projected sales gross margin for the remainder of the life at the optimal price path.	PRO_RUN_RECOM_DENOR MALIZE.CUM_TOT_GMARGIN+ PRO_RUN_RECOM_OPT_RESULT.TOT_PROJ_OPT_GMARGIN
Curr Proj Sls Units EOL	N	Total projected sales units at end of life with current price, including any applied overrides. It is calculated as the sum of cumulative sales units until the last actual week and projected sales units for the remainder of the life at the current ticket price.	PRO_RUN_RECOM_DENOR MALIZE.CUM_TOT_SLS_QTY + PRO_RUN_RECOM_OPT_RESULT.TOT_PROJ_CURR_SALES_QTY
Curr Proj Rev EOL	N	Total projected revenue at end of life with current price, including any applied overrides. It is calculated as the sum of cumulative sales revenue until the last actual week and projected sales revenue for the remainder of the life at the current ticket price.	PRO_RUN_RECOM_DENOR MALIZE.CUM_TOT_SLS_AMT + PRO_RUN_RECOM_OPT_RESULT.TOT_PROJ_CURR_REVENUE
Curr Proj GM EOL	N	Total projected gross margin at end of life with current price, including any applied overrides. It is calculated as the sum of cumulative sales gross margin until the last actual week and projected sales gross margin for the remainder of the life at the current ticket price.	PRO_RUN_RECOM_DENOR MALIZE.CUM_TOT_GMARGIN+ PRO_RUN_RECOM_OPT_RESULT.TOT_PROJ_CURR_GMARGIN
Sls Units T/D	N	Net Sales Units till last loaded week.	PRO_RUN_RECOM_DENOR MALIZE.CUM_TOT_SLS_QTY
Sls Units 1W Ago	N	Net Sales Units 1 week ago.	PRO_RUN_RECOM_DENOR MALIZE.SLS_QTY_LAST_WEEK
Sls Units 2W Ago	N	Net Sales Units 2 week ago.	PRO_RUN_RECOM_DENOR MALIZE.SLS_QTY_2_AGO
Sls Units 3W Ago	N	Net Sales Units 3 week ago.	PRO_RUN_RECOM_DENOR MALIZE.SLS_QTY_3_AGO
Sls Amt 4W Ago	N	Net Sls Amount/Revenue 4 weeks ago.	PRO_RUN_RECOM_DENOR MALIZE.SLS_AMT_4_AGO
Sls Amt T/D	N	Net Sls Amount/Revenue till last loaded week.	PRO_RUN_RECOM_DENOR MALIZE.CUM_TOT_SLS_AMT

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Sls Amt 1W Ago	N	Net Sls Amount/Revenue 1 week ago.	PRO_RUN_RECOM_DENOR MALIZE.SLS_AMT_LAST_W EEK
Sls Amt 2W Ago	N	Net Sls Amount/Revenue 2 weeks ago.	PRO_RUN_RECOM_DENOR MALIZE.SLS_AMT_2_AGO
Sls Amt 3W Ago	N	Net Sls Amount/Revenue 3 weeks ago.	PRO_RUN_RECOM_DENOR MALIZE.SLS_AMT_3_AGO
Sls Amt 4W Ago	N	Net Sls Amount/Revenue 4 weeks ago.	PRO_RUN_RECOM_DENOR MALIZE.SLS_AMT_4_AGO
GM T/D	N	Net Gross Margin till last loaded week.	PRO_RUN_RECOM_DENOR MALIZE.CUM_TOT_GMARGI NG
GM 1W Ago	N	Net Gross Margin 1 week ago.	PRO_RUN_RECOM_DENOR MALIZE.GMARGING_LAST_ WEEK
GM 2W Ago	N	Net Gross Margin 2 weeks ago.	PRO_RUN_RECOM_DENOR MALIZE.GMARGING_AMT_2 _AGO
GM 3W Ago	N	Net Gross Margin 3 weeks ago.	PRO_RUN_RECOM_DENOR MALIZE.GMARGING_AMT_3 _AGO
GM 4W Ago	N	Net Gross Margin 4 weeks ago.	PRO_RUN_RECOM_DENOR MALIZE.GMARGING_AMT_4 _AGO
Target ST EOL	N	Business rule - percentage of sell-through for each product at end of clearance season.	PRO_RUN_RECOM_OPT_R ESULT.TARGET_ST_PCT
ProdAttrValue1 - Prod AttrValue 5	N	Product attributes selected by the user in the user filter. For example, Brand.	RSE_PROD_ATTR
Currency Attribute 1 - 30	Y	User Defined Attribute of Currency Type.	Flex Fact (W_RTL_FLEX_FACT)
Date Attribute 1 - 15	Y	User Defined Attribute of Date type.	Flex Fact (W_RTL_FLEX_FACT)
Number Attribute 1 - 40	Y	User Defined Attribute of Number Type.	Flex Fact (W_RTL_FLEX_FACT)
Percentage Attribute 1 - 15	Y	User Defined Attribute of percentage Type.	Flex Fact (W_RTL_FLEX_FACT)
Text Attribute 1 - 30	Y	User Defined Attribute of Text Type.	Flex Fact (W_RTL_FLEX_FACT)

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Appendix: Regular Manage LPO Recommendation

This table provides information about table columns and calculations for Regular Optimization recommendations.

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Image	Y	#N/A	N/A
Flag	Y	Users can flag the recommendation for further review.	PRO_REG_RUN_RECOM_OPT_RESULT.FCST_REVIEW_CODE
Notes	Y	Users can enter any comment for the recommendation. For example, Additional Budget received so overriding to a deeper markdown.	PRO_REG_RUN_RECOM_OPT_RESULT.FCST_NOTE
Ovrd Status	Y	Shows whether the item has any pending recalculate. It shows which user requested it.	PRO_REG_RUN_RECOM_OPT_RESULT.CHANGED_BY_USER
Company	Y	Location of the item recommendation. (For example, Region, Channel, and so on). Corresponds to the run location setup level. Will be chain when using price zones. PRO_DB_PARAMETER_VW; #PRO_LOC_HIER_PROCESSING_LVL = 1 (RSE_HIER_LVL)	RSE_LOC_HIER
Item Descr	Y	Item description, external code, and name separated in different columns.	RSE_PROD_HIER.DESCR SE_PROD_HIER.HIER_LEVEL_ID=8
Brand Name	Y	Name of the brand.	RSE_PROD_GRP.NAME
Price Zone	Y	Price zone of the item recommendation. Corresponds to the run setup level.	RSE_PRICE_ZONE and RSE_PRICE_ZONE_GRP
Rec Status	Y	Recommendation status of the item, which says Ready for Review > Reviewed > Approved/Submitted/Taken > Export Failed	PRO_REG_RUN_RECOM_OPT_RESULT.RECOMMENDATION_STATUS_IDJoin With PRO_RECOMMENDATION_STATUS on ID to get UI_NAME.

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Tkt Price	Y	Ticket Price of the item. Reflects TRAN TYPE 0, 4, 8. Rolled up from leaf node levels. (For example, SKU-STORE) using Most Common Value.)	PRO_REG_RUN_RECOM_OPT_RESULT.CURRENT_PRICE
Reg Price	Y	Regular Price of the item. Reflects TRAN TYPE 0, 4. Rolled up from leaf node levels (For example, SKU-STORE) using Most Common Value.	PRO_REG_RUN_RECOM_OPT_RESULT.LAST_REGULAR_PRICE
Orig Price	Y	Original Price of the item. Reflects TRAN TYPE 0. Rolled up from leaf node levels (For example, SKU-STORE) using Most Common Value.	PRO_REG_RUN_RECOM_OPT_RESULT.REGULAR_PRICE
Eff Price	Y	Effective Price of the item - it will reflect either the recommended or the overridden/user added price. If the recommendation is rejected, then it will reflect the ticket price of the item.	Calculated during optimization and displayed in the UI.
Eff Rec Type	Y	Effective Recommendation Type of the item. It will be recommended, or the overridden/user added or rejected action.	Calculated during optimization and displayed in the UI.
Eff Start Dt	Y	Effective start date of the recommendation. Reflect user date override as well.	PRO_REG_RUN_RECOM_OPT_RESULT.EFF_START_DT
Eff %Chg of Tkt	Y	Effective % Change of Average Ticket Value, compared to a previous period (like LFY, LFQ, and so on).	Calculated during optimization and displayed in the UI.
Eff %Chg of Orig	Y	Effective percentage Change of Original Price, compared to a previous period (like LFY, LFQ, and so on).	Calculated during optimization and displayed in the UI.
Eff %Chg of Reg	Y	Effective percentage Change of Regular Price, compared to a previous period (like LFY, LFQ, and so on).	Calculated during optimization and displayed in the UI.
Rec Price	Y	Recommended Price of the Item.	PRO_REG_RUN_RECOM_OPT_RESULT.RECOM_PRICE
Rec Type	Y	Recommendation Type of the Item. Markdown, Promotion, No Recommendation, Non-forecasted.	PRO_REG_RUN_RECOM_OPT_RESULT.PRICE_RECOM_TYPE_ID Join with PRO_PRICE_RECOM_TYPE on ID to get DESCR

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Rec %Chg of Tkt	Y	Recommended percentage Change of Ticket.	Calculated during optimization and displayed in the UI.
Rec %Chg of Orig	Y	Recommended percentage Change of Original Price.	Calculated during optimization and displayed in the UI.
Proj Sls Units	Y	Projected Sales Units for the Effective Week, including any applied overrides.	PRO_REG_RUN_RECOM_OPT_RESULT.OPTIMAL_FOR_ECASTED_SALES
Proj Sls Rev	Y	Projected Sales Revenue for the Effective Week, including any applied overrides.	PRO_REG_RUN_RECOM_OPT_RESULT.OPTIMAL_REVENUE
Proj GM	Y	Projected Gross Margin \$ for the Effective Week, including any applied overrides.	PRO_REG_RUN_RECOM_OPT_RESULT.OPTIMAL_GROSS_MARGIN
Last Act Inv	Y	Inventory for the Last Actual Week (or Processing Week). It is the sum of all inventory components that are configured to be used for optimization.	PRO_REG_RUN_RECOM_OPT_RESULT.INV_QTY_LAD
Total Buy	Y	It is sum of Cumulative Sls Units and the Last Act Inv. Cumulative Sls Units is calculated from the first receipt date.	PRO_REG_RUN_RECOM_OPT_RESULT.INITIAL_INVENTORY
Run Id and Name	Y	ID of optimization run generating rec.	CONCAT(PRO_RUN_HDR.ID, '-', PRO_RUN_HDR.NAME)
Optimization Date	Y	Date of optimization run.	PRO_RUN_HDR.LAST_EXECUTION_DATE
Recalculation Date	Y	Date when the item is recalculated.	PRO_REG_RUN_RECOM_OPT_RESULT.RECALCULATE_DT
Recalculation User	Y	User who last requested the recalculate.	PRO_REG_RUN_RECOM_OPT_RESULT.RECALCULATE_BY_USER
Exported On Date	Y	Date when the item is Approved	PRO_REG_RUN_RECOM_OPT_RESULT.EXPORTED_ON_DT
Approved By User	Y	User who approved the recommendation.	PRO_REG_RUN_RECOM_OPT_RESULT.EXPORTED_BY_USER
LFY Rev	Y	Last Fiscal Year Revenue - The total revenue a company made during its most recently completed fiscal year.	PRO_REG_RUN_RECOM_DENORMALIZE.LFY_REVENUE
LFYH Rev	Y	Last Fiscal Year Half Revenue - The revenue from the first or second half of the last fiscal year, depending on the context.	PRO_REG_RUN_RECOM_DENORMALIZE.LFYH_REVENUE

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
LFYQ Rev	Y	Last Fiscal Year Quarter Revenue - Revenue from a specific quarter of the last fiscal year (such as Q1, Q2, and so on.)	PRO_REG_RUN_RECOM_D ENORMALIZE.LFYQ_REVENUE
LFH Rev	Y	Last Fiscal Half Revenue - Revenue from the most recent half-year period in the last fiscal year.	PRO_REG_RUN_RECOM_D ENORMALIZE.LFH_REVENUE
LFQ Rev	Y	Revenue from the Last Fiscal Quarter (For example, Q4).	PRO_REG_RUN_RECOM_D ENORMALIZE.LFQ_REVENUE
LF2Q Rev	Y	Revenue from the 2nd Last Fiscal Quarter (that is, the quarter before LFQ - so if LFQ is Q4, this is Q3).	PRO_REG_RUN_RECOM_D ENORMALIZE.LF2Q_REVENUE
LFY Sls Units	Y	Last Fiscal Year Total Sales Units - Total units sold across all quarters of the last fiscal year.	PRO_REG_RUN_RECOM_D ENORMALIZE.LFY_SALES
LFYH Sls Units	Y	Last Fiscal Year Half Sales Units - Units sold during half of the last fiscal year (H1 or H2).	PRO_REG_RUN_RECOM_D ENORMALIZE.LFYH_SALES
LFYQ Sls Units	Y	Last Fiscal Year Quarter Sales Units - for example, Q4 of last fiscal year.	PRO_REG_RUN_RECOM_D ENORMALIZE.LFYQ_SALES
LFH Sls Units	Y	Last Fiscal Half Sales Units, The most recent half-year from LFY (either H1 or H2).	PRO_REG_RUN_RECOM_D ENORMALIZE.LFH_SALES
LFQ Sls Units	Y	Last Fiscal Quarter Sales Units, The units sold in the most recent quarter of the last fiscal year.	PRO_REG_RUN_RECOM_D ENORMALIZE.LFQ_SALES
LF2Q Sls Units	Y	2nd Last Fiscal Quarter Sales Units, The units sold in the quarter before the last one.	PRO_REG_RUN_RECOM_D ENORMALIZE.LF2Q_SALES
Currency Attribute 1 - 30	Y	User Defined Attribute of Currency Type.	Flex Fact (W_RTL_FLEX_FACT)
Date Attribute 1 - 15	Y	User Defined Attribute of Date type.	Flex Fact (W_RTL_FLEX_FACT)
Number Attribute 1 - 40	Y	User Defined Attribute of Number Type.	Flex Fact (W_RTL_FLEX_FACT)
Percentage Attribute 1 - 15	Y	User Defined Attribute of percentage Type.	Flex Fact (W_RTL_FLEX_FACT)
Text Attribute 1 - 30	Y	User Defined Attribute of Text Type.	Flex Fact (W_RTL_FLEX_FACT)

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Ext Code, Name, Descr of - Item / Division / Group / Department / Class / Sub Class / Style / Style Color	N	Product Hierarchy.	CONCAT(RSE_PROD_HIER.PROD_EXT_CODE,',',RSE_PROD_HIER.NAME)Based on RSE_PROD_HIER.HIER_LEVEL_ID
Chain Ext Code / Name / Descr > Area > Region > District >Location Ext Code / Name / Descr	N	Location Hierarchy. N/A with Price Zones.	RSE_LOC_HIER_DH
Ovrd Price	N	Overridden price for the item	PRO_REG_RUN_RECOM_OPT_RESULT.USR_OVRD_RECOM_PRICE
Ovrd Price Type	N	Override price type for the item.	PRO_REG_RUN_RECOM_OPT_RESULT.USR_OVRD_PRICE_RECOM_TYPE_ID JOIN WITHPRO_PRICE_RECOM_TYPE ON ID to get DESCR
Ovrd Price %Chg of Tkt	N	The percentage change in ticket price based on user-overridden prices, compared to a previous period or baseline.	Calculated during optimization and displayed in the UI.
Rec Accepted?	N	Y or No flag to denote whether recommendation was accepted as is or not.	PRO_REG_RUN_RECOM_OPT_RESULT.ACCEPTED_FLAG
Proj Inv End of EW	N	Projected inventory at the end of the effective week, including any applied overrides.	PRO_REG_RUN_RECOM_OPT_RESULT.OPTIMAL_REMAINING_INVENTORY
Start Dt	N	Start date of the Item. For example, 2% ST or 3 weeks from first receipt date.	PRO_REG_RUN_RECOM_OPT_RESULT.MODEL_START_DT
Text Attribute 1 - 30	Y	User Defined Attribute of Text Type.	Flex Fact (W_RTL_FLEX_FACT)
Ext Code, Name, Descr of - Item / Division / Group / Department / Class / Sub Class / Style / Style Color	N	Product Hierarchy.	CONCAT(RSE_PROD_HIER.PROD_EXT_CODE,',',RSE_PROD_HIER.NAME)Based on RSE_PROD_HIER.HIER_LEVEL_ID
Chain Ext Code / Name / Descr > Area > Region > District >Location Ext Code / Name / Descr	N	Location Hierarchy. N/A with Price Zones.	RSE_LOC_HIER_DH
Ovrd Price	N	Overridden price for the item	PRO_REG_RUN_RECOM_OPT_RESULT.USR_OVRD_RECOM_PRICE
Ovrd Price Type	N	Override price type for the item	PRO_REG_RUN_RECOM_OPT_RESULT.USR_OVRD_PRICE_RECOM_TYPE_ID JOIN WITHPRO_PRICE_RECOM_TYPE ON ID to get DESCR

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Ovrd Price %Chg of Tkt	N	The percentage change in ticket price based on user-overridden prices, compared to a previous period or baseline.	Calculated during optimization and displayed in the UI.
Rec Accepted?	N	Y or No flag to denote whether recommendation was accepted as is or not.	PRO_REG_RUN_RECOM_OPT_RESULT.ACCEPTED_FLAG
Proj Inv End of EW	N	Projected inventory at the end of the effective week, including any applied overrides.	PRO_REG_RUN_RECOM_OPT_RESULT.OPTIMAL_REMAINING_INVENTORY
Start Dt	N	Start date of the Item. For example, 2% ST or 3 weeks from first receipt date.	PRO_REG_RUN_RECOM_OPT_RESULT.MODEL_START_DT
Final Ship Dt	N	Denotes the calculated final ship date of the item. Last inventory change date that is older than x weeks (configuration) is assigned as the final ship date for the item	PRO_REG_RUN_RECOM_OPT_RESULT.FINAL_SHIP_DT
Sys Recom Price	N	System Recommended Price - Suggested by the pricing optimization system based on the rules, strategies, and algorithms it uses.	Calculated during optimization and displayed in the UI.
Sys Opt Sales Units	N	The number of units the system predicts will be sold at the system-recommended price.	Calculated during optimization and displayed in the UI.
Sys Opt Revenue	N	The predicted revenue based on the system-recommended price and the corresponding system-optimized sales units.	Calculated during optimization and displayed in the UI.
Sys Opt Gross Margin	N	The predicted gross margin based on the system's pricing optimization.	Calculated during optimization and displayed in the UI.
Sys Opt Inv	N	The inventory levels the system forecasts to meet the sales units needed at the system-recommended price.	Calculated during optimization and displayed in the UI.
LFY GM	N	Last Fiscal Year Gross Margin - The gross margin for the entire last fiscal year.	PRO_REG_RUN_RECOM_DENORMALIZE.LFY_GROSS_MARGIN
LFYH GM	N	Last Fiscal Year Half Gross Margin - The gross margin for the first or second half of the last fiscal year	PRO_REG_RUN_RECOM_DENORMALIZE.LFYH_GROSS_MARGIN
LFYQ GM	N	Last Fiscal Year Quarter Gross Margin - The gross margin for the last fiscal quarter of the previous year.	PRO_REG_RUN_RECOM_DENORMALIZE.LFYQ_GROSS_MARGIN

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
LFH GM	N	Last Fiscal Half Gross Margin - The gross margin for half of the last fiscal year.	PRO_REG_RUN_RECOM_DENORMALIZE.LFH_GROSS_MARGIN
LFQ GM	N	Last Fiscal Quarter Gross Margin - The gross margin for the most recent quarter of the last fiscal year.	PRO_REG_RUN_RECOM_DENORMALIZE.LFQ
LF2Q GM	N	Second Last Fiscal Quarter Gross Margin - The gross margin for the quarter before the most recent one in the last fiscal year.	PRO_REG_RUN_RECOM_DENORMALIZE.LF2Q_GROSS_MARGIN
Sys Mkdn Budget Used	N	The amount of the markdown budget that has been used by the system to products.	Calculated during optimization and displayed in the UI.
Target ST EOL	N	Business rule - percentage of sell-through for each product at end of clearance season	PRO_REG_RUN_RECOM_OPT_RESULT.TARGET_ST_PCT
ProdAttrValue1 - Prod AttrValue 5	N	Product attributes selected by the user in the user filter. For example, Brand.	RSE_PROD_ATTR

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Appendix: Promotion and Markdown Review Forecast

This table provides information about table columns and calculations for Promotion and Markdown Review Forecasts.

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Class / Subclass / Style / Color / Customer Segment	Y	Product Hierarchy (Depending on the Filter)	CONCAT(RSE_PROD_HIER.PROD_EXT_CODE,',',RSE_PROD_HIER.NAME)Based on RSE_PROD_HIER.HIER_LEVEL_ID
Price Zone	Y	Price zone of the item recommendation. Corresponds to the run setup level.	RSE_PRICE_ZONE and RSE_PRICE_ZONE_GRP
Company (Dynamic Level)	Y	Location of the item recommendation. (For example, Region, Channel, and so on). Corresponds to the run location setup level. Will be chain when using price zones. PRO_DB_PARAMETER_VW; #PRO_LOC_HIER_PROCES SING_LVL = 1 (RSE_HIER_LVL)	RSE_LOC_HIER
Week Ending Date	Y		PRO_RUN_RECOM_OPT_RESULT.CAL_HIER_IDJOIN WITHRSE_CAL_HIER ON ID to get CAL_TO_DT
Proj Inv End of Wk	Y	Projected inventory at the end of the effective week, including any applied overrides.	PRO_RUN_RECOM_OPT_RESULT.OPTIMAL_REMAINING_INVENTORY
Proj Sls Units	Y	Projected Sales Units for the Effective Week, including any applied overrides.	PRO_RUN_RECOM_OPT_RESULT.OPTIMAL_FORECASTED_SALES
Proj Sls Rev	Y	Projected Sales Revenue for the Effective Week, including any applied overrides.	PRO_RUN_RECOM_OPT_RESULT.OPTIMAL_REVENUE
Tkt Price	Y	Ticket Price of the item. Reflects TRAN TYPE 0, 4, 8. Rolled up from leaf node levels (For example, SKU-STORE) using Most Common Value.	PRO_RUN_RECOM_OPT_RESULT.CURRENT_PRICE

Column Heading	Default (Y/N)	Definition	DB Reference / Calculation
Proj Tkt Price	Y	Projected ticket Price of the item for the Effective Week. Reflects TRAN TYPE 0, 4, 8. Rolled up from leaf node levels (For example, SKU-STORE) using Most Common Value.	
Proj Sls Price	Y	Projected Sales Price for the Effective Week, including any applied overrides.	PRO_RUN_RECOM_OPT_R ESULT.OPTIMAL_PRICE
Base Sales Units	Y	The expected sales volume for the effective week after adjusting the base demand for seasonality effects.	BASE_DEMAND * SEASONALITY_INDEX
Sales Units from Price Changes	Y	The change in unit sales driven by applying the optimal price effect to the base demand.	Base Sales Units * OPTIMAL_PRICE_EFFECT - BASE_DEMAND
Sales Units from Planned Events	Y	The change in unit sales due to planned promotional activities compared to the base demand.	Base Sales Units * PLANNED_PROMOTION_LI FT - BASE_DEMAND
Cumulative Sales Units	Y	The running total of Proj Sls Units from the last actual date.	Cumulative Sum of PRO_RUN_RECOM_OPT_R ESULT.OPTIMAL_FORECAS TED_SALES
Demand Units at Full Price	Y	Units expected to be sold at the full price.	
Base Demand	Y	The estimated sales volume before applying any promotional, markdown `or seasonal adjustments.	BASE_DEMAND
Item Count	Y	The total number of items included in the product hierarchy. For example, it is 1 if product hierarchy is style - color.	
No Recom Item Count	Y	The number of items for which no new price recommendation was generated.	
Under 30%	Y	Count of Promotion/ Markdown - Under 30%.	(PRO_RUN_RECOM_OPT_ RESULT.CURRENT_PRICE- PRO_RUN_RECOM_OPT_R ESULT.OPTIMAL_PRICE)/ PRO_RUN_RECOM_OPT_R ESULT.CURRENT_PRICE
30%-50%	Y	Count of Promotion/ Markdown - 30% to 50%	
Over 50%	Y	Count of Promotion/ Markdown - Over 50%..	
Week Start Date	Y	Promotion/Markdown event start date.	PRO_RUN_RECOM_OPT_R ESULT.CAL_HIER_IDJOIN WITHRSE_CAL_HIER ON ID to get CAL_FROM_DT