

**Oracle® Retail Insights**

User Guide

Release 15.0

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# Preface

The *Oracle Retail Insights User Guide* helps Retail Insights users to build, use, and modify reports using the Retail Insights repository in Oracle Business Intelligence (Oracle BI). It includes a user reference to the dimensions, attributes, metrics, and terminology of the Retail Insights metadata. The guide also provides minimal introduction to the Oracle BI user interface.

This guide does not include:

- End user documentation for Oracle BI. This is provided through the Oracle BI documentation library and user training.
- Details of the Retail Insights data model. The *Oracle Retail Insights Data Model* contains this information.
- Information about tasks and responsibilities of system administrators, systems analysts, operators, and programmers who install, configure, and support the Retail Insights software. This information is provided in the *Oracle Retail Insights Implementation Guide*, *Oracle Retail Insights Installation Guide*, and *Oracle Retail Insights Operations Guide*.

## Audience

This user guide is for use by business analysts, the primary end users of Retail Insights, as well as for merchandising and finance executives who rely on those reports on a daily basis. The principal users of this guide are those who have responsibility to create and modify Retail Insights reports. They may study these reports themselves, and they may also prepare reports for distribution to other users such as managers, buyers, and other analysts who study and plan business activities. The particular user group for Retail Insights depends on each retailer's unique organization structure and individual job assignments.

This guide assumes that the user knows how to use the Oracle BI user interface. End user documentation is provided in the Oracle BI documentation library, and this guide provides references to pertinent documents.

End users need the following prerequisite skills:

- An understanding of data warehousing
- Knowledge of business intelligence concepts
- Oracle Business Intelligence training

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## Related Documents

For more information, see the following documents in the Oracle Retail Insights Release 15.0 documentation set:

- *Oracle Retail Insights Data Model*
- *Oracle Retail Insights Implementation Guide*
- *Oracle Retail Insights Release Notes*
- *Oracle Retail Insights Installation Guide*
- *Oracle Retail Insights Operations Guide*
- *Oracle Retail Insights Security Guide*

For information about Oracle BI administration and end use, see the documentation library for Oracle Business Intelligence Enterprise Edition, particularly the following documents:

- *Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*
- *Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*
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When you install the application for the first time, you install either a base release (for example, 14.2) or a later patch release (for example, 14.2.1). If you are installing the base release and additional patch releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch releases can contain critical information related to the base release, as well as information about code changes since the base release.

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## Conventions

The following text conventions are used in this document:

<b>Convention</b>	<b>Meaning</b>
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<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

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# Introduction to Oracle Retail Insights

This chapter introduces the role of business intelligence and data warehousing in a retail environment. It briefly describes the implementation of Oracle Retail Insights and its data sources, and the Retail Insights user interface through Oracle Business Intelligence Enterprise Edition (Oracle BI EE).

## Business Intelligence in the Retail Environment

Business intelligence includes the processes, methods, and technologies adopted by organizations to answer complex business questions and build comprehensive decision support systems. Business intelligence enables all users in a retail organization to answer questions about the business, for example:

- How do actual sales this period compare to the current plan?
- What is the retail value of inventory on hand, and how does it compare to the same period last year?
- What are the best-selling items in a division or department?
- How effective was the last promotion?

The answers to these questions and others are embedded in the enormous volume of sales and returns, price changes, receipts, and other transactions generated by your retail organization. These transactions are the raw material for business intelligence. Transaction-level data must be converted to information to support decisions in a retail enterprise.

These systems help organizations in maintaining secure, conformed, and highly available data for all levels of users, from top-level executives who make decisions based on corporate-level information to managers and analysts who analyze their areas and take actions based on their findings. Business intelligence is built using several processes, and applications that maintain these processes, using the latest tools and technologies. One of the main components of business intelligence is a data warehouse. A data warehouse is the repository that stores data extracted from multiple source systems, modeled to perform for both data loading, reporting, and ad hoc analysis needs.

## Data Warehousing and Business Intelligence

The data warehouse is the central repository for the data that is required for business intelligence in a retail environment. The applications and components that make up the data warehouse perform these functions:

- They organize and standardize data so that it can be stored in a consistent format in the data warehouse.
- They load data to a relational database management system that is specially constructed for business intelligence.
- They provide analytical tools and interfaces necessary to deliver information throughout the retail organization.

Online transaction processing (OLTP) applications, such as Oracle Retail Merchandising System (RMS), are designed for efficient record-keeping. They generally hold only a small amount of historical information. The data warehouse, on the other hand, consists entirely of historical data organized by business area. (Collections of data organized to support particular business areas are sometimes called data marts.) These business areas consist of a relatively small number of very large tables.

This type of organization is optimal in the business intelligence environment, where large quantities of historical data must be stored and made available to users in summary form. The tables that make up the data warehouse contain the information that is needed to create a picture of the organization at any point during the period for which data is kept.

## Oracle Retail Insights

Oracle Retail Insights offers a rich business intelligence solution to retail industry users. Retail Insights is built using latest Oracle technologies and uses Oracle Data Integrator (ODI) for extracting, transforming, and loading (ETL) the data to Oracle Business Intelligence Enterprise Edition for end user reporting and analysis. This solution provides complete, enterprise-wide insight for retail users, enabling fact-based actions and intelligent interactions.

Retail Insights starts with customer and merchandising data. It embraces existing corporate data sources, and it integrates with Oracle Retail solutions to increase effectiveness across the entire merchandising life cycle.

Retail Insights can integrate with Oracle applications, as well as applications from other vendors. It can be implemented alone, or integrated with other applications, to accommodate each retailer's unique information needs and applications environment. The prebuilt nature of the solution allows you to achieve fast time to value, by reducing deployment time and helping to lower total cost of ownership.

Oracle Retail Insights is a software product that includes the following modules:

- Merchandise Insights Cloud Service
- Customer Insights Cloud Service

### Merchandise Insights Cloud Service Module

The Merchandise Insights Cloud Service module is a merchandising-specific business intelligence module of the Retail Insights application. It provides insight to critical performance indicators such as item sales, store performance, markdowns, inventory turns, sales and profit trends, and current and potential out-of-stocks.

Merchandise Insights Cloud Service dashboards provide the ability to act on those insights. They enable you to order more stock, reallocate merchandise, or begin a promotion, triggered by metric thresholds.

The Customer Order subject area of the Merchandise Insights Cloud Service module facilitates analysis of Oracle's Commerce Anywhere solution. Commerce Anywhere integrates Oracle Retail applications with on-line order capture (OOC) and order management (OMS) applications to support the ability to do real-time available inventory lookups into Oracle Retail applications, creation of customer orders fulfilled from suppliers or retailer locations, and fulfillment of these customer orders.

## Customer Insights Cloud Service Module

The Customer Insights Cloud Service module enables you to perform retail analysis of customers and customer segments. It features three new subject areas:

- Customer Analysis
- Market Basket Analysis
- Promotion Analysis

For each subject area, there are relevant metrics that can be used to answer business questions such as the following:

- Who are my most profitable customers? Who are my most frequent shoppers?
- Which items in my category should I promote together? Which items cannibalize sales from others?
- How did my promotion perform compared to my plan? How profitable was it?
- How are my products selling across various customer demographics?
- How are my products selling across various customer behaviors?
- Which items should I promote, and using which methods?
- What are my top product affinities?
- What is my promotional lift?

The Customer Insights Cloud Service module provides fact-based insight into the following:

- Customer price sensitivity
- Customer loyalty to merchandise
- RFM scores
- Overall promotion effectiveness

You can use this insight to manage and track event performance, and to segment and retain your most valuable customers. You can assess the effectiveness of promotions, track and analyze key promotion sales and promotion metrics, and generate a complete picture of customer-centric promotion performance.

Customer segment analysis in Customer Insights Cloud Service is available based on the following:

- Demographics, the ability to analyze segments by income, ethnicity, geography, and other factors.
- RFM scoring, used for analyzing customer behavior and defining market segments. The following metrics are given a score of 1 through 5:
  - Recency – How recently did the customer purchase?
  - Frequency – How often does the customer purchase?

- Monetary value – How much does the customer spend?
- Behavior – Are customers considered environmentally green? Would they be considered frugal? Do they tend to be health-conscious? Based on their behavioral attributes, you can make informed decisions about products or promotions that are of interest to your customers.
- Customer loyalty analysis and scoring – Retail Insights provides the ability to classify and report on customers by loyalty score.

Market basket analysis offered by the Customer Insights Cloud Service module provides insight into which products might make effective bundles. Customer behavior information is obtained from mining transaction history, and it is correlated with customer segment attributes to inform promotion strategies. The ability to understand market basket affinities allows marketers to calculate, monitor, and build promotion strategies based on critical metrics such as customer profitability.

Promotion analysis can be done based on the following:

- Promotional halo and cannibalization, which will highlight the promotions effect on other items in the category.
- Promotional try and repeat, which shows the promotion's effect on initial and repeat purchases.
- Promotional response rate and offer conversion, which will speak to the effectiveness of the promotion.

## Characteristics

These are some characteristics of Oracle Retail Insights:

- Rich reporting capabilities
  - Retail Insights offers report creation capabilities using three different analysis methods in the same environment:
    - Historical (as-was)
    - Current (as-is)
    - Point in time
  - See [Chapter 4, "Creating and Modifying Reports"](#) for more information about these analysis methods.
  - Packaged reports are provided as a reference for creating customized reports and serve as the baseline reports for Retail Insights.
- Comprehensive Solution
  - Oracle Retail Insights is an end-to-end solution for reporting and retail business intelligence needs through the following:
    - Data integration with source applications
    - Loading and transforming the fact and dimension data
    - Rolling up the data for improved query performance
    - The Web-based Oracle BI user interface for report creation
    - Shell scripts for setting up the batch schedule
    - An automated installer
  - High-performance extract, transform, and load (ETL) code

Using Oracle Data Integrator, Retail Insights offers high performance for the Oracle Database batch processes.

- Extensibility

Retail Insights ETL code can be customized and extended for customer-specific needs.

- Flexibility

Oracle Data Integrator and Oracle BI EE code promote flexibility during implementation based on customer-specific needs and help in improving batch and report performance.

- High-performance reporting

Retail Insights metadata is built using Oracle BI EE and designed to perform in complex reporting scenarios.

- Robust data model

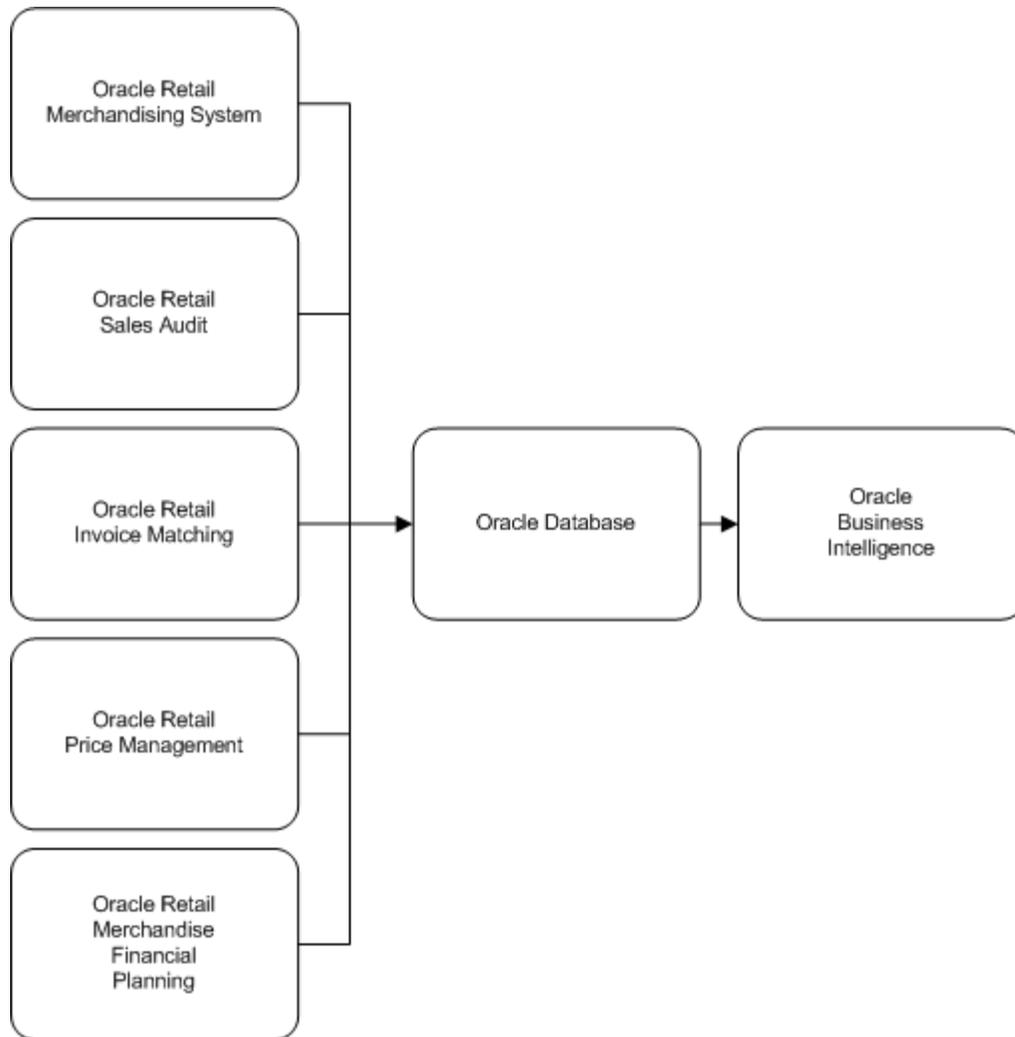
The Retail Insights data model is designed to support a retailer's data needs in a business intelligence environment. Data model elements are designed to perform with Oracle BI EE architecture.

## Retail Insights Data Sources

Retail Insights uses several data sources including Oracle Retail Merchandising System (RMS) and Oracle Retail Price Management System (RPM). Data is extracted, loaded, and transformed into the Retail Insights data model to support reporting requirements. The first step after installing Retail Insights is to load the data into data warehouse tables using packaged Oracle Data Integrator ETL programs.

[Figure 1-1](#) illustrates the data sources for Oracle Retail Insights. The data sources can be Oracle Retail applications or other data sources specific to each retailer's systems environment. The Customer dimension has an external customer stub, or open interface, so that you can bring in customer data from sources other than Oracle Retail applications.

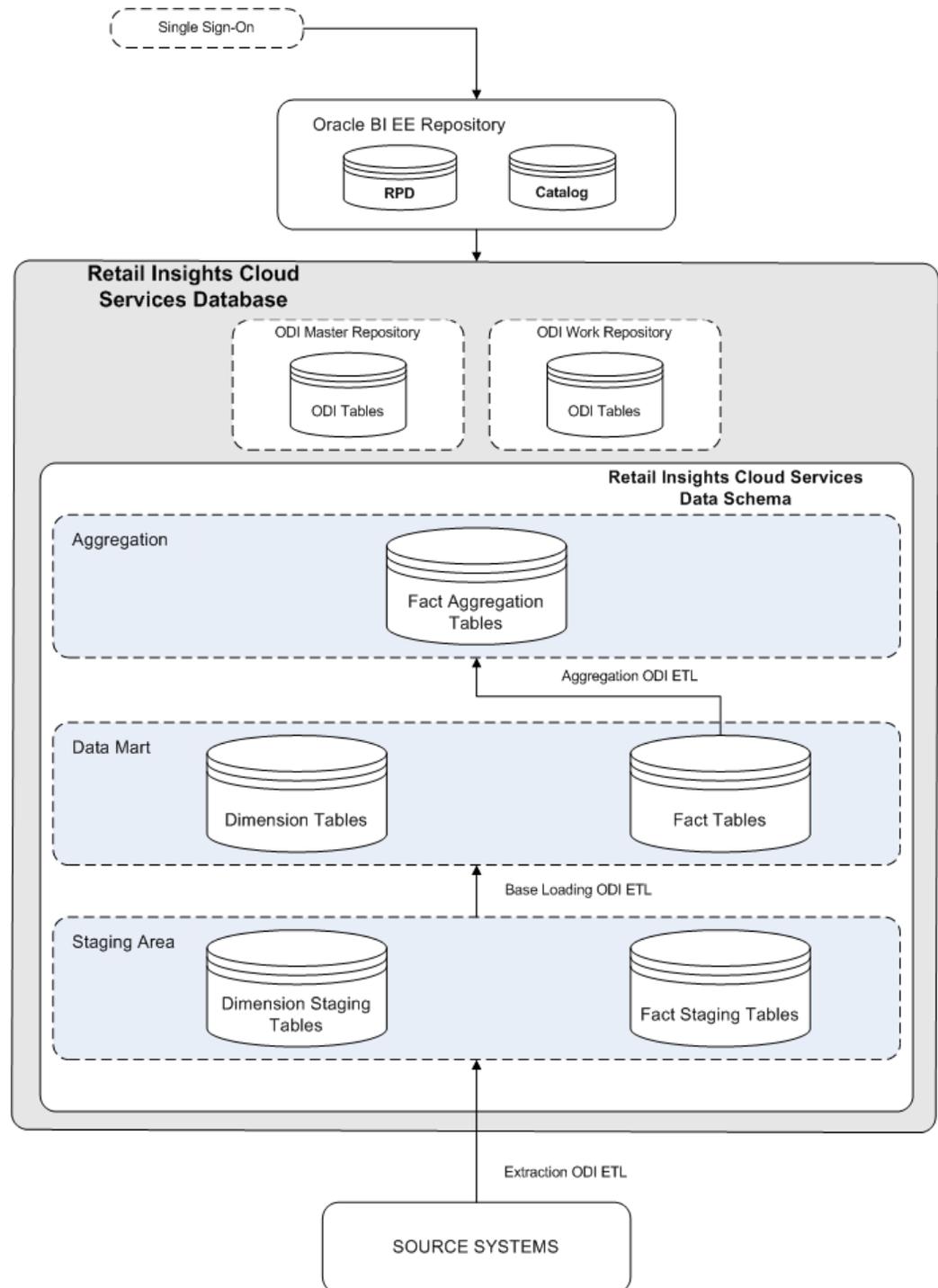
**Figure 1–1 Data Sources for Oracle Retail Insights**



## Oracle Retail Insights Architecture

Figure 1–2 represents how the Oracle Retail Insights data model interfaces with other Oracle Retail Applications, and how an Oracle BI user accesses the Retail Insights metadata. See the *Oracle Retail Insights Implementation Guide* and *Oracle Retail Insights Data Model* for more details about the data model.

Figure 1-2 Retail Insights Architecture



## Oracle Retail Solutions

Oracle Retail Insights is integrated with the following Oracle Retail applications:

- Oracle Retail Merchandising System (RMS)
- Oracle Retail Sales Audit (ReSA)
- Oracle Retail Invoice Matching (ReIM)

- Oracle Retail Price Management (RPM)
- Oracle Retail Merchandise Financial Planning (MFP)

See the *Oracle Retail Insights Installation Guide* for information about the release levels of Oracle Retail products that integrate with Oracle Retail Insights.

An online transaction processing (OLTP) application such as Oracle Retail Merchandising System (RMS) is the principal source of data for Retail Insights. The OLTP application provides the majority of attribute data for most dimensions, including organization, product, and time calendar dimensions. The OLTP application supplies facts for many data marts including inventory, pricing, cost, and supplier compliance. For more details, see the *Oracle Retail Insights Operations Guide*, which maps source data to its corresponding target table in Retail Insights.

Oracle Retail Sales Audit (ReSA) provides the tools to evaluate point-of-sale data, to ensure the accuracy and completeness of information exported to downstream systems used in optimization processes, financial reporting, and analysis.

Oracle Retail Invoice Matching (ReIM) is a solution that provides the data necessary to support invoice verification, minimizing interface development and maintenance costs. ReIM can serve as the source of invoice cost data. This information must be extracted from another application if you do not use ReIM.

Oracle Retail Price Management (RPM) is a solution that assists with pricing decisions. RPM can serve as the source of promotion data. This information must be extracted from another application if you do not use RPM.

Oracle Retail Merchandise Financial Planning (MFP) provides strategic and financial product planning functions. These functions support industry planning standards for preseason and in-season processes. MFP facilitates the creation of financial plans in a structured method.

## Data Granularity

Data granularity is decided for fact tables based on reporting requirements. Currently, data granularities are set for generic report requirements. Data may be available at lower levels in source systems and may not be available in Retail Insights because of requirements. Dimension data exists at the lowest hierarchy levels.

The data from transaction systems is transformed to accommodate the Retail Insights database structure. This data serves as the foundation for business measurements, but by itself it is not sufficient to answer many business questions.

Typically, data is held at a low granular level in Retail Insights. For example, sales data is held by location, item, and day attributes. There is one row in the sales fact table for every combination of these attributes. In most cases, however, the analyst wants to view data at higher levels in the product and organization hierarchies, and for a longer span of time than a single day.

Effective business intelligence requires facts to be held at a low granular level, while allowing measurements at any level in the organization where they are needed. For example, a location manager making an assessment of monthly sales at the department level wants a report showing total sales for each department. When the location manager spots a potential problem at the department level, the manager may want to focus analysis on the subclass, or even the specific items, for which problems exist. Retail Insights permits analysis at any level by storing information at a low granular level, while allowing reporting at higher summary levels.

In some cases, Retail Insights holds data at multiple levels, to facilitate analysis and improve performance. For example, sales facts are held by subclass and week, as well as by item and day (the location attribute is present in both tables). The result is that the same data exists in more than one fact table in the database. While redundant data improves performance by reducing the number of queries that must be serviced, it also requires more maintenance. Retail Insights uses redundant data in a few cases in which all customers benefit in terms of performance; in most cases, however, retailers must determine where redundancy is needed, based on their own requirements.

## Metadata Organization

The Oracle Retail Insights presentation model is implemented in the form of seven subject areas. (A subject area is also called a presentation catalog in the repository.) The following are the categories of subject areas in Retail Insights:

- Merchandise Insights Cloud Service
 

Merchandise Insights Cloud Service is supported for sales and sales promotion, supplier, product, employee, and organization for as-is, as-was, and point in time analysis.
- Customer Insights Cloud Service
 

The Customer dimension is supported for sales, sales promotion, customer loyalty, and promotions for as-is, as-was, and point in time analysis. Market basket analysis is supported for as-is analysis only.

The subject areas are as follows:

- Retail Merchandise Insights Cloud Service As-Was
- Retail Merchandise Insights Cloud Service As-Is
- Retail Merchandise Insights Cloud Service Point in Time
- Retail Customer Insights Cloud Service As-Was
- Retail Customer Insights Cloud Service As-Is
- Retail Customer Insights Cloud Service Point in Time
- Retail Customer Insights Cloud Service Data Mining

See [Appendix B, "Reporting on Oracle BI Repository Objects,"](#) for information about how to produce documentation about repository objects.

### As-Was

The supporting attributes and metrics for as-was reporting are available in this subject area. On the reports on this subject area, the historical data is associated with the hierarchy of an attribute before a reclassification. For example, if an item is reclassified from the Snacks Department to a new Grocery Department, the previous history of the item stays with the old department (Snacks), which shows how the SKU performed in that department. Future transactions for the item will belong to its new department (Grocery).

### As-Is

The supporting attributes and metrics for as-is reporting are available in this subject area. On the reports on this subject area, historical data is associated with the new hierarchy of an attribute after a reclassification. For example, if an item is reclassified from the Snacks Department to a new Grocery Department, the previous history of the item moves to the new department (Grocery).

**Point in Time**

The supporting attributes and metrics for point-in-time reporting are available in this subject area. On the reports on this subject area, historical data is associated with the hierarchy of an attribute as of a user-supplied date. For example, if an item is reclassified from the Snacks Department to a new Grocery Department on January 15, 2013, and a report is run for February 16, 2013, the previous history of the item before January 15, 2013 is reported in its new department (Grocery).

**Data Mining**

Market Basket Analysis metrics are generated through a complex data mining process. To realize their maximum value, you should use them in specific ways that differ from other Oracle Retail Insights metrics. See the "Market Basket Analysis" section of [Chapter 3, "Predefined Retail Insights Reports"](#) for a description of the data mining process.

For example, Market Basket Analysis reports have been designed so that their metrics are specific to each report and cannot be used across reports. Market Basket reports can be customized by adding or removing relevant metrics, but only those metrics that belong to that report can be added. It is not accurate to drill down or roll up on Market Basket attributes. By observing these guidelines, you can be sure that you are analyzing your Market Basket metrics in the appropriate context.

## Oracle BI User Interface

Oracle BI is the interface that provides the OLAP tools for Oracle Retail Insights. Oracle BI is a comprehensive solution that you can use to create, modify, schedule, and distribute reports to end users throughout your retail enterprise. You access Oracle BI through your Web browser. Oracle BI is the metadata built on top of the Retail Insights data model, and it can be used for executing and scheduling existing reports or creating ad hoc reports.

For information about creating reports with Oracle BI, the primary reference is the *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition*.

The Oracle BI interface can be customized in many ways for your enterprise. The illustrations in this guide show the default installation of Retail Insights dashboards and reports. You can create your own dashboards to organize your reports and other objects you create. You can also develop report schedules and automated distribution mechanisms, to direct reports to the people who need them.

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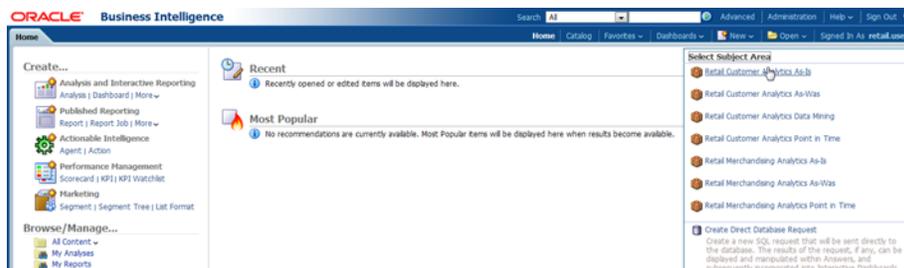
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**Note:** The specific URL and login requirements for Oracle BI depend on how Oracle BI is configured in your enterprise. Your system administrator can supply the information you need to access Oracle BI and Retail Insights.

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[Figure 1–3](#) shows an example of the interface you use to create and modify reports.

**Figure 1–3 Oracle BI Presentation Interface**

Use the Oracle BI Presentation interface for tasks such as the following:

- To create and modify reports, prompts, and filters
- To perform ad hoc analyses and experiment with metrics and filters
- To experiment with different report presentations, including tables and charts of many types
- To schedule and distribute finished reports to the end users who need them
- To administer presentation layer security, which limits the reports, dashboards, and report elements users can access

The Oracle BI interface displays attributes, facts, and metrics as logical columns. When a report is executed, the results (rows of data) are grouped by the attribute columns on the report, such as ‘Sales \$ by Year, Department.’ You can include any of the logical columns in your reports. You can modify your report columns with your own metrics, filters, and prompts.

Numerous predefined reports are packaged with Retail Insights and can be used without modifications. You can also enhance these reports for your specific requirements and use them to create your own custom reports. For more information about predefined reports, see [Chapter 3, "Predefined Retail Insights Reports."](#)

## Security

Retail Insights is built with role-based access. Permissions are associated with roles. Users should be made members of appropriate roles, through which users acquire the permissions needed for their jobs.

The following groups and application roles are available:

- Buyers
- Buyer analysts
- Inventory analysts
- Inventory managers
- Merchandising executives
- Merchandise financial planners
- Planning executives
- Promotional planners
- Pricing analysts
- Retail Insights developers

## Supported Languages

Oracle BI provides numerous language options for users; however, not all languages supported by Oracle BI are supported by Oracle Retail Insights. The following languages are supported for Retail Insights users:

- Chinese (Simplified)
- Chinese (Traditional)
- Croatian
- Dutch
- English
- French
- German
- Greek
- Hungarian
- Italian
- Japanese
- Korean
- Polish
- Portuguese (Brazilian)
- Russian
- Spanish
- Swedish
- Turkish

## Oracle BI Administration Interface

Use the Oracle BI Administration interface for tasks such as the following:

- Create and modify metrics, attributes, and dimensions
- Create and modify subject areas (presentation catalogs)
- Create and modify users and their privileges
- Add new tables to the physical layer or modify the existing relations

These tasks should be performed by Oracle BI developers and administrators, because they require coding and testing. For more information about Oracle BI administration, see the *Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

## User Roles and Responsibilities

To support numerous business decision-making processes, Retail Insights reports are designed for different categories of users such as:

- Merchandising executives and analysts
- Buyers

- Pricing executives and analysts
- Planning executives and analysts
- Inventory control managers

In the standard Retail Insights installation, the predefined reports are organized in multiple dashboards to facilitate role-based implementation.

See the *Oracle Fusion Middleware Security Guide for Oracle Business Intelligence Enterprise Edition* to learn about authentication and user role configurations for an enterprise.

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**Note:** Retail Insights does not provide data level security.

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## More Information

For each dashboard, additional measures can be inserted into the existing reports or used to create custom reports based on specific business requirements. These additional measures are available in each application's subject area in Oracle BI Answers. For more information on creating custom reports, see the following:

- *Oracle Retail Insights Implementation Guide*
- *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition*
- *Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*



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## Report Components

A report is primarily constructed of logical columns. Logical columns include:

- Facts
- Attributes
- Metrics

You can constrain (limit) the data to be included in a report with filters and prompts:

- A filter constrains the data in the report so that the report shows only the information that the user of the report wants to see. For example, you can use filters to limit reports to show information only about certain locations, items, and time periods. See "[Filters](#)" later in this chapter.
- A prompt allows the user of a report to select how to filter data in the report. For example, a prompt can ask the user to select a time period or location. See "[Prompts](#)" later in this chapter.

### Facts

A fact is a column that contains numeric data in one or more database tables. For example, the Sales fact SLS\_AMT\_LCL (sale amount) allows access to the corresponding column in the sales tables in the Retail Insights database.

Facts are the basis for the formulas used to construct business metrics. For example, the formula SUM(SLS\_AMT\_LCL) is the basis for the calculation of gross sales amount.

By themselves, facts have no meaning. The statement “inventory on hand was 10” only has meaning when given the context of time and place. Attributes place facts in context and make them meaningful. An attribute is the general description of some aspect of the business, such as location, day, or item. Examples are Minneapolis (location), April 16, 2011 (day), and scarves (item). Facts become useful only when qualified by one or more attributes. Facts are most often qualified by multiple attributes (see "[Attributes and Dimensions](#)" later in this chapter).

### Additive Facts

The majority of facts are additive, meaning that two facts of the same type can be added to create a meaningful number. For example, the sum of total sales for each of the days in a week gives the total sales for that week, and the sum of total sales for each month can give the total sales for a quarter or year.

## Semi-Additive Facts

Some facts are semi-additive, meaning that facts of the same type cannot be added in all circumstances. For example, adding receipts of an item to existing inventory produces a meaningful result, a new count of inventory on hand. On the other hand, adding the number of units on hand for every day during a week does not result in a meaningful weekly total; rather, the amount of inventory is expressed as a position for some time period such as day or week.

## Positional Facts

The data in positional fact tables reports the state of an entity at a certain point in time, rather than the total activity of an entity, these facts cannot be simply summed over time.

For example, you could ask the question: "What was my total unit retail for this week?" This is not the correct question. Aggregations of positional facts along the axis of time take end-of-period snapshots that answer the question: "What was my unit retail at the end of this week?"

For all aggregations along the time axis, aggregation programs run daily. For aggregations of positional facts within a period, this results in a period-to-date position, rather than an end-of-period position. After the period is complete, the last run for that period results in the desired end-of-period position.

## Attributes and Dimensions

An attribute describes some characteristic of an entity such as a product, a time period, or a store location. Attributes are used to aggregate data and constrain data in a report.

Attributes that are not part of the same dimension are related when they exist in the same fact table. The attributes item, location, and week are not formally related in a hierarchy; however, all of these attributes exist in the sales fact table. This means that questions can be answered by one or more of these attributes.

For example, you might ask first to see sales data by location and week. Because the fact table contains the attribute Item as well, the data can be reorganized using the Item attribute. As a general rule, information can be referenced by any attribute, or combination of attributes, present in the fact table.

Dimensions are collections of related attributes. These are some examples of Retail Insights dimensions:

- Organization
- Product
- Promotion
- Business Calendar

## Dimensions and Drilling

Attributes can be related to each other through parent-child relationships. In a relationship of this type, the child attribute belongs to only one parent attribute. For example, the Location attribute in the Organization hierarchy is defined as the child of the Region attribute. All elements of the Location attribute exist in only one region. Because the Region attribute is also defined as the child of another attribute, the relationship of the Location attribute to all other attributes in the hierarchy can be predicted.

Through these relationships, you can drill into data. Investigation of a business problem often begins at a summary level and moves to a detailed level as analysis progresses. Drilling allows you to focus on parts of the data set where problems are identified.

## Metrics

Oracle Retail Insights contains an extensive set of metrics (measures) and key performance indicators (KPIs) designed for business intelligence in a retail environment.

Metrics are performance measurements, typically numeric, that allow you to analyze business performance. Metrics range in complexity, from a simple metric that sums the values in a single fact column, to highly complex calculations that contain mathematical operators.

A metric can be viewed as a statement that specifies how a performance measure is calculated. The basic component of a metric is a formula that specifies the calculation to be made. A metric can contain other components that specify additional criteria for calculating the metric.

## Formulas

Each metric has a formula that specifies how the metric is calculated. The formula for a simple metric specifies a fact and a function for the fact. For example, the following formula calculates a sum of values in the sales fact column:

```
SUM(SLS_AMT_LCL)
```

where SLS\_AMT\_LCL is the fact and SUM is the function to be performed.

In a compound metric, the formula contains two or more metrics and a formula for calculation. For example, a formula for a compound metric might calculate the average sales value by dividing the net sales metric by another metric that calculates the number of units sold.

As another example, the following compound metric formula calculates average sales value per unit using two simple metrics:

```
Sales Value / Sales Units
```

Compound metrics can also be used to create other compound metrics. For example, the formula for the stock turn metric employs a simple metric (Sales Value) and a compound metric (Avg Stock Retail Value):

```
Sales Value / Avg Stock Retail Value
```

Avg Stock Retail Value in the preceding formula is itself a compound metric, constructed from three simple metrics that access base formulas for the facts used in the calculation:

```
(SUM(BOH Retail Value + EOH Retail Value) / (No of Weeks with Stock + 1))
```

Variance metrics are common compound metrics in Retail Insights. Variance metrics compare the change or difference in two different data points.

“Percent change” and “percent variance” metrics in Retail Insights are defined as:

```
(A-B) / B
```

The following are some examples of percent change and percent variance metrics.

**Table 2–1 Percent Change and Percent Variance Metrics**

<b>Metric</b>	<b>Formula</b>
Gross Sales Amt Var LY	$(\text{Gross Sales Value} - \text{Gross Sales Value (Last Year)}) / \text{Gross Sales Value (Last Year)}$
Gross Sales Qty Var LY	$(\text{Gross Sales Qty} / \text{Gross Sales Qty LY}) - 1$
Gross Profit Var LY	$(\text{Gross Profit} / \text{Gross Profit LY}) - 1$
Net Sales Amt WTD Var LY	$(\text{Net Sales Amt WTD} / \text{Net Sales Amt LY WTD}) - 1$
Net Reg Sales Qty MTD Var LY	$(\text{Net Reg Sales Qty MTD} / \text{Net Reg Sales Qty LY MTD}) - 1$

## Level Metrics

The level component of a metric specifies the attribute level to which a metric aggregates. By default, a metric aggregates to the level of the attributes on the report.

Some complex metrics require more than one level of aggregation in formulas. For example, you might want a report that shows the percent contribution sales value of each location to its region. You must know the sales value for each location and the total sales value for region to which it belongs to create the formula for this metric:

$$\text{Sales Value (Location)} / \text{Sales Value (Region)}$$

A metric that specifies a level of aggregation other than the default level for the report is called a level metric. Retail Insights includes many level metrics for sales and profit for attributes in the Organization and Product dimensions. In Retail Insights, when a metric has a predefined dimension level, the name of the attribute level appears in parentheses after the metric name. The following are some example level metrics for sales value in the Product hierarchy.

- Sales Value (Company)
- Sales Value (Group)
- Sales Value (Department)
- Sales Value (Class)

You can use level metrics to build compound metrics that measure the contribution of lower-level elements to higher or parent levels. The following are some examples of these contribution metrics.

**Table 2–2 Contribution Metrics**

<b>Metric</b>	<b>Formula</b>
Sales Amt Item Contribution to Department	$\text{Sales Value} / \text{Sales Value (Department)}$
Sales Amt Contribution to Location	$\text{Sales Value} / \text{Sales Value (Location)}$
Sales Amt Division Contribution to Tot	$\text{Sales Value} / \text{Sales Value (Division)}$
Profit Item Contribution to Department	$\text{Profit Value} / \text{Profit Value (Department)}$
Profit Division Contribution to Tot	$\text{Profit Value (Division)} / \text{Profit Value (Company)}$

## Time Series Conversion Functions

Time-based comparisons are an essential part of analysis at almost every level in a retail environment. Typical examples are the comparison of sales value for the current season-to-date to the same period last year, or the retail value of inventory compared to the previous week.

Retail Insights time conversion functions use the following Oracle BI time series aggregation functions:

- **Ago()**  
This function calculates the aggregated value from the current time back to a specified time period.
- **ToDate()**  
This function aggregates a measure attribute from the beginning of a specified time period to the currently displayed time.

The Ago() and ToDate() functions are described in the following documents:

- *Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*
- *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition*

See [Appendix A, "Time Series Conversion Functions,"](#) for information about the time series conversion functions.

## Filters

A filter constrains the data that is retrieved from the database. The filter attached to a report limits the data that is retrieved for the metrics in the report. For example, a filter can limit the information in a report to a particular month, department, and location.

Filters generally constrain all of the metrics in a report. In some cases, however, it is necessary to place additional constraints on individual metrics in a report. When a condition is applied to a single metric, it does not affect the other metrics in the report. A metric condition plays the same role in a metric that a filter plays in a report, limiting the data that is retrieved based on one or more conditions.

In Retail Insights, sales and return amounts are segmented by price type according to the retail price type: regular, promotion, or clearance. Sales fact tables hold sales and return amounts in two fact columns, SLS\_AMT\_LCL and RET\_AMT\_LCL. The retail price type is indicated by a code for each row in the table. A sales metric retrieves all values, regardless of type, unless a price type is specified. To specify the price type, a filter is attached to the metric. For example, regular price type is indicated in the fact table by a value of 1. A filter stating that price type must equal 1 is attached to a metric. Queries for this metric limit the data to rows in the fact table that have a retail type of 1.

You can build your own filters with Oracle BI. Retail Insights does not include any packaged filters.

## Prompts

Prompts allow any end user of a report to select the data used in the content of a report. Using prompts, you can customize filter criteria and other parts of a report, allowing multiple users to use the same report to answer different business questions.

In Oracle BI, there are two kinds of prompts:

- Dashboard prompts

A dashboard prompt filters all reports on a dashboard page. A dashboard prompt can prompt the end user for multiple filter criteria.

- Inline prompts

An inline prompt applies to only one report. You can use an inline prompt to prompt the user about the content of an individual report column.

An inline prompt can prompt only for the dimensions that exist in the report. A dashboard prompt can prompt about any dimension, even if it does not exist in a particular report.

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## Predefined Retail Insights Reports

Predefined reports are packaged with Retail Insights and available on four sample Oracle BI dashboards. You can use these packaged reports without modifications to begin reporting on your retail measures. You can also use these reports as foundations or examples for building your own custom reports. Each packaged report includes dashboard prompts, to allow a user to refine and focus the data in the report for the subset of the retailer's business measures that you need to investigate.

In addition to the predefined reports, Retail Insights includes a variety of predefined, fundamental metrics that are common throughout the retailing industry. Some of these are used in the packaged reports, and you can use any of the metrics in your own custom reports. See [Chapter 6, "Metrics"](#) for more information.

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**Notes:** Before viewing reports, ensure that the Retail Insights nightly batch runs have completed successfully for the report subject area, so that you can analyze the most up-to-date data.

Moving, removing, or re-ordering of the columns or prompts on any predefined report is not recommended as they have only been tested as they are currently configured.

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### Retail Insights Reporting Areas

Retail Insights offers extensive reporting in the following areas:

- [Merchandising and Marketing](#)
- [Corporate Planning and Performance Management](#)
- [Customer Analysis](#)
- [Retail Insights Data Mining](#)
- [Promotion Effectiveness](#)
- [Cluster](#)
- [Wholesale](#)
- [Consumer](#)
- [Customer Order](#)
- [Weekly Business Review](#)
- [Chief Marketing Officer Dashboard](#)

## Merchandising and Marketing

### Merchandise Planning

The merchandising reports provide a high-level, organization-wide perspective for analyzing the effectiveness of merchandising strategies. The utilization of key performance indicators (KPIs) provides detailed analysis of various merchandising techniques to maximize profit, increase sales opportunities, and enhance product performance. The merchandising reports under the Merchandising Analysis dashboard analyze merchandise performance, profits, sales, and trends. These reports use metrics created for sales, cost, and pricing facts.

### Evaluating Promotion Effectiveness

Reports under the Markdowns dashboard analyze the efficiency of merchandising promotions. The reports also compare the sales generated through promotion mechanisms, and break down markdown amount by various retail types.

## Corporate Planning and Performance Management

### Evaluating Comparable Store Performance and New Store Locations

The reports under the Merchandising Performance dashboard provide comparable store analysis information. These reports provide a measure of a retailer's sales strength by comparing this year's sales against last year's sales, using both total sales and comparable store sales.

## Customer Analysis

You can use Customer Analysis reports to explore customer segmentations that can translate into promotion opportunities. These reports can help you to understand behavioral habits of a focused customer base, increase the relevancy of advertisements, and increase revenue from advertisement placements or other types of promotion events.

## Market Basket Analysis

Market Basket Analysis is a data mining technique that outputs the correlations between various items in a customer's basket.

Market Basket Analysis reports help you to understand which items sell with which other items, including probability and profitability of market baskets. You can use these reports to plan promotions, optimize product placement, and support store planogram decisions. These reports can also help you to understand the statistical relationship between sales of different merchandise.

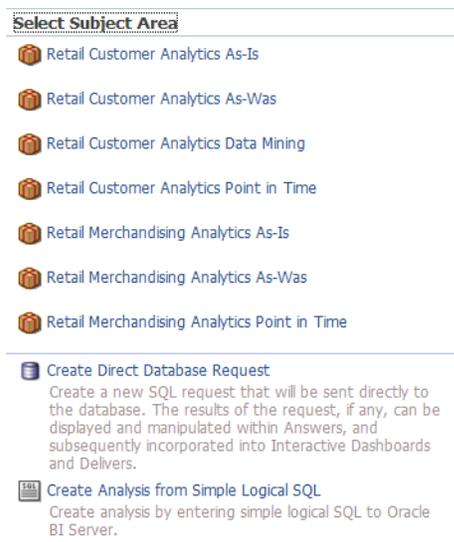
## Promotion Effectiveness

Promotion Effectiveness is the area of analysis that a buyer or merchandising planner uses to compare promotion strategies across the promotion hierarchy, as well as across the merchandising and organization hierarchies. For example, you might compare one promotion to another to evaluate total sales volume and profit amount across the two promotions.

Along with promotion (offer) redemption analysis, the merchandising planner can compare actual promotion results against the promotion forecast, down to the low level of promotion component and item level.

## As-Is, As-Was, and Point in Time Reporting

The packaged Retail Insights metrics are found under the different Retail As-Is, Retail As-Was, and Retail Point In Time subject areas.



See [Chapter 4, "Creating and Modifying Reports"](#) for more information about as-is, as-was, and point in time analysis methods.

See the *Oracle Retail Insights Implementation Guide* for information about adding reports in different subject areas.

## Retail Insights Predefined Reports

The rest of this chapter describes the reports that are packaged with Oracle Retail Insights, and the Retail Insights dashboards in the Oracle BI interface where you can find these reports. The report descriptions are organized according to the dashboards where you find them.

### Report Formats

The Retail Insights dashboards contain a variety of report formats, each suited to the various roles in the retail organization, as well as the different areas of retailing business analysis.

#### Productivity Reports

Productivity reports focus on the overall monetary and meaningful contribution of a particular level of the merchandise or organization hierarchy. Productivity measures are frequently based on time or monetary considerations. For example, sales productivity measures focus on questions such as these:

- How much does a particular store, employee, or process contribute to sales or profit?
- How much profit does one particular item contribute as part of a department?

### **Trend Reports**

Trend reports highlights distinct patterns or progressions in the retailer's data over time. These are typically presented to the user as bar or line graphs charting a measure over a selected time period.

### **Ranking Reports**

Ranking reports sort or arrange information in a particular order at a given point in time, or over a selected time period (top sales, bottom performers, fast movers, and so on). Reports can be ranked either by sorting on one of the metrics (such as top 10 sellers based on sales amount), or through a filter on the report (such as weeks of supply greater than 5 or less than 2).

### **To Date Reports**

These reports provide running totals for information up to and including the date selected.

## **Dashboards and Reports**

Retail Insights consists of a Retail Merchandise Insights Cloud Service dashboard and Retail Customer Insights Cloud Service.

### **Retail Merchandise Insights Cloud Service**

The Retail Merchandise Insights Cloud Service dashboard is divided into these sections:

- [Merchandising Scorecard](#)
- [Merchandising Analysis](#)

Each section provides links to dashboards that contain reports; see [Figure 3-1](#).

### **Retail Customer Insights Cloud Service**

Retail Customer Insights Cloud Service consists of following dashboards:

- Customer Analysis
- Promotions
- Market Basket Analysis
- Customer Order
- Consumer
- Cluster
- Wholesale

Figure 3–1 Retail Merchandise Insights Cloud Service Overview Dashboard

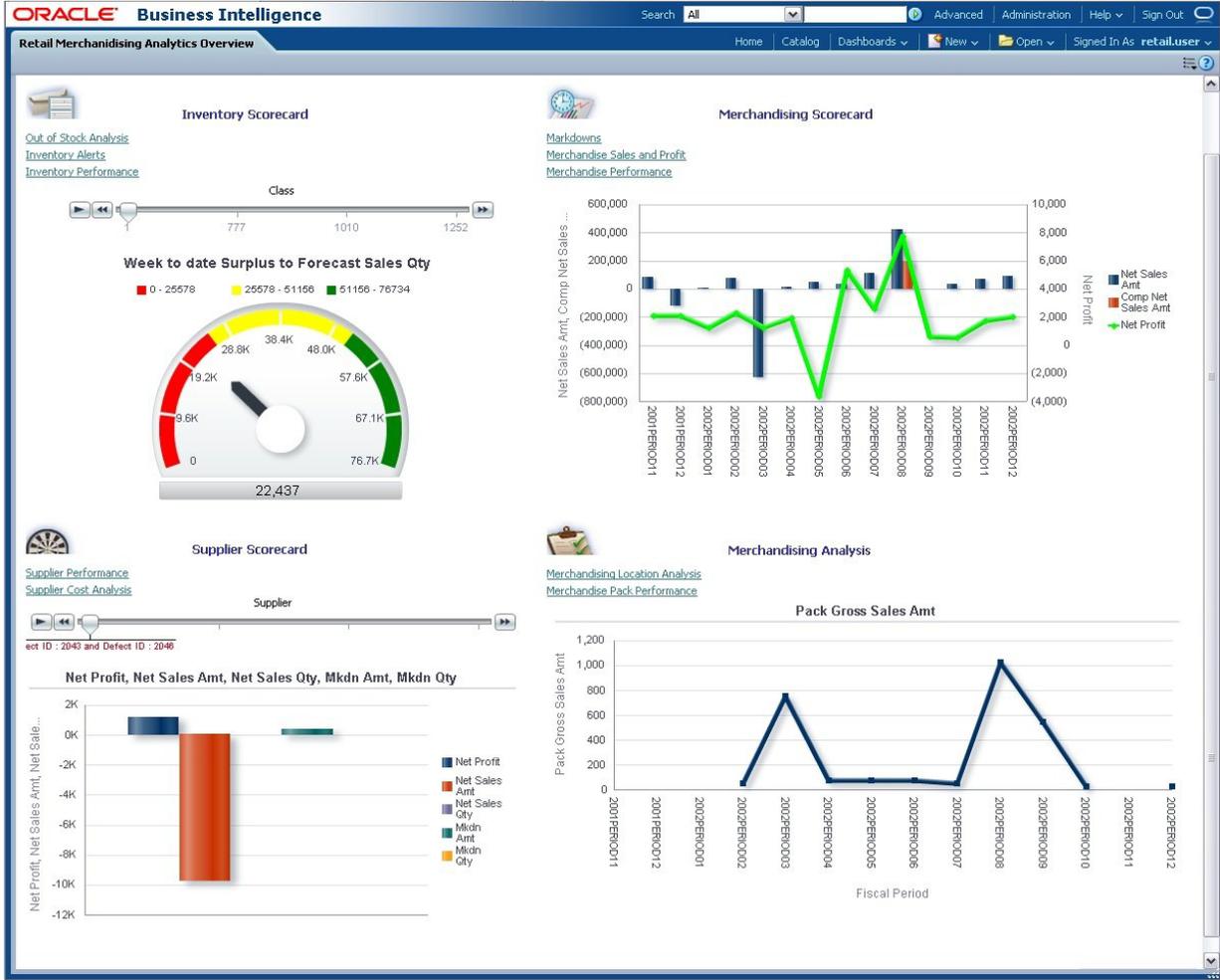


Table 3–1 lists all of the Retail Insights predefined reports. The table identifies the sections of the overview dashboard through which you access the reports, and the dashboards on which the reports appear. The table also indicates the types of analysis used in the reports.

**Table 3–1 Predefined Retail Insights Reports - Sections, Dashboards, and Analysis Methods**

Section	Dashboard	Report Name	As-Is	As-Was	Point in Time
Merchandising Analysis	Markdowns	Current Markdown Scorecard - Markdown to Sales Ratio		X	
		Current Top 10 Sale Items		X	
	Merchandise Sales and Profit	Current Top 10 Sale Items As Is	X		
		Current Sales and Profit Contribution <ul style="list-style-type: none"> <li>■ Sales LY</li> <li>■ Profit LY</li> <li>■ Total</li> </ul>		X	
		Season Performance		X	
		Current Sales Scorecard - Monthly Trend		X	
	Merchandise Performance	Current Sales Projection		X	
		Daily Sales and Profit		X	
Merchandising Location Analysis	Customer Analysis	Customer Segment Transaction Analysis		X	
		Customer Analysis		X	
Retail Insights Data Mining	Market Basket Analysis	Top 10 Product Affinities	X		
		Current Top 10 Promoted Subclass Affinities	X		
		Anchor Subclass Top Affinities by Promotions	X		
		Anchor Customer Segment Promotion Affinities	X		
		Anchor Subclass Top Affinities	X		
Promotion Effectiveness	Promotion	Promotion Item Lift		X	
Consumer	Consumer Analysis	Consumer Purchases by Channel	X		
		Consumer Score	X		
		Consumer Segment Gross Spend	X		
		Consumer Spending by Income Range	X		
		Consumer Item Penetration	X		
		Consumer Spend by Category	X		
Cluster	Cluster Analysis	Cluster Overview		X	
		Cluster Group Rank	X		
		Cluster Group to Cluster Inventory Comparison		X	
		Cluster Promotion Effectiveness	X		

**Table 3–1 (Cont.) Predefined Retail Insights Reports - Sections, Dashboards, and Analysis Methods**

Section	Dashboard	Report Name	As-Is	As-Was	Point in Time
Customer Order	Customer Order	Demand and Fulfillment Comparison		X	
		Channel Profitability Comparison		X	
		Top 6 Customer Segment Analyses (As-Was)		X	
		Top 6 Customer Segment Analyses (As-Is)	X		
		Channel Cancel and Backorder Correlation	X		
		Customer Order Brand Performance		X	
		Customer Order Service Levels (As-Was)		X	
		Customer Order Service Levels (As-Is)	X		
		Customer Order Status Analysis	X		
Wholesale	Wholesale Analysis	Wholesale Sales and Inventory		X	
		Wholesale Transaction Analysis		X	
		Wholesale Sales and Returns		X	
		Wholesale Sales Trend		X	
Weekly Business Review	Financial	Key Performance Indicators		X	
		Sales Performance		X	
		Department Analysis		X	

## Merchandising Scorecard

The Merchandising Scorecard provides a high-level, organization-wide perspective for analyzing the effectiveness of merchandising strategies, allowing detailed analysis of various merchandising techniques to maximize profit, increase sales opportunities, and enhance product performance. The Merchandising Scorecard section contains the following dashboards of reports:

- [Markdowns](#)
- [Merchandise Sales and Profit](#)
- [Merchandise Performance](#)

### Markdowns

The Markdowns dashboard includes the following reports.

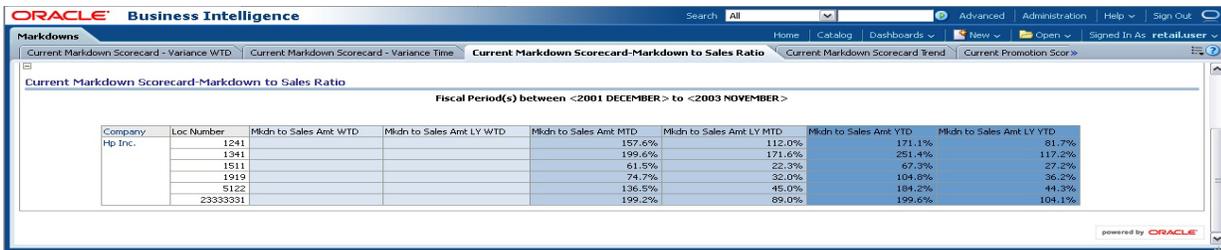
#### Current Markdown Scorecards

These reports provide markdown information, based on regular, promotion, and clearance retail types, compared to last year. Merchandising and finance executives can use this report to determine the effectiveness of markdown strategies. Buyers can identify items that have high variances of markdowns compared to last year, and possibly negotiate and evaluate the prices of such items with suppliers.

The following are the Current Markdown Scorecard reports.

**Current Markdown Scorecard - Markdown to Sales Ratio** The report displays week-to-date, month-to-date, and year-to-date retail markdown to sales ratios for this year and last year.

**Figure 3–2 Current Markdown Scorecard - Markdown to Sales Ratio Report**



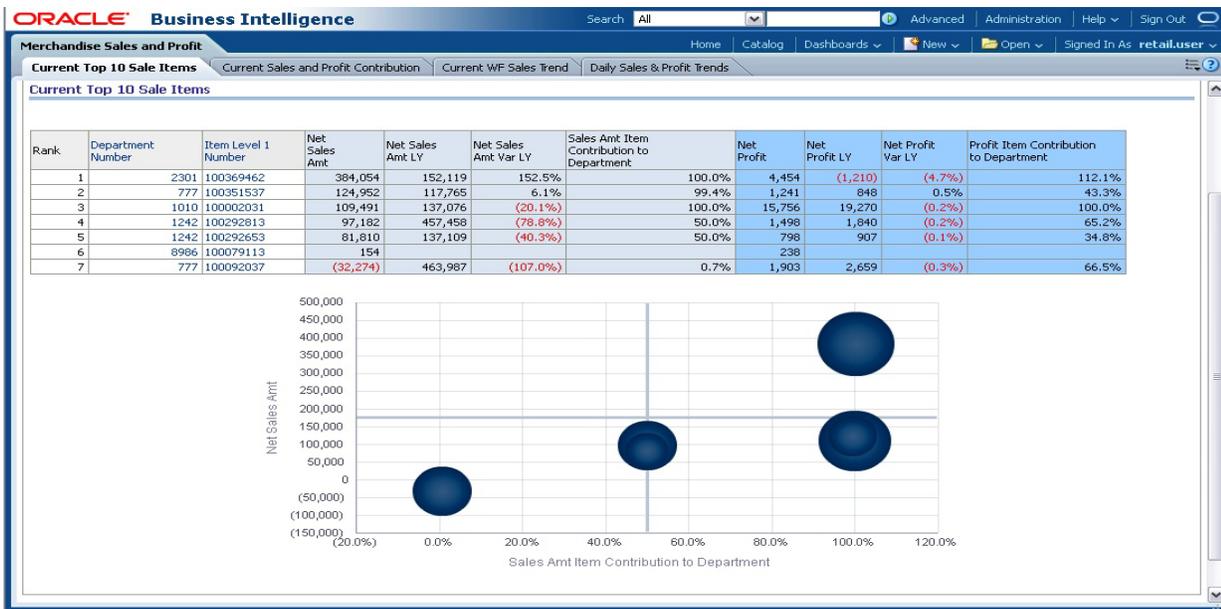
### Merchandise Sales and Profit

The Merchandising Sales and Profit dashboard includes the following reports.

#### Current Top 10 Sale Items

This report shows the top ten selling items, ranked by sales amount, for a time period specified by the user. This report can be run periodically to review the merchandising strategies for a selected range of departments. The results of the report can be used by buyers to evaluate pricing and promotion strategies for key items.

**Figure 3–3 Current Top 10 Sale Items Report**



#### Current Sales and Profit Contribution

This report provides a view of sales and profit contribution across the organization by merchandising division. The report can be run monthly to compare the merchandising mix this year to last year by sales value. For the underperforming divisions in this report, merchandising executives can navigate to the Current Location Scorecard report to analyze division performance and profitability by location.

There are three subreports in this report:

- Current Sales and Profit Contribution - Sales LY

This report displays the gross sales amounts for various divisions of a company. It also displays the sales contribution of each division this year and last year.

**Figure 3-4 Current Sales and Profit Contribution - Sales LY Report**



- Current Sales and Profit Contribution - Profit LY

This report displays profit amounts for various divisions of a company. It also displays the profit contribution of each division this year and last year.

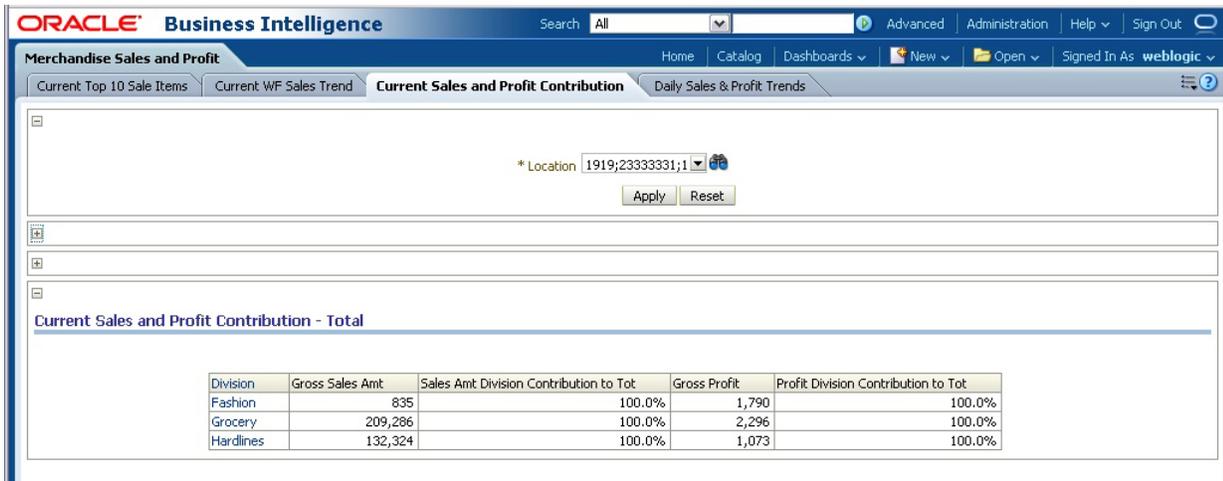
**Figure 3-5 Current Sales and Profit Contribution - Profit LY Report**



- Current Sales and Profit Contribution - Total

This report displays gross sales, sales contribution percentages, gross profit, and profit contribution percentages for various divisions of a company.

**Figure 3–6 Current Sales and Profit Contribution - Total Report**



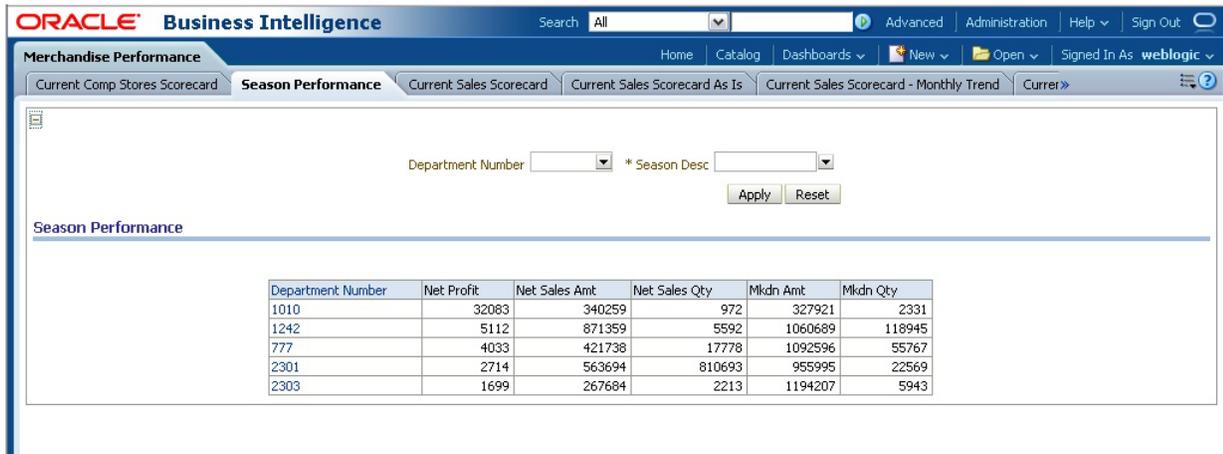
## Merchandise Performance

The Merchandise Performance dashboard includes the following reports.

### Season Performance

This report displays performance across departments for a specified product season. Planners and buyers evaluating seasonal merchandise assortments can compare sales and profitability of items attached to specific seasons. Because product seasons do not have to align with the business calendar, this report offers an alternative view of performance of merchandise over time.

**Figure 3–7 Season Performance Report**



## Merchandising Analysis

Merchandising Analysis provides a deeper level of analysis compared to the merchandising scorecards. Buyers and planners can use these reports to drill down to low-level analysis to understand trends in profit, variances from sales forecasts, and the effectiveness of merchandising strategies. The Merchandising Scorecard section contains the following dashboards of reports:

- [Merchandising Location Analysis](#)

## Merchandising Location Analysis

The Merchandising Location Analysis dashboard includes the following reports.

### Daily Sales and Profit

This report provides an organizational comparison of sales and profit trends compared to the same time period last year. Regional and store Managers can review this report daily to ensure that daily projections for their regions and locations are being met on high-traffic days.

**Figure 3–8 Daily Sales and Profit Report**

Loc Number	Fiscal Week	Fiscal Date	Net Sales Amt	Net Sales Amt LY	Net Sales Amt Var LY	Net Profit	Net Profit LY	Net Profit Var LY
1241	2003WEEK33	10/12/2003	3,339			48		
		10/14/2003		456			48	
		10/15/2003	1,022			38		48
		10/17/2003		3,558				
1341	2003WEEK33	10/18/2003	-165			48		
		10/12/2003	5,703			72		
		10/14/2003		329			154	
1511	2003WEEK33	10/15/2003	163,498			149		
		10/17/2003		3,629			148	
		10/18/2003	19,167			66		
		10/12/2003	252	-25	(11.1%)	-41	117	(0.6%)
		10/13/2003	1,966	1,800	0.1%	500	117	3.3%
1919	2003WEEK33	10/14/2003	234	1,335	(0.8%)	230	1,622	(0.9%)
		10/15/2003	441	-351	(2.3%)	30	116	(0.7%)
		10/16/2003	-221	-2,881	(0.9%)	-1,225	-16	73.3%
		10/17/2003	3,305	620	4.3%	16	62	(0.7%)
		10/18/2003	3,558	986	2.6%	62	12	4.0%
23333331	2003WEEK33	10/12/2003	2,648			566		
		10/14/2003		1,234			916	
		10/15/2003	1,938			882		1,648
		10/17/2003		4,256				
23333331	2003WEEK33	10/18/2003	369			1,037		
		10/12/2003	702			27		
		10/14/2003		1,035			16	
		10/15/2003	445			2		

### Current Sales Projection

This report displays actual sales quantities compared to forecast for the current week, broken down by location. This report can be run midweek by merchandising and planning executives who assess progress against forecast. For locations where variance from forecast is negative, an inventory control manager can see whether low inventory levels are affecting the performance compared to forecast.

## Customer Analysis

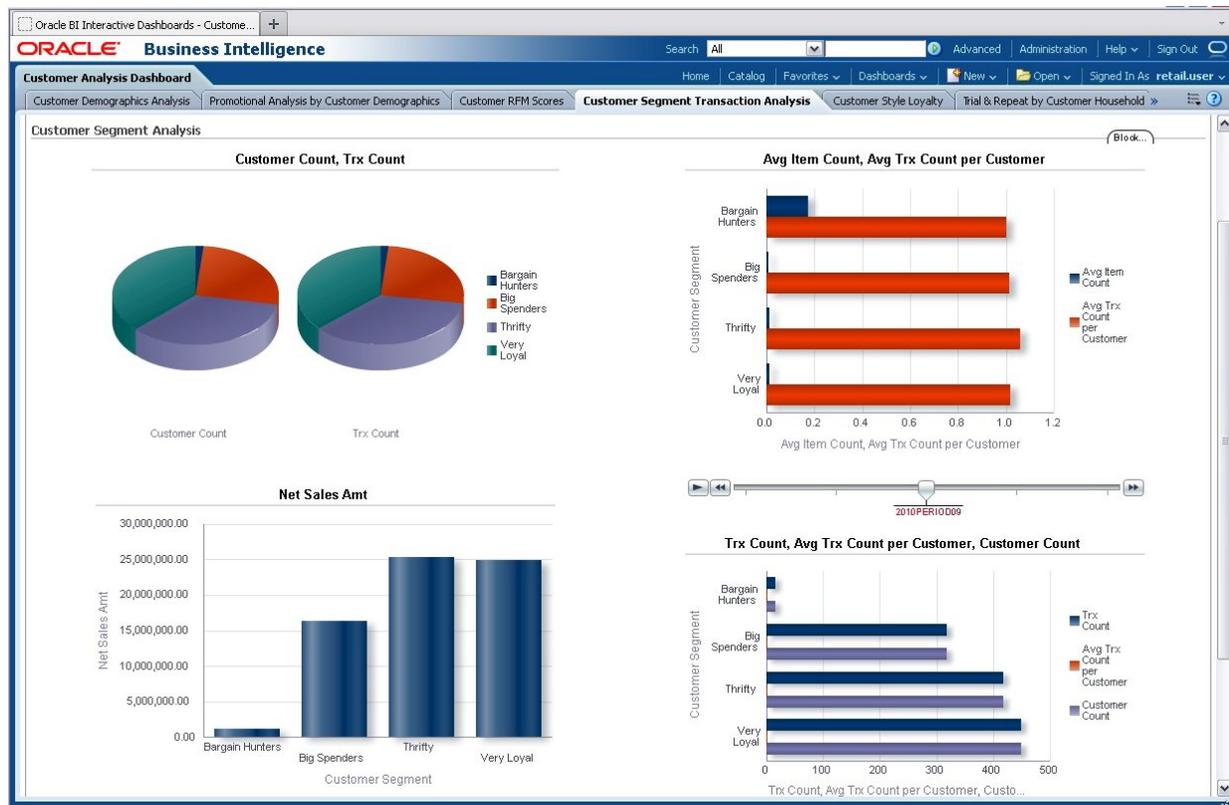
Marketing teams and promotion planners need to understand how the buying behavior of their customers varies across the customer base. Using the Customer Analysis dashboard, they can view customer behavior by demographics, RFM scores, customer segments, and more, using the following reports from the Customer Analysis dashboard.

- [Customer Segment Transaction Analysis](#)

## Customer Segment Transaction Analysis

This report displays sales performance by customer groups and will highlight customer groups that are most valuable to a retailer. It will also exhibit disparities in behavior of different customer groups. If all customer groups behave similarly, analysts may choose to market towards all customers in the same manner. If customer groups behave significantly different, analysts may choose to customize the retail experience for a specific customer group.

Figure 3–9 Customer Segment Transaction Analysis Report



## Retail Insights Data Mining

Retail Insights' data mining capabilities enable market basket analysis of which products may make effective bundles. This customer behavior information is gleaned from mining transaction history and correlating it with customer segment attributes to inform promotion strategies. The ability to understand the market basket affinities allows marketers to calculate, monitor, and build promotion strategies based on critical metrics such as customer profitability.

Data mining also enables baseline calculations that are used to calculate lift for promoted products. That is, how much over the baseline did my sales increased when I promoted this category? Baseline metrics can be used by a buyer during category planning to establish expected sales for a category before promotions are added.

## Market Basket Analysis

Market basket analysis uses a data mining technique to look for sales patterns between products within a given group of transactions. The output of that analysis provides a

rule that defines the association found between products at the subclass, class, or department level of the merchandise hierarchy.

A rule consists of one to three antecedents (IF attribute) and a single consequent (THEN attributes). For example:

IF (milk) and (juice), THEN (cereal)

In other words, if a customer purchases an item from subclasses milk and juice, the customer will also purchase an item from subclass cereal. After a rule is defined, a user can use market basket analysis metrics to understand how strong the association is, using rule confidence and support. The probability that a customer will buy milk and juice is support, and the conditional probability that a customer will purchase cereal is confidence.

After users have identified selling patterns, they can begin to take action based on those patterns, as well as the needs and goals of their product category. Suppose that a merchant is tasked with bringing in more margin dollars to the cereal category. Armed with the association rule in the preceding example, the merchant might work with the dairy category on a milk promotion to increase sales of milk. This in turn increases sales of cereal, without sacrificing margin dollars on a cereal promotion. Note that this could require cross-category planning in some cases, depending on the affinities being studied. The Market Basket Analysis section contains the following dashboards of reports:

- [Top 10 Product Affinities](#)
- [Current Top 10 Promoted Subclass Affinities](#)
- [Anchor Subclass Top Affinities by Promotions](#)
- [Anchor Customer Segment Promotion Affinities](#)
- [Anchor Subclass Top Affinities](#)

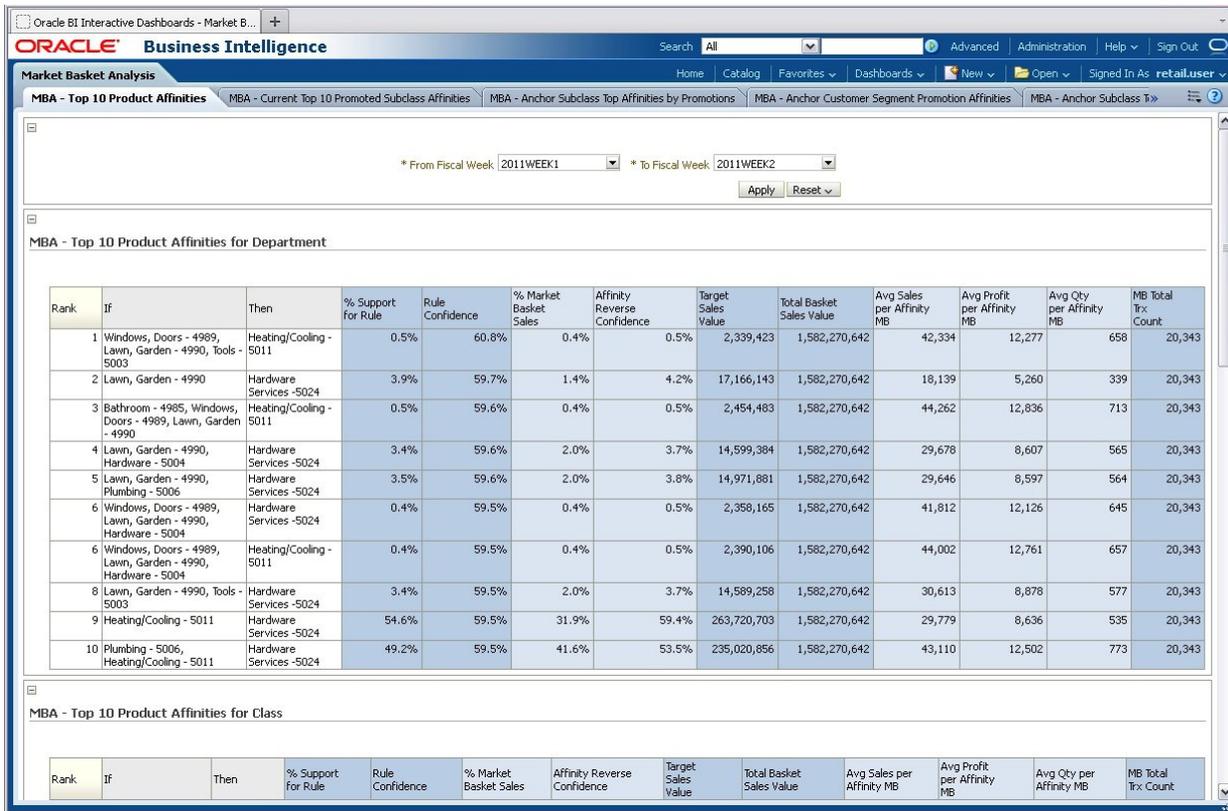
### **Market Basket Analysis Report Ranking**

For the Top 10 Product Affinities and Current Top 10 Promoted Subclass Affinities reports, results are ranked from 1 to 10 in descending order of rule confidence. This provides the user an easy-to-understand visual representation of the strength of product affinities.

### **Top 10 Product Affinities**

This report illustrates the affinity relationship that buying one item has on buying another item. Buyers, planogram analysts, merchandising executives, and marketing executives can run this report at the beginning of the week. Marketing analysts can capitalize on the reported product affinities to efficiently plan promotions. Planogram analysts can benefit from this report by using product affinities to create customer-friendly store planograms and catalog pages.

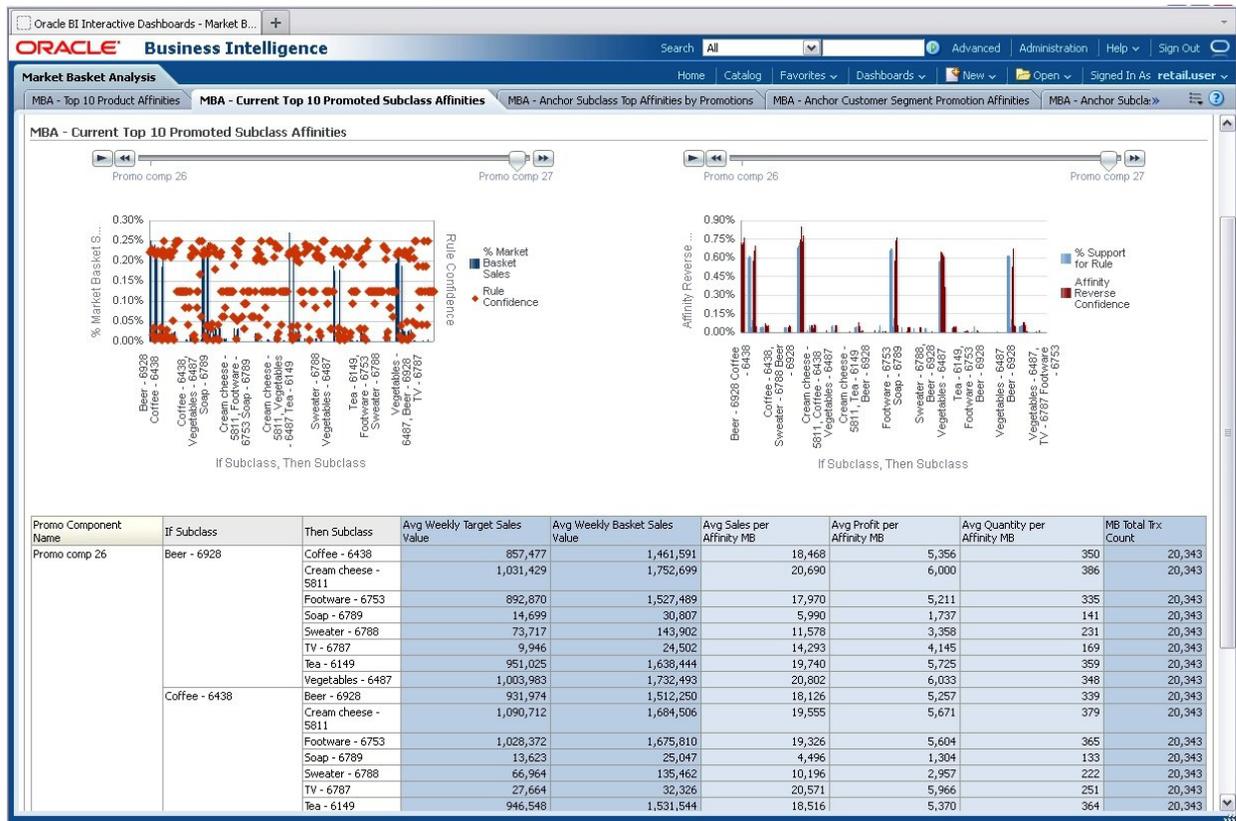
Figure 3–10 MBA - Top 10 Product Affinities Report



### Current Top 10 Promoted Subclass Affinities

This report reveals the effect of promoting one subclass on the sales of another subclass. Category managers, merchandising executives, and marketing executives can run this report. This report can be helpful in planning future promotions, because reducing the price on some items might cause a boost in sales of related high-affinity items, without the need to also promote those items.

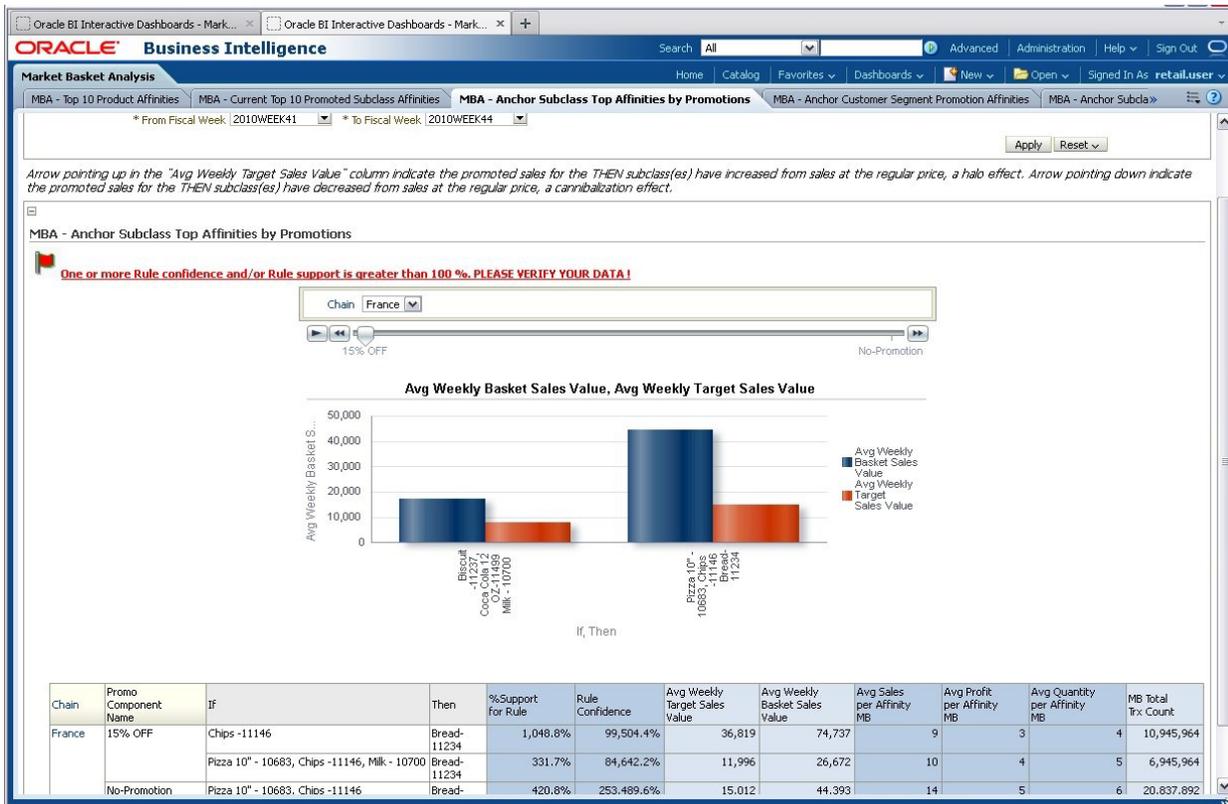
Figure 3-11 MBA - Current Top 10 Promoted Subclass Affinities Report



### Anchor Subclass Top Affinities by Promotions

This report provides a view of how much a promotion on a specific subclass drives sales for another subclass. Merchandising and marketing executives can use this information to plan for promotions, because reducing the price on some subclasses may cause a boost in sales of related high-affinity subclasses, without the need to further promote those affinity subclasses.

Figure 3–12 MBA - Anchor Subclass Top Affinities by Promotions Report

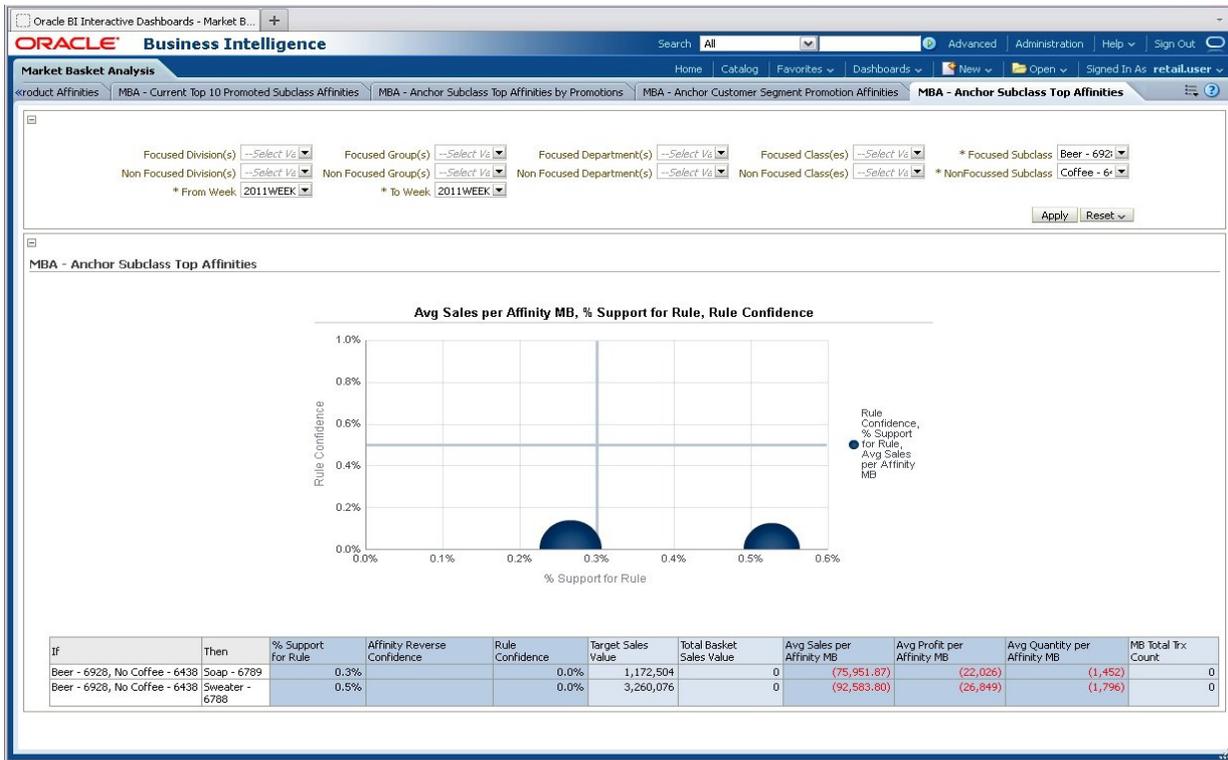


### Anchor Customer Segment Promotion Affinities

This report provides a view of subclass affinities by customer segment when subclasses are on promotion. Merchandising and marketing executives can use this information to explore customer segments that potentially translate into opportunities for promotions. It can also help in understanding customer habits, to increase the relevancy and potential revenue from different types of promotional events.



Figure 3–14 MBA - Anchor Subclass Top Affinities Report



## Promotion Effectiveness

The Promotion dashboard includes the following reports:

- [Promotion Item Lift](#)

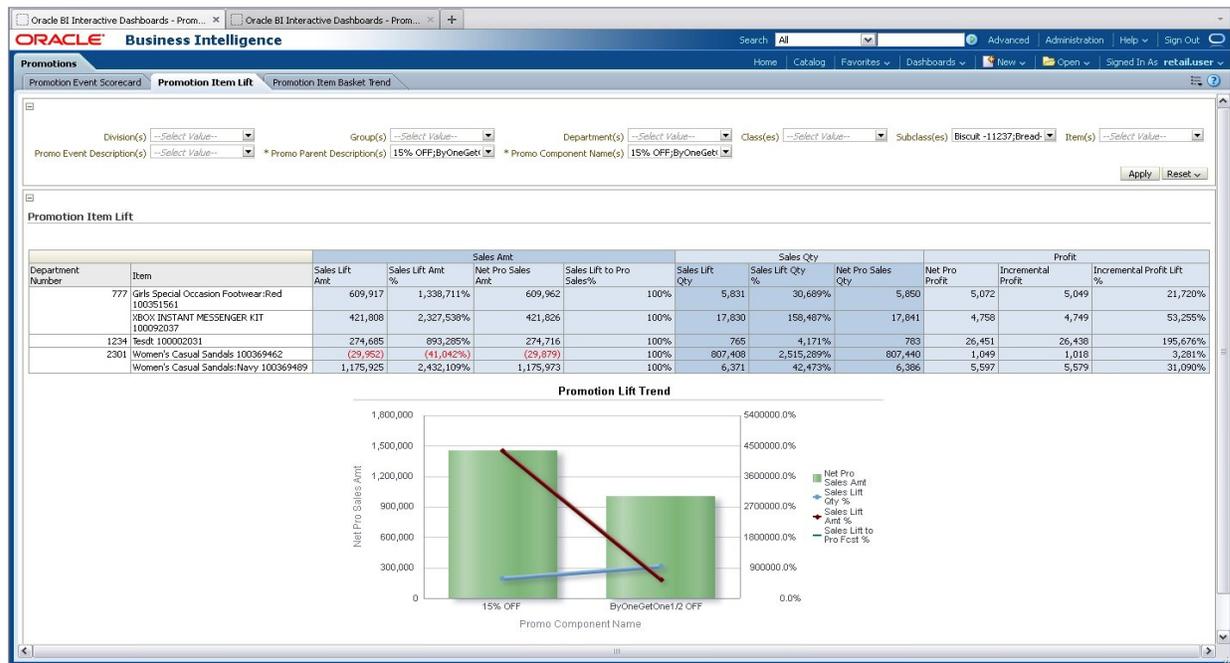
### Promotion Item Lift

This report displays which departments' items are driving sales within a single or multiple promotions. Analysts can use this report to determine which departments' items to promote in the future. They can also use this report to determine which departments' items to promote in advertising methods such as circulars.

This report can be run by merchants including planners, buyers, and category managers, as well as financial analysts. Typically, it will not be used by executive-level managers, because it is at a low granular level.

Suppose that a promotion component has been executed across multiple different departments. This promotion component could be seasonal, which is why it would apply to multiple departments. At the end of the promotion component time period, merchants want to know how the promotion performed. They can run this report to determine if a specific department's items sold more often than another department's items. The results of this report can determine whether the same departments will be placed on promotion again, or if those departments did not yield enough sales to warrant a repeated promotion. If one department had more frequent sales, merchants may decide to put more items from that department on the next similar promotion.

Figure 3–15 Promotion Item Lift Report



## Cluster

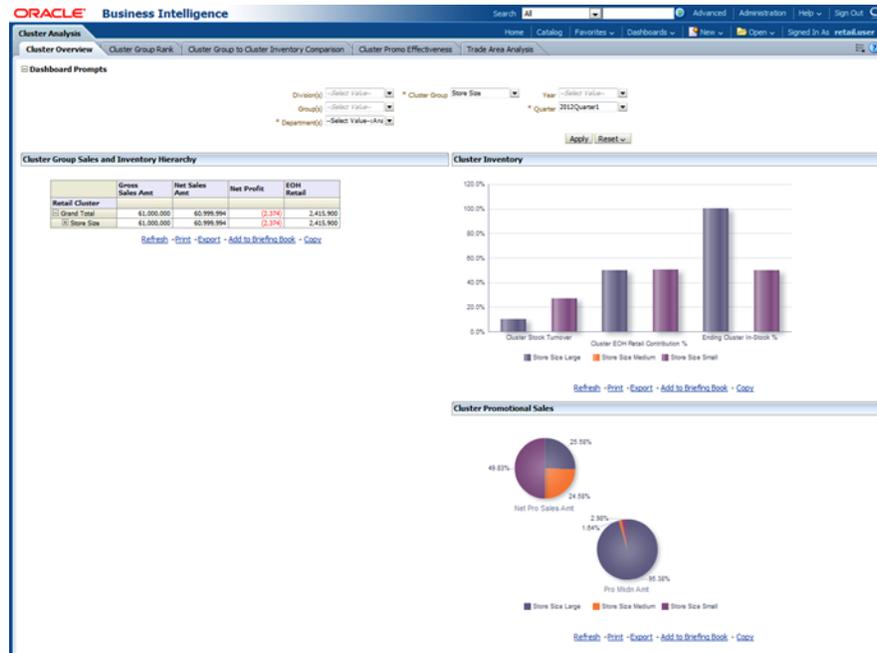
The Cluster dashboard includes the following reports:

- [Cluster Overview](#)
- [Cluster Group Rank](#)
- [Cluster Group to Cluster Inventory Comparison](#)
- [Cluster Promotion Effectiveness](#)

## Cluster Overview

This page provides a bird's eye view of a cluster group's performance in terms of sales, profit, inventory, and promotions for a quarter.

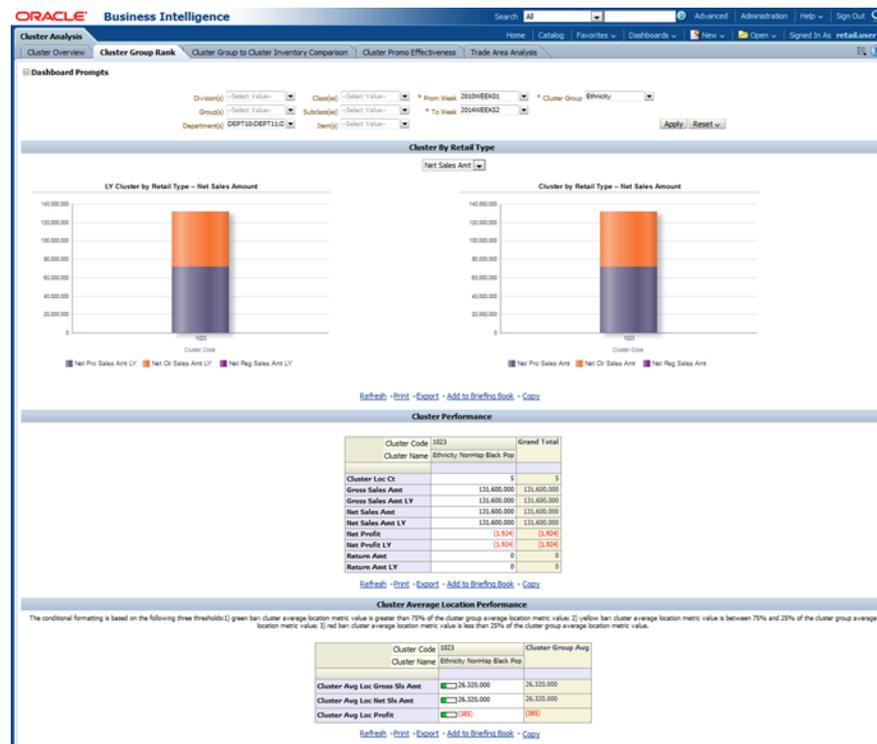
Figure 3–16 Cluster Overview Report



### Cluster Group Rank

This report compares clusters within the same cluster group to one another. Depending on what the cluster was built for it may make sense to fall in a certain part of cluster rank. For example: a high volume cluster should have higher average location sales than a low volume cluster.

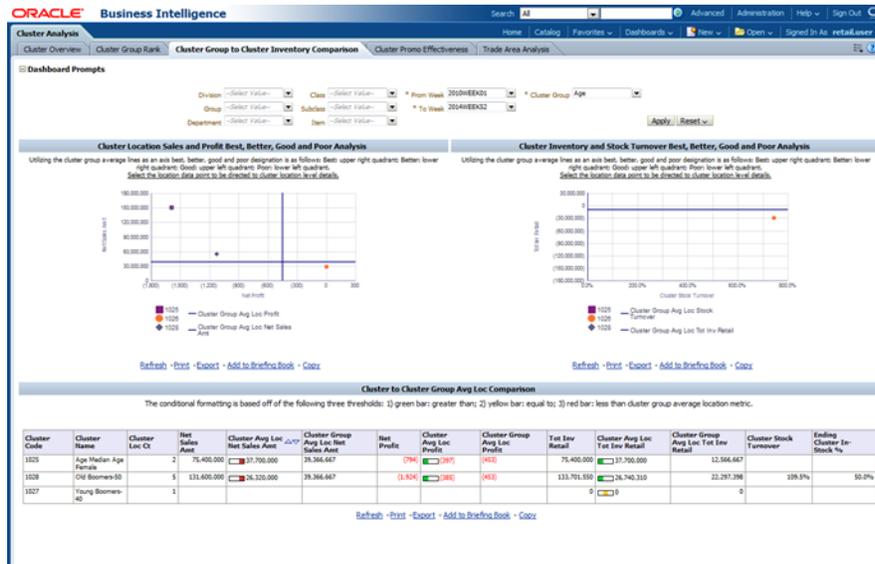
Figure 3–17 Cluster Group Rank Report



## Cluster Group to Cluster Inventory Comparison

This report has a plethora of visualizations to show inventory investment in comparison to sales and profit performance. By comparing both investment and gains, one should be able to understand if they are investing in the correct locations (implicitly one would understand if they are investing in the right merchandise as clusters have a relationship to a merchandise node).

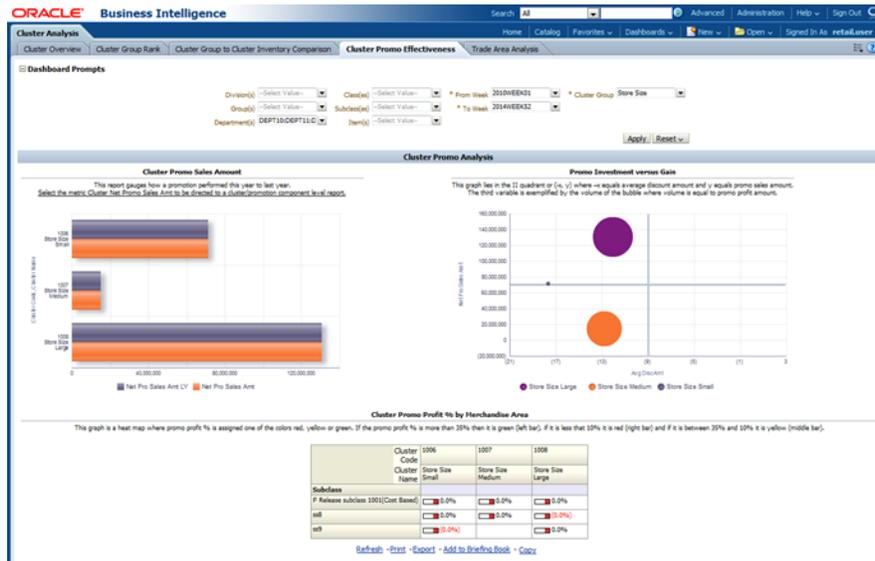
Figure 3–18 Cluster Group to Cluster Inventory Comparison Report



### Cluster Promotion Effectiveness

This page looks at promotion sales amount in several different ways: in comparison to profit, promotion savings and forecasted promotion sales amount. These reports combined, give one a good understanding of the effectiveness of their promotions by cluster.

Figure 3–19 Cluster Promotion Effectiveness Report



### Wholesale

The Wholesale dashboard includes the following reports:

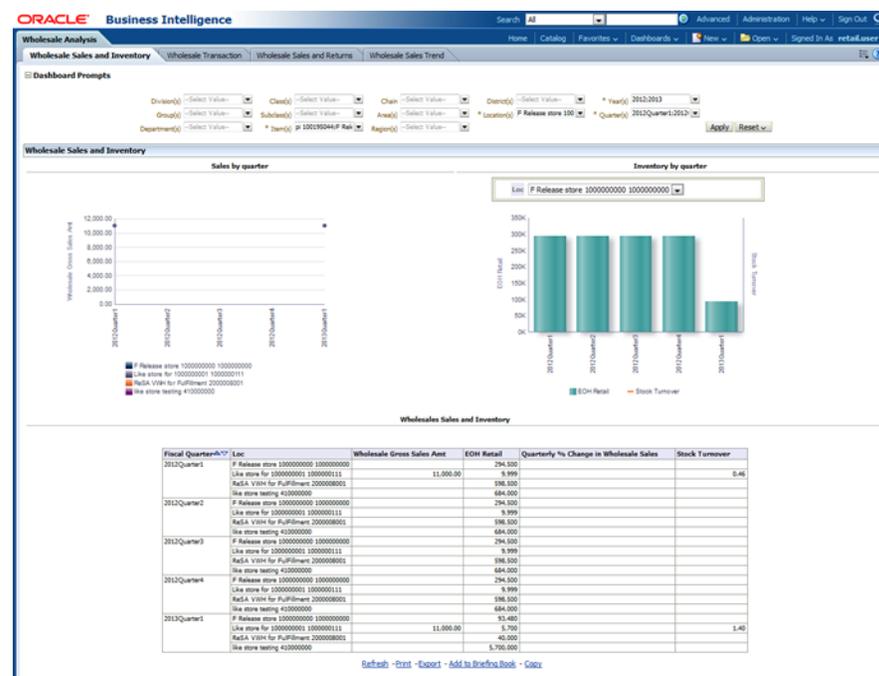
- Wholesale Sales and Inventory

- Wholesale Sales and Returns
- Wholesale Sales Trend
- Wholesale Transaction Analysis

## Wholesale Sales and Inventory

This report provides sales and inventory levels by month for a retailer's wholesale sales transactions, as well as inventory to sales ratio and inventory turns. It could be used by buyers to understand the volume of their wholesale business, and how it may be changing over time, and also whether their inventory levels are appropriate for the volume of wholesale business their category is doing. If the inventory levels are too low they could be missing out on potential wholesale sales, while conversely if inventory levels are too high, they are carrying unnecessary inventory costs that could be spent more wisely elsewhere.

**Figure 3–20 Wholesale Sales and Inventory Report**



## Wholesale Sales and Returns

This report shows wholesale transactions, profit, returns, and total sales over time. This information enables buyers and merchandise executives to understand the nature of their wholesale business as separate from their regular retail business, in terms of sales, profits, and returns. If, for example, a buyer is concerned about a large amount of returns in his category that are affecting his sales numbers, by using this report he could determine how much if at all he should be concerned about returns in his wholesale business.

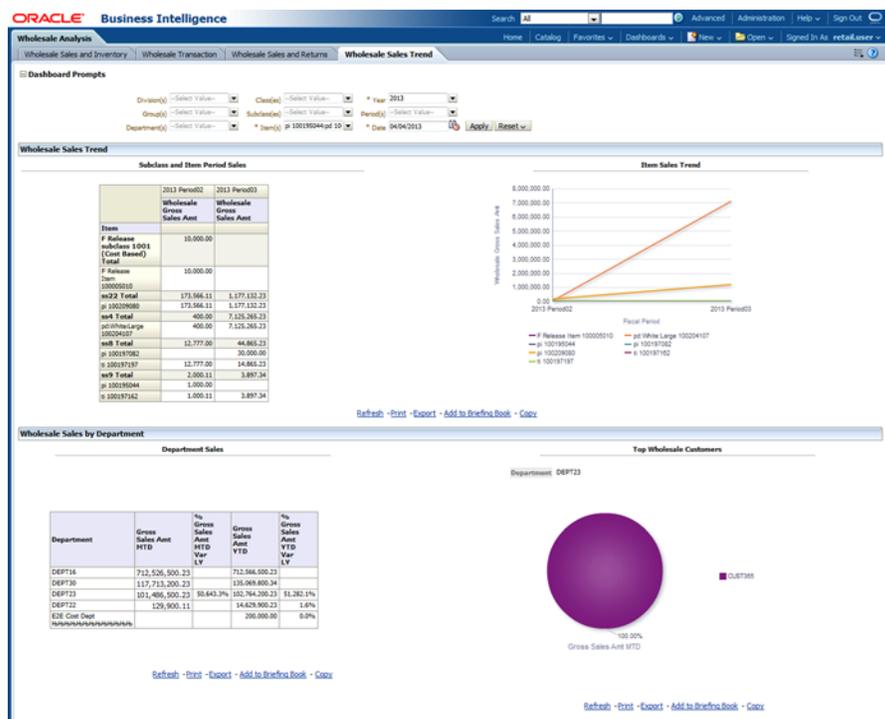
Figure 3–21 Wholesale Sales and Returns Report



### Wholesale Sales Trend

This report allows buyers and merchandise executives to understand sales trends in their wholesale business. It provides sales month to date and year to date and the percentage change over the same time period the previous year.

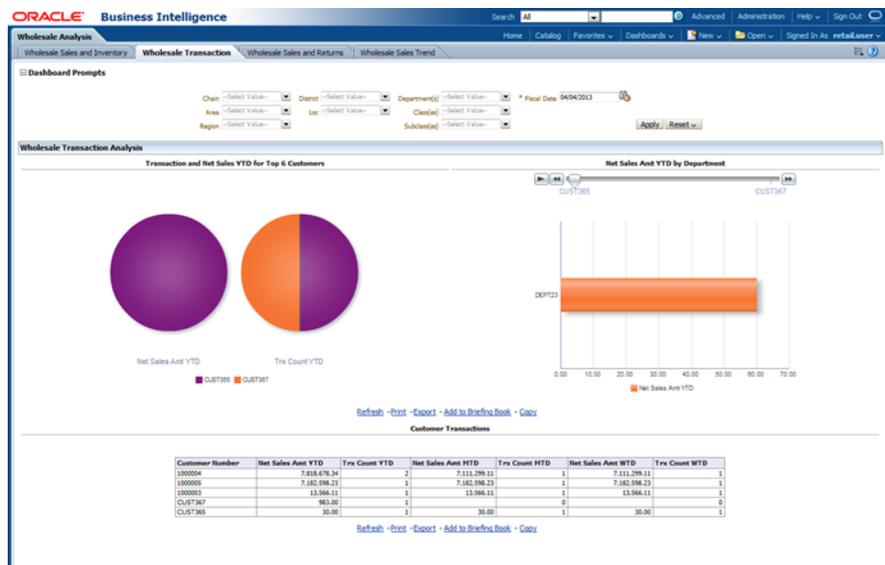
Figure 3–22 Wholesale Sales Trend Report



## Wholesale Transaction Analysis

This report can be used by buyers and merchandise executives to understand which wholesale customers are buying from them and how much each is spending.

Figure 3–23 Wholesale Transaction Report



## Consumer

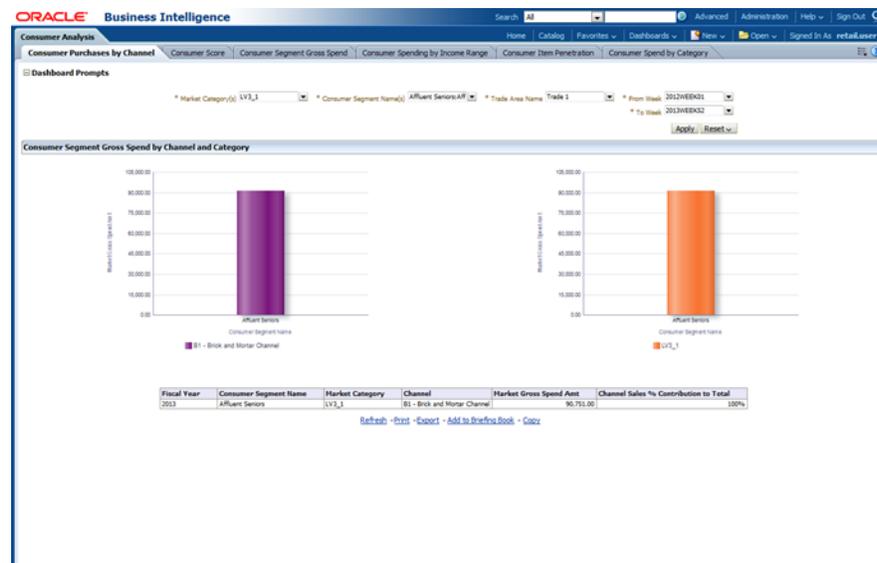
The Consumer dashboard includes the following reports:

- [Consumer Purchases by Channel](#)
- [Consumer Score](#)
- [Consumer Segment Gross Spend](#)
- [Consumer Spending by Income Range](#)
- [Consumer Item Penetration](#)
- [Consumer Spend by Category](#)

### Consumer Purchases by Channel

This report shows buying patterns by channel for consumer segments. Promotional Planners and Buyers can use this information to target promotional campaigns to the correct channel for the segment they are trying to attract. Assortment decisions can also be made this way, for example, in a region where a desirable segment is buying a category mostly online, the web assortment could be adjusted to be more extensive than the brick and mortar store assortment. If a region shows few online sales but a comparatively large amount of brick and mortar sales, which could give retailers a clue about what types of consumers are shopping there, for example, they might be elderly or poor and have little access to computers.

**Figure 3–24 Consumer Purchases by Channel Report**

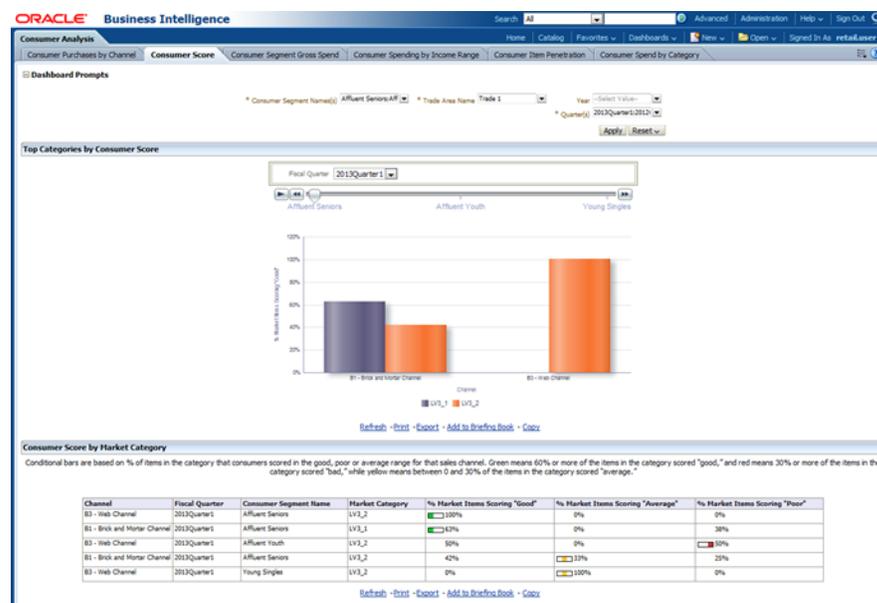


### Consumer Score

Merchandise Executives, Buyers, and Promotional Planners can use this report to understand how various categories and items are perceived by consumers across the available selling channels by year. It could lead to assortment decisions based on how a consumer segment feels about purchasing a specific category through a specific channel. For example, if a retailer is interested in attracting customers from a certain consumer segment with a clear channel preference, then they would want to assort their category accordingly. It also provides information on consumer perception of the

retailer's categories, which can be used to drive decisions about assortments or channel availability that will make a retailer more competitive in its marketplace.

**Figure 3–25 Consumer Score Report**



## Consumer Segment Gross Spend

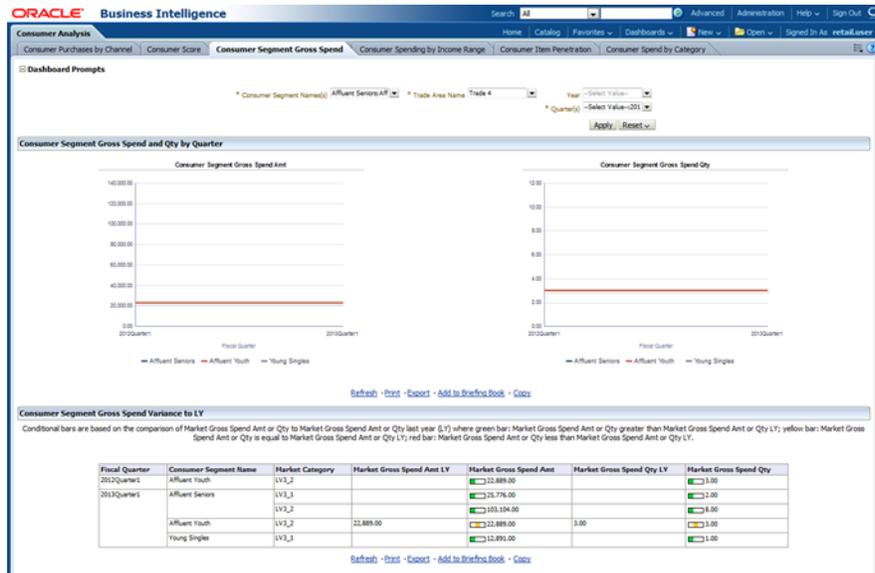
This report can help answer business questions like:

- What are my top purchases by consumer segment?
- Which products does a particular consumer segment purchase most often?

Answering these questions can help a retailer make assortment decisions that will draw desirable consumer segments to shop at their store. For example, if this report shows a consumer segment spending large amounts on a merchandise category that is relatively underrepresented in a retailer's assortment, they may decide to expand that category's offerings in hopes of attracting that segment's business. Alternatively, if the retailer feels the assortment is not the problem they may choose to run promotions targeted to that consumer segment. This report allows the retailer to be specific about which consumers it is targeting with its sales and promotion tactics.

The time dimension of this report can be used to identify trends in spending by a consumer segment, for example, it may be possible to see shifts in spending from one category to another.

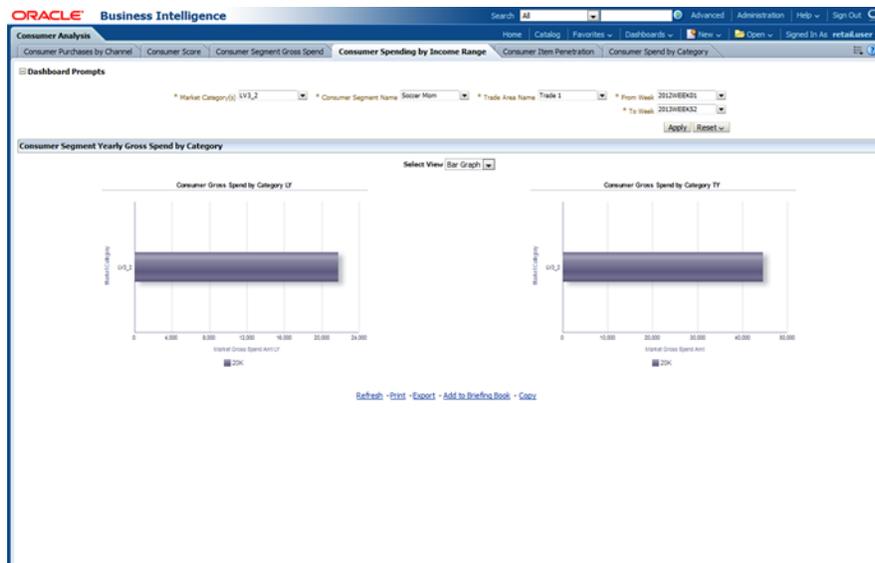
**Figure 3–26 Consumer Segment Gross Spend Report**



## Consumer Spending by Income Range

This report shows consumer average spend by income and category for a specific Region. It could be used by Merchandise Executives, Buyers, and Promotional Planners to understand where consumers with different income levels tend to spend the most, so they can tailor assortments and promotions in the region accordingly. For example, if High Income consumers are spending large amounts of money in Frozen, it may be to the retailer's advantage to have a wide assortment of high margin products to take advantage of that popularity.

**Figure 3–27 Consumer Spending by Income Report Window**

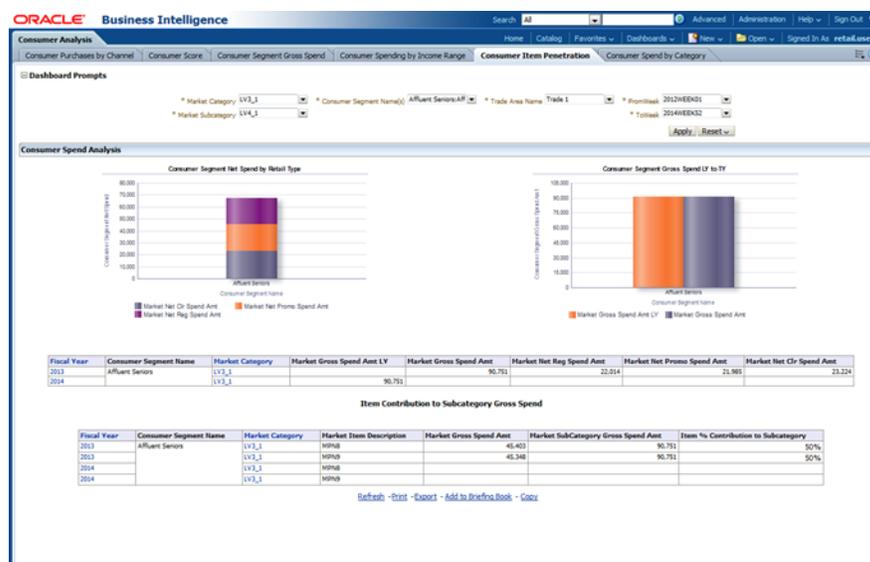


## Consumer Item Penetration

By indicating how much consumer segments spend per trip to a store, how many trips they make, and how much they spend on sale items, the Spend section of this report highlights the important items in a category for various consumer segments, geographies, and time periods. This information can be used by Planning Executives and Merchandise Executives to formulate strategic plans about what consumer groups they should target that would drive the most profitable sales for their category or organization.

The item penetration section will call out what the important items are in a market category, by showing how much of that categories' sales are due to the items within it. This information could be used by buyers to drive assortment decisions within their own department that will attract desirable consumer groups and increase sales of the department in their store.

**Figure 3–28 Consumer Item Penetration Report**



## Consumer Spend by Category

This report shows consumer spend by category. It can be used by Planning Executives and Merchandise Executives to understand on which categories various consumer segments are spending their money, and how that spending is trending over time. This could be useful in planning marketing activity to either capitalize on consumer spending trends or try to counteract trends that are perceived as harmful.

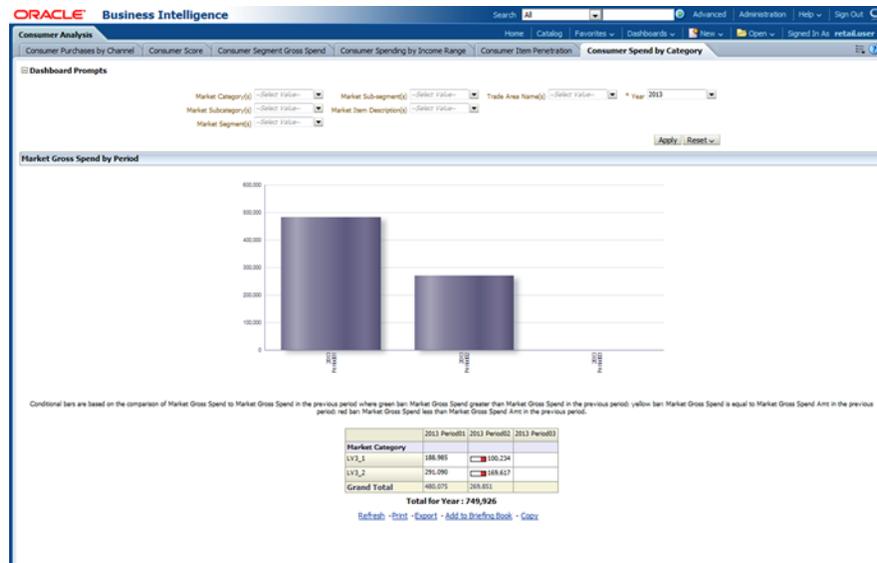
This report could be used to compare a category's performance to the overall market, and thus provide an idea of how a category is performing with a consumer segment compared to the competition. This could help identify strengths and weaknesses of a merchandise assortment, and how those strengths and weaknesses are changing over time, and also some trend analysis.

It answers business questions like:

- What type of consumer buys from my category?
- How can I encourage other types of desirable consumers to buy from my category?

- How has that consumer behavior changed over time?
- What is the trend in consumer behavior?

**Figure 3–29 Consumer Spend by Category Report**



## Customer Order

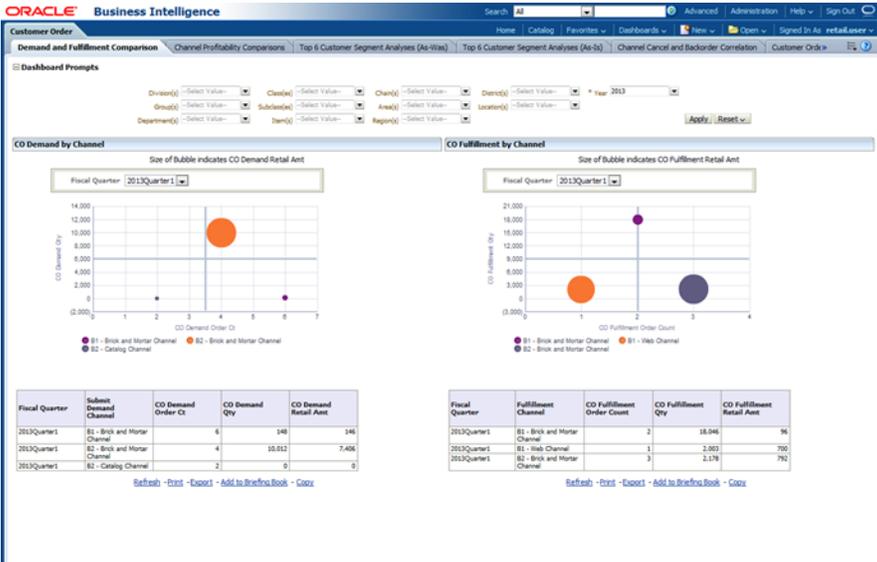
The Customer Order dashboard includes the following reports:

- Demand and Fulfillment Comparison
- Channel Profitability Comparison
- Top 6 Customer Segment Analyses
- Channel Cancel and Backorder Correlation
- Customer Order Brand Performance
- Customer Order Service Levels
- Customer Order Status Analysis

### Demand and Fulfillment Comparison

A merchandiser wants to compare demand amount to fulfillment amount by channel to understand how much demand and fulfillment are different by channel. They use this analysis to start the process of understanding where their customers are purchasing from and then they can move to where it is the most profitable for them to fulfill customers' orders.

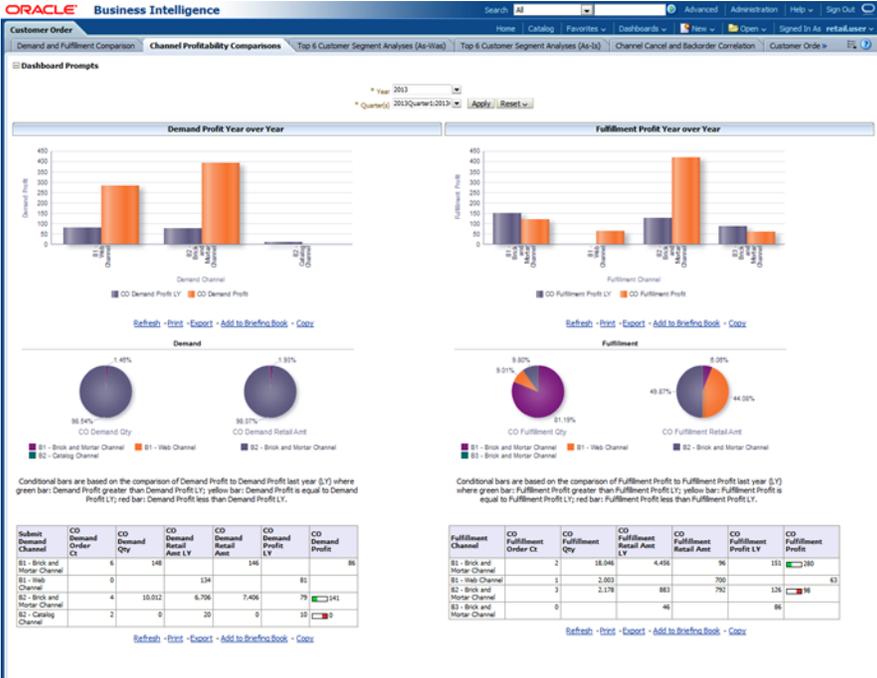
Figure 3–30 Demand and Fulfillment Comparison Report



Channel Profitability Comparison

A merchandiser wants to understand if he has the right assortment by channel. He can do this by understanding a) which channel drives the most demand for specific merchandise as well as where that same merchandise is being fulfilled. What's more, he wants to understand which channel it would be the most profitable for a customer to purchase specific merchandise from, so that he can have the correct assortment there.

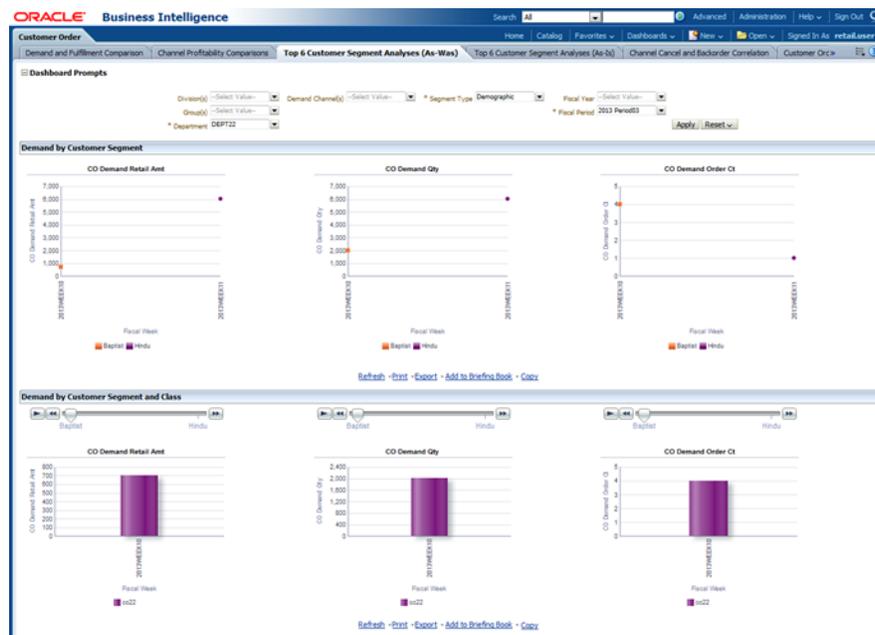
Figure 3–31 Channel Profitability Comparison Report



## Top 6 Customer Segment Analyses

The Merchandising Director and the Marketing Director are analyzing which products resonate with different types of customers in terms of customer orders. They want to understand which channels resonate with the 'Green' customer segment, in order to place their Earth Day campaign in the appropriate channel(s) and addressing the correct merchandise to entice this segment.

**Figure 3–32 Top 6 Customer Segment Analyses (As-Was) Report**



## Channel Cancel and Backorder Correlation

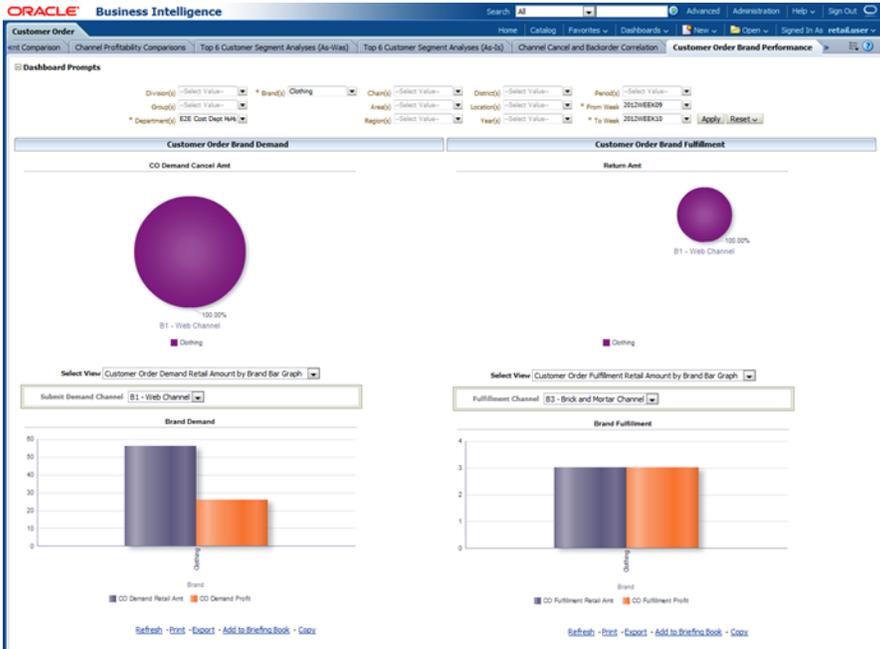
The Merchandising Director wants to understand how much business they have "walked" due to excessive backorder days and how that correlates to the customer order amount versus the cancel amount. Essentially, she wants to understand what backorder elasticity there is by customer segment and therefore can do further analysis on what they should have on-hand in each channel.

This report is delivered with Period, From Week and To Week prompts set to mandatory and single-select, which results in a time span of four weeks of analysis. The prompts can be customized to span a time period longer than four weeks, but that will negatively affect report performance.

## Customer Order Brand Performance

The Merchandising Director wants to understand where demand originates from in comparison to where liability is fulfilled from by brand in order to ensure the correct brands are in the correct locations.

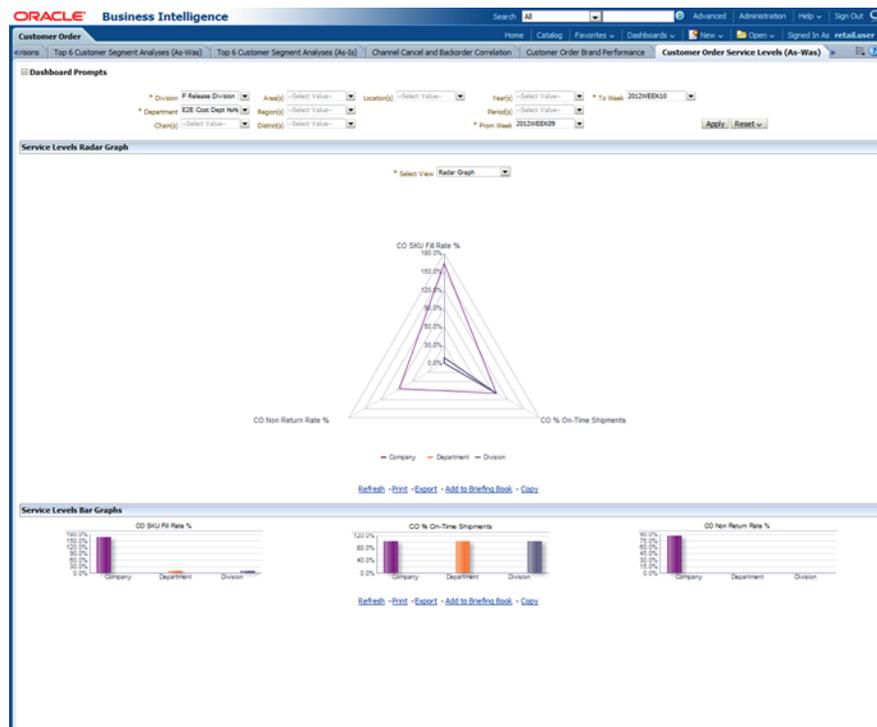
Figure 3-33 Customer Order Brand Performance Report



### Customer Order Service Levels

Often times, poor sales or conversion is not because a customer doesn't like an item but rather because service levels are low. A merchandising analyst or buyer, needs to be able to frequently track how their category is doing in terms of CO fill-rate, complete-ship, customer non-return in order to understand what is driving any negative business.

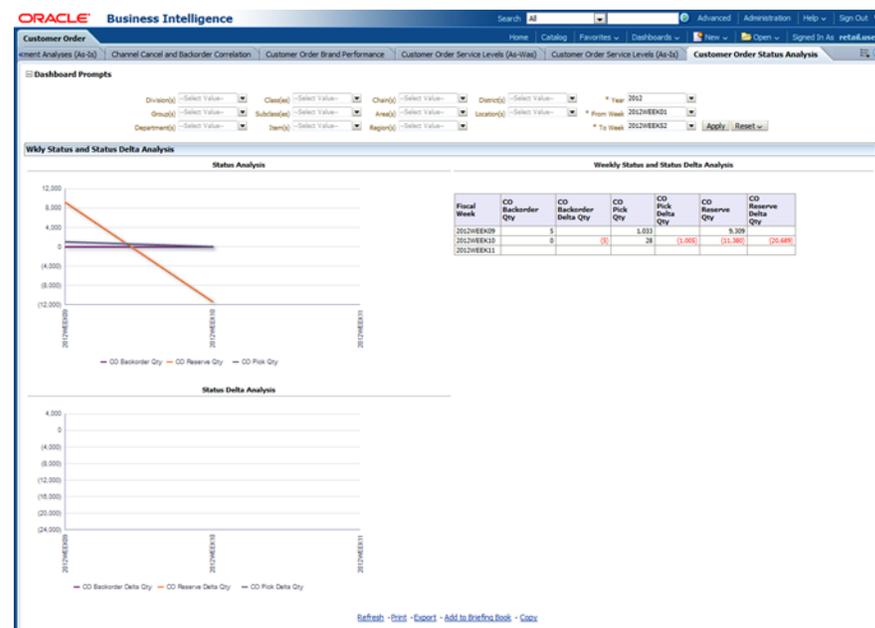
**Figure 3–34 Customer Order Service Levels (As-Was) Report**



### Customer Order Status Analysis

Often times, poor sales or conversion is not because a customer doesn't like an item but rather because service levels are low. A merchandising analyst or buyer needs to be able to frequently track how their category is doing in terms of CO fill-rate in order to understand what is driving any negative business. This way they can attribute negative business to the direct cause: product or other outlier.

Figure 3–35 Customer Order Status Analysis Report



## Weekly Business Review

The Weekly Business Review in the retail industry is a standard cadence of related meetings speaking to the state of the business. In Retail Insights a set of dashboards are built to facilitate review of company's high-level KPIs relative to the company's strategies, goals and objectives. In addition to facilitating those Weekly Business Review meetings, these dashboards also define the workflow of a specific user's day through role-based dashboards.

The role-based dashboards delve into further analysis to understand what happened, why it happened, when to react, and how to change strategies to prevent the same thing from happening going forward. This process aligns to a retailer's need for closed-loop analytics – a framework of detect, then analyze, then act, and finally model.

Packaged with this release, the Weekly Business Review dashboard is a CEO-level dashboard that provides an overview of how a retailer is performing in relation to its stated goals, specifically, financial goals. It is designed to be used as part of the following specific business flow:

- On Monday morning the CEO checks the state of his company and focuses on the financial performance. He has a list of financial KPIs that are important to him and are based on objectives that contribute to the over-all company goals.
- Based on the most important KPI to him or one that catches his eye, he looks at the Comp Net Sales % analysis to see which divisions are causing the issue. The CEO contacts the responsible divisional manager who does further research using first the Sales Performance dashboards. After the divisional manager identifies the buyer responsible for the relevant department, he will alert him and the buyer will then use the Department Analysis dashboards to determine what action to take. Those dashboards enable sales and inventory analysis as compared to their respective plans, as well as some customer sales and transaction analysis.

Figure 3-36 Key Performance Indicators Report

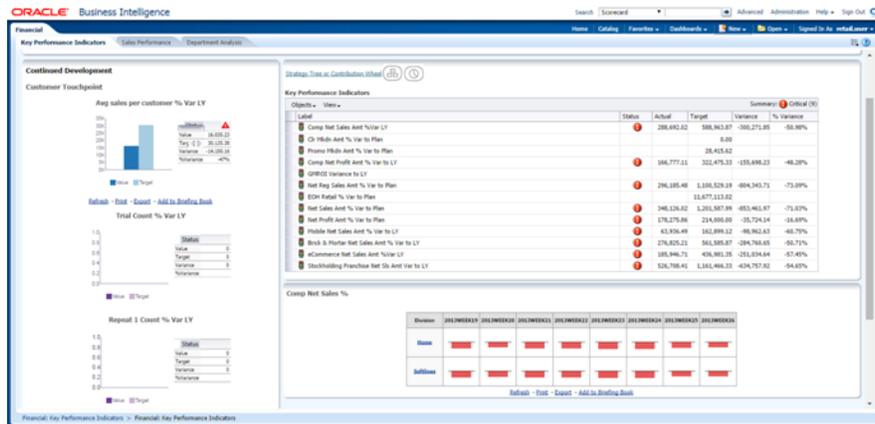


Figure 3-37 Sales Performance Report

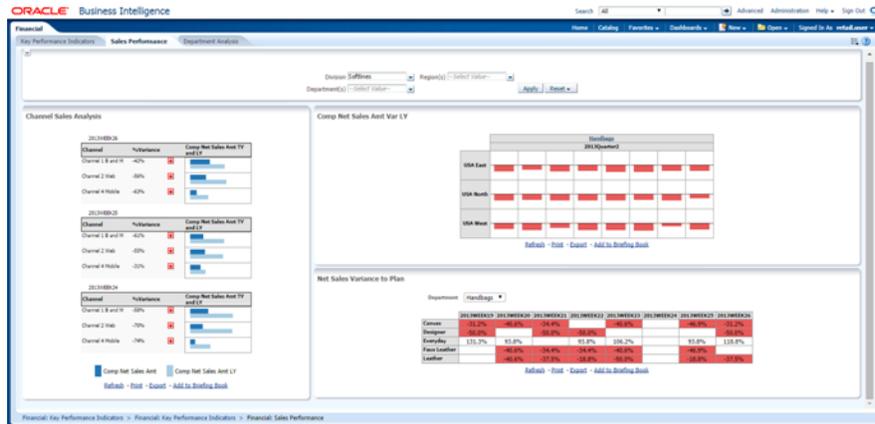
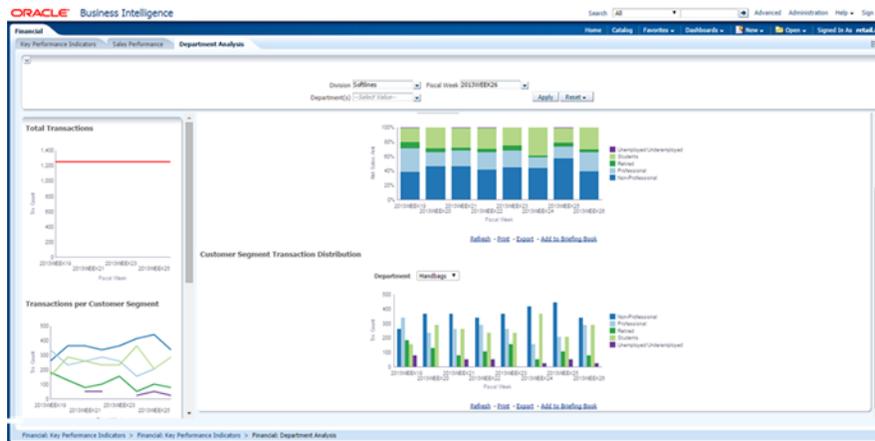


Figure 3-38 Department Analysis Report



## Chief Marketing Officer Dashboard

The Chief Marketing Officer (CMO) dashboard helps to analyze sales performance by comparing current sales to the previous year's sales and current plan. This dashboard enables analysis of where demand is being generated, product affinities, attribute analysis, pricing elasticity, sales, different customer segments behavior and channel performance of items consolidated in one dashboard. Please see some selected example CMO pages below.

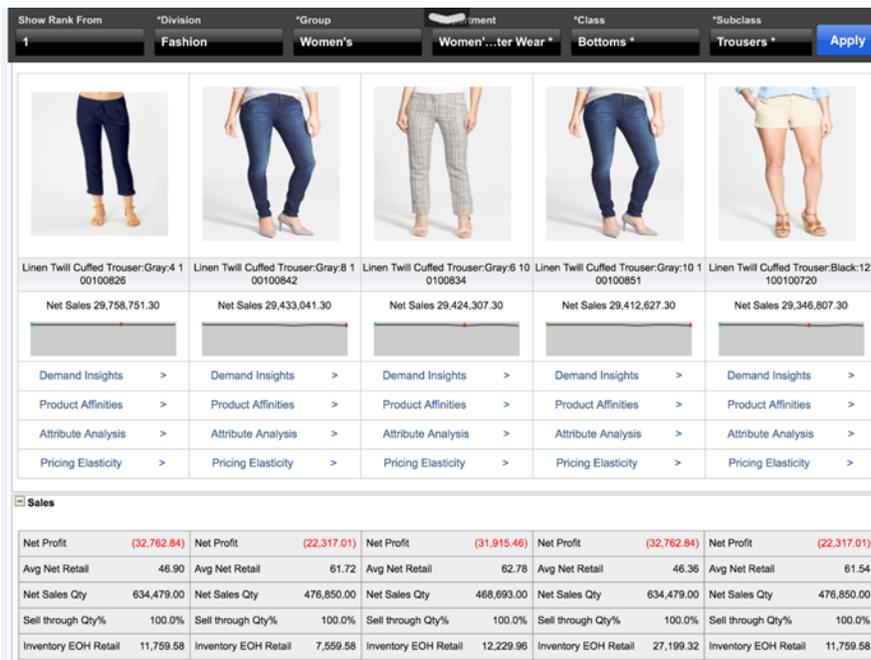
The Key Performance page enables analysis of year over year sales and sales to plan for the selected merchandise hierarchy level for regular, promo, and clearance sales. It includes Key Performance Sales to Plan analysis that compares regular, promo, clearance, and total sales to plan, with a collapsible merchandise hierarchy displayed on the left, and the Key Performance Year over Year analysis that compares regular, promo, clearance, and total sales to the previous year, with a collapsible merchandise hierarchy displayed on the left:

**Figure 3–39 Chief Marketing Officer Dashboard**

	Net Regular Sales		Net Promo Sales		Net Clearance Sales		Net Total Sales	
Fashion	+14%	TY LY	+15%	TY LY	+29%	TY LY	+14%	TY LY
Women's	+14%	TY LY	+15%	TY LY	+29%	TY LY	+14%	TY LY
Women's Better Wear *	+14%	TY LY	+15%	TY LY	+29%	TY LY	+14%	TY LY
Bottoms *	+14%	TY LY	+15%	TY LY	+29%	TY LY	+14%	TY LY
Trousers *	+14%	TY LY	+15%	TY LY	+29%	TY LY	+14%	TY LY
Softlines	%	TY LY	+87%	TY LY	+87%	TY LY	+99%	TY LY

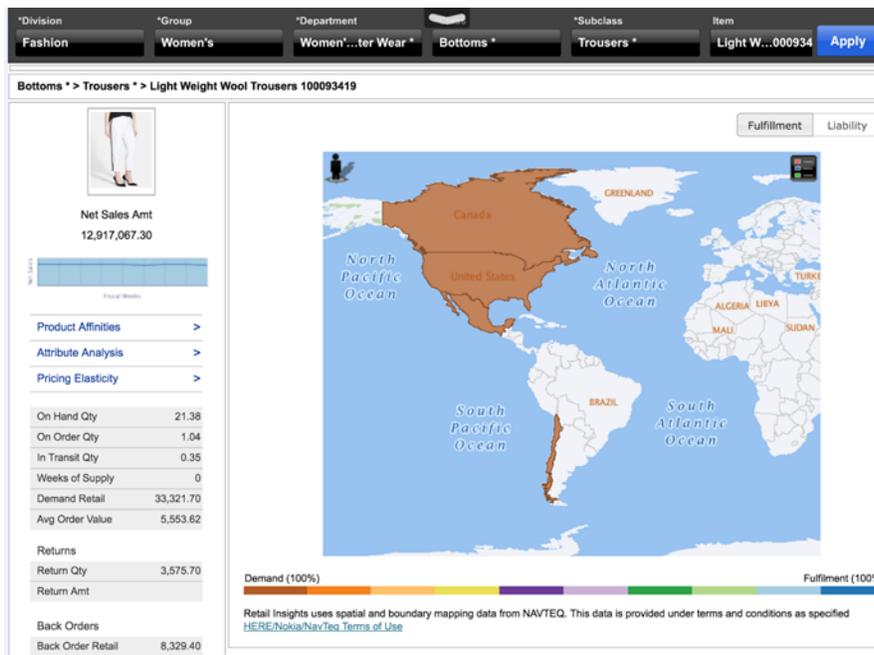
Using the Top Sellers page the user can switch between views of top sellers and bottom sellers that rank and display the best and worst selling items from the selected subclass:

Figure 3-40 Top Sellers Page

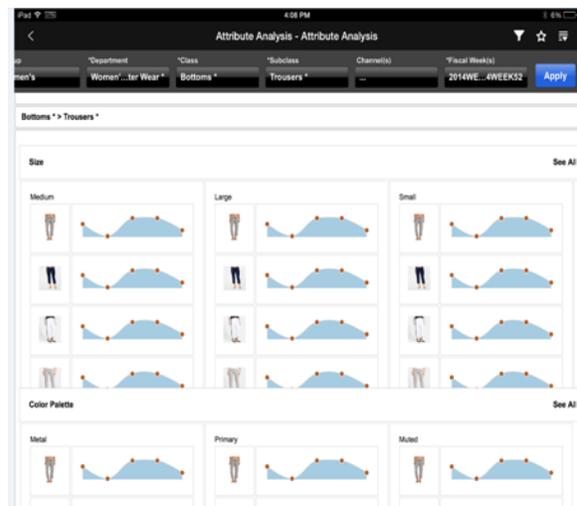


The Demand Insights page allows users to switch between a map based fulfillment analysis and a trending over time liability analysis:

Figure 3-41 Demand Insights Page



The Attribute Analysis page displays net sales per item attribute from the selected merchandise hierarchy level:

**Figure 3–42 Attribute Analysis Page**

## Customer Segment Pages

The two Customer Segment pages analyze sales by item and customer segment.

On the Customer Segment Sales Trend page, prompts enable users to select the customer segment and date range to be analyzed. The item image, item name and the items' corresponding Net Sales Amount, Net Sales Quantity, Average Price, and Net Profit for the selected date range are displayed, along with a line graph of the item's Net Sales Amount over time. Ten items are displayed by sorted by Net Sales Amount by default, but users can change the number of items displayed and the sorting of items by various metrics using drop down selectors. With the click of a button the user can switch to the Promotion page. This flexibility enables a variety of different analyses within a single dash-board page.

The second Customer Segment report, Promotional Sales, enables analysis of the sales due to promotions by item and customer segment. The prompts enable users to select the customer segment and date range to be analyzed. The item image, item name, and the item's corresponding promotional sales metrics for the selected date range are displayed, along with a line graph of the item's Net Sales Amount over time. The top ten items by net sales amount are displayed by default, but users can change the number of items displayed using a drop-down selector, as well as changing which metric the items should be sorted by, either net promotional sales quantity, net promotional sales amount, or net promotional profit. This flexibility again enables a variety of different analyses within a single dashboard page.

Figure 3-43 Customer Segment Sales

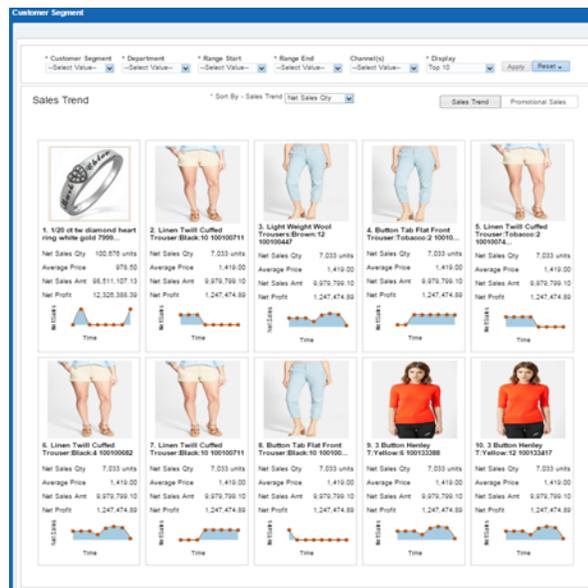
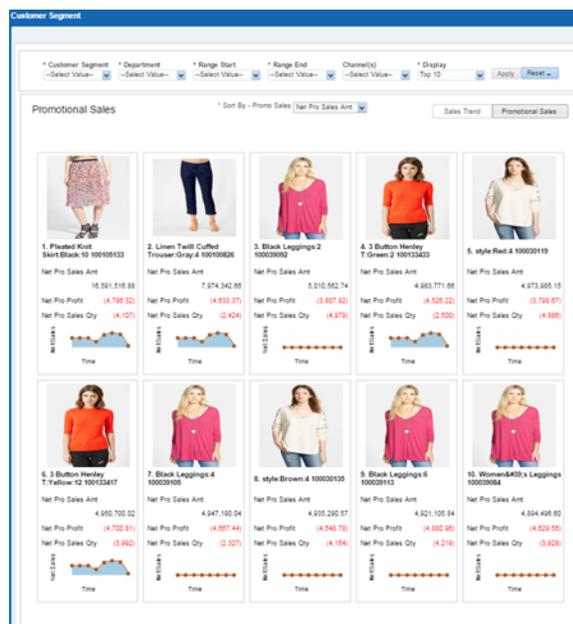


Figure 3-44 Customer Segment Promotion



## Similarity Score Page

Retail Insights consumes similarities from Oracle Retail Science Engine. Using transaction based similarities, customer segment behavior in buying patterns and changes in demand can be analyzed. Similarities calculate how likely a customer is to switch from one item to another in a range from 0 to 1. For example, if the similarity rate for Skirt A and Skirt B is 0.64 while the similarity rate for Skirt A and Skirt C is 0.18, the customer is more likely to switch to Skirt B than Skirt C.

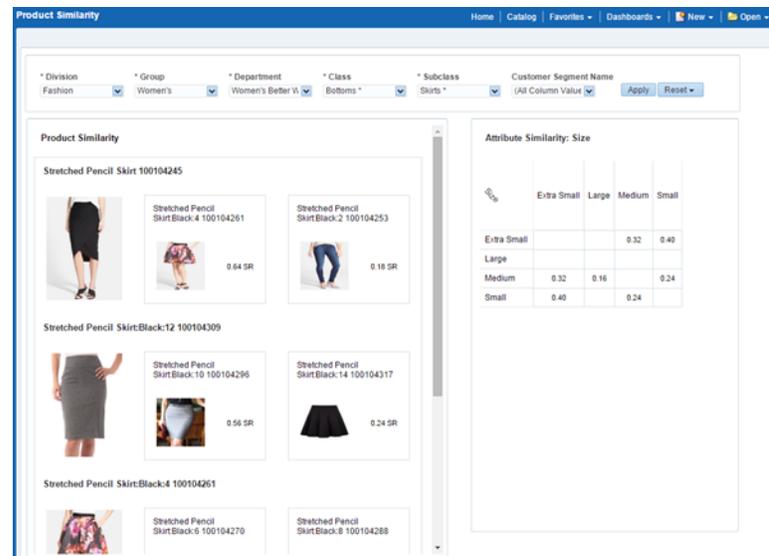
The same type of analysis can be done on item attributes such as color, fabric, style, etc.

The Similarity Score dashboard page consists of two complementary analyses, item similarity and attribute similarity, positioned side-by-side for maximum contextual analytical possibilities.

This first is a scrolling display of items and their images, alongside the most and least similar items and their images. The appropriate similarity rate is displayed alongside the two comparison items.

The second has a table that displays a list of attributes and their corresponding Similarity Rates. The selected attribute is displayed at the top, and the attribute values are displayed along the top and down the left side of the table. Where the attribute values meet, their Similarity Rate is displayed.

**Figure 3–45 Similarity Score**





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## Creating and Modifying Reports

This chapter describes some of the reporting features of Oracle BI and Oracle Retail Insights. It also describes a number of considerations for creating Oracle Retail Insights reports.

The primary reference for Oracle BI users is the *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition*. For more information, see that guide, particularly chapters about creating and formatting analyses, views, and dashboard pages.

### Analysis Methods

The Retail Insights presentation model is designed in three different subject areas based on the reporting scenarios and analysis methods that Retail Insights supports:

- Retail As-Is
- Retail As-Was
- Retail Point in Time

A single instance of Retail Insights offers as-is, as-was, and point in time analysis for the slowly changing dimensions Product and Organization. *Slowly changing dimensions* are dimensions with data that changes slowly, rather than changing on a time-based, regular schedule.

Although facts and dimensions appear similar across these three subject areas, they are modeled differently in the Oracle BI repository. For example, Item or Subclass or Class might appear similar in all three subject areas, but their sources and join conditions are different to support the appropriate method of reporting.

### As-Is Reporting

This type of reporting reflects the current nature of facts and dimensions as they are known to be true today. The performance of a dimension is tracked according to the current state of the dimension in a hierarchy without regard to time period.

If hierarchies have changed or items have been reclassified, as-is reporting shows history as if it had occurred under the current hierarchy or parent. Performance of the previous hierarchy or parent cannot be seen in as-is reporting.

See "[Reclassification](#)" in [Chapter 5, "Dimensions and Attributes"](#) for more information.

## As-Was Reporting

As-was reporting reflects the current values of transactions tied to a dimension value that was applicable at a former point in time. The performance of a dimension is tracked along the changes it has undergone in a hierarchy over a period of time. One of the effects of reclassification is that the presence of two hierarchies or parents makes it possible to compare an entity's performance before and after it undergoes this change.

In fact tables, all history is kept under the former hierarchy or parent, while all data after a reclassification is under the current hierarchy or parent.

Drilling allows you to see a particular report at a given level, and then view the same report at a lower level, to examine data at a finer level of granularity. This type of analysis makes well-defined hierarchies extremely important. Drill paths must be clear, and facts must add up between levels of aggregation. This requirement explains why changes to the position of an entity in the hierarchy are considered major.

## Point In Time Reporting

Point in time reporting reflects a past value of a transaction tied to the applicable dimension value at a former point in time. Reports are created with transactions reported in the hierarchy that existed at a particular instant in time. The point in time hierarchy is like the as-was hierarchy, but the report user can apply the hierarchy at a particular time and see the results.

For positional facts, point in time reporting is not supported at the finest granular level (item-location-day); however, point in time reporting is available at the item-day level (corporate aggregates). This is because of performance implications.

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**Notes:**

- Point in time reports also run against the base fact table, even for the higher levels in the hierarchy. The aggregate fact tables cannot be used for point in time reports, because the assignments within the hierarchy change and lose visibility when data is aggregated.
  - If a dimension record does not exist for a day for which a point in time report is created, the corresponding fact records do not appear on the report.
- 
- 

## Features of Retail Insights Reports

Through Oracle Business Intelligence Enterprise Edition, Oracle Retail Insights provides capabilities to deliver contextual and actionable insight to retail business users. These capabilities and features can result in improved decision-making, better-informed actions, and more efficient business processes. Reporting capabilities of Oracle BI are featured in Retail Insights predefined (packaged) reports. You can also make use of these Oracle BI features in your own custom reports.

## Interactive Dashboards

Retail Insights provides a number of levels of prompts, charts, tables, pivot tables, and graphics for each of its reports. You can further drill through and interact with various levels of Organization, Product, and Time hierarchies on these business objects and refine their data analysis. Retail Insights reports present intuitive access to information based on a user's role.

The following topics describe some interactive features used in Retail Insights reports.

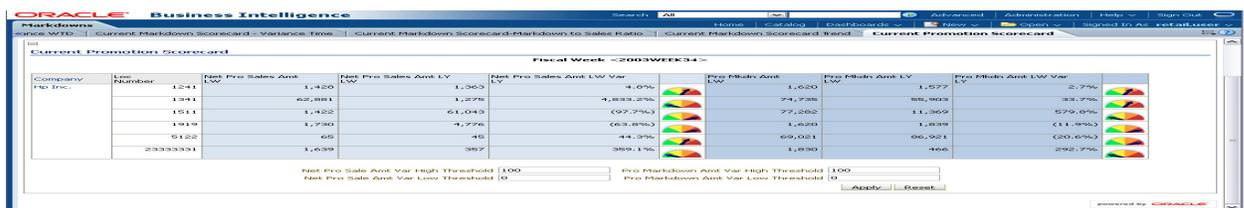
### Charts

Various reports use interface features such as graphs and charts. For example, Supplier Compliance reports graphically represent various key performance indicators (KPI) related to purchase orders, which can help buyers to promptly assess the performance of a supplier.



### Gauges

Reports such as Current Promotion Scorecard use gauges to represent the quality of KPI values. In the following example, profit and markdown variances are qualified with Oracle BI dial gauges, with an indicator that points to where the data falls within predefined limits.



### Conditional Formatting

Some reports use conditional formatting to indicate the performance of predefined KPIs. For example, in the Current Sales Projection report, the thresholds are defined for the low and high gross sales quantity variances. The results are formatted based on these thresholds. Threshold amounts can be configured by users when executing these reports.

For example, when a user applies a high variance of 20 percent and a low variance of 5 percent for Gross Sales Qty WTF Var LY, the report cells for Metrics Gross Sales Qty WTD Var LY that have variances above 20 percent turn green in color, and those with variance less than 5 percent turn red.

Current Sales Projection

Company	Loc Number	Gross Sales Qty WTD	Gross Sales Qty LY WTD	Gross Sales Qty WTD Var LY	Fcst Sales Qty	Fcst Sales Qty Var	Gross Sales Qty LW	Gross Sales Qty LY LW	Gross Sales Qty LW Var LY
Hp Inc.	1151				200				
	1241	45	36	-0.2%	800	16.2%			42
	1341	211	919	-0.3%					249
	1511	73	87	-0.2%	100	0.4%			15
	1531				300				
	1919	58	36	0.8%					42
	23333331	69	3	22.0%					9
	5122	4	152	-1.3%					552

High Gross Sales Qty WTD Var LY  High Fcst Sales Qty Var  High Gross Sales Qty LW Var LY

Low Gross Sales Qty WTD Var LY  Low Fcst Sales Qty Var  Low Gross Sales Qty LW Var LY

### Drilling

Retail Insights reports permit drilling on various attribute hierarchies. By default, reports display the results at the summary level or a preconfigured attribute level. The user can further move to a detailed level of analysis by drilling to focus on parts of the data set where problems are identified.

The following example demonstrates the drilling capability on the Sales Pack Performance report.

Department Number	Item Number	Gross Sales Amt	Pack Gross Sales Amt	Tot Gross Sales Amt	Gross Sales Qty	Pack Gross Sales Qty	Tot Gross Sales Qty
777	100092037	550,460		901,124	(20,356)		(19,096)
1010	100002031	394,068		812,353	0		755
	101140491		25				1
	101140521		25				1
1100	100002314		25				1
	100238059		25				1
1102	100001043		50				1
	100004009		25				1
	100008000		25				1
	100040026		25				1
	100040181		25				1
	100047295		25				1
	100056513		50				1
	100066211		25				1
	101246464		25				1
	1105	100007648		25			
1106	100027067		50				1
1110	100955496		25				1
1114	100068281		25				1
	100321936		25				1
	100354501		521				34
1117	100353364		25				1
1238	100032093		25				1
1242	100292768	289,326		629,038	(3,033)		(1,902)
	100292830	650,961		925,600	0		1,140

Rows 1 - 25

Department Number	Class Number	Item Number	Gross Sales Amt	Pack Gross Sales Amt	Tot Gross Sales Amt	Gross Sales Qty	Pack Gross Sales Qty	Tot Gross Sales Qty
1102		100001043		50				1
		100004009		25				1
		100008000		25				1
		100040026		25				1
		100040181		25				1
		100047295		25				1
		100056513		50				1
		100066211		25				1
		101246464		25				1

[Return](#)

Department Number	Class Number	Subclass Number	Item Number	Gross Sales Amt	Pack Gross Sales Amt	Tot Gross Sales Amt	Gross Sales Qty	Pack Gross Sales Qty	Tot Gross Sales Qty
1102	1	1	100001043			50			1
			100004009			25			1
			100008000			25			1
			100040026			25			1
			100040181			25			1
			100047295			25			1
			100056513			50			1
			2 101246464			25			1
			4 100066211			25			1

[Return - Back](#)

**Note:** There is no value in drilling below the transaction level for an item. The transaction level can be identified if "no level" appears at drilling, which means the previous level was the transaction level.

## Guided Navigation

Some Retail Insights reports use the guided navigation feature of Oracle BI, which allows you to navigate from one source report to other target reports, based on certain preconditions or data points on the source report. This helps a business user to inspect a complete logical workflow, and possibly determine the root causes of problematic key performance indicators.

The following reports are linked through guided navigation.

**Table 4-1 Linked Reports**

Report Name	Navigate to Report
Current MTD Sales and Inventory Scorecard	Current Location Price Trend Current Loc WOS Warning

The Current MTD Sales and Inventory Scorecard report navigates to the Current Location Price Trend report based on user-configured net profit measures. For low profit yield items, a user can navigate to the Current Location Price Trend report.

### Current MTD Sales and Inventory Scorecard

Company	Location	Net Sales Amt	Net Sales Qty	BOH Retail	BOH Qty	On Order Retail	On Order Qty	In Transit Retail
Hp Inc.	1511	270.00	30	600.00	3,485	100	111	50
	1919	14,780.00	23	550.00	392	110	5	55

For high profitability products, the user has the option to navigate to the Current Location WOS Warning report.

### Current MTD Sales and Inventory Scorecard

Company	Location	Net Sales Amt	Net Sales Qty	BOH Retail	BOH Qty	On Order Retail	On Order Qty	In Transit Retail
Hp Inc.	1511	270.00	30	600.00	3,485	100	111	50
	1919	14,780.00	23	550.00	392	110	5	55

For more information about extending the use of Oracle BI guided navigation features, see the *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition*.

## Map Viewer

Retail Insights reports can be customized to render geographical maps, using spatial data managed by Oracle Spatial. These custom reports can help a user to visualize geographical data. For example, when analyzing comparable sales for a particular region, maps on such a report can provide additional topographic information about the location.

To use these features, you must load the topographic data about warehouses, stores, and other locations into Oracle Spatial, and then use Oracle MapViewer to create maps.

## Support for Multiple Currencies

Retail Insights supports five currencies:

- Local Currency
- Document Currency
- Global 1 Currency
- Global 2 Currency
- Global 3 Currency

During installation, these currencies are defined for your organization. You need to know how these currency mappings are used when you design reports. For example, currencies could be defined as follows:

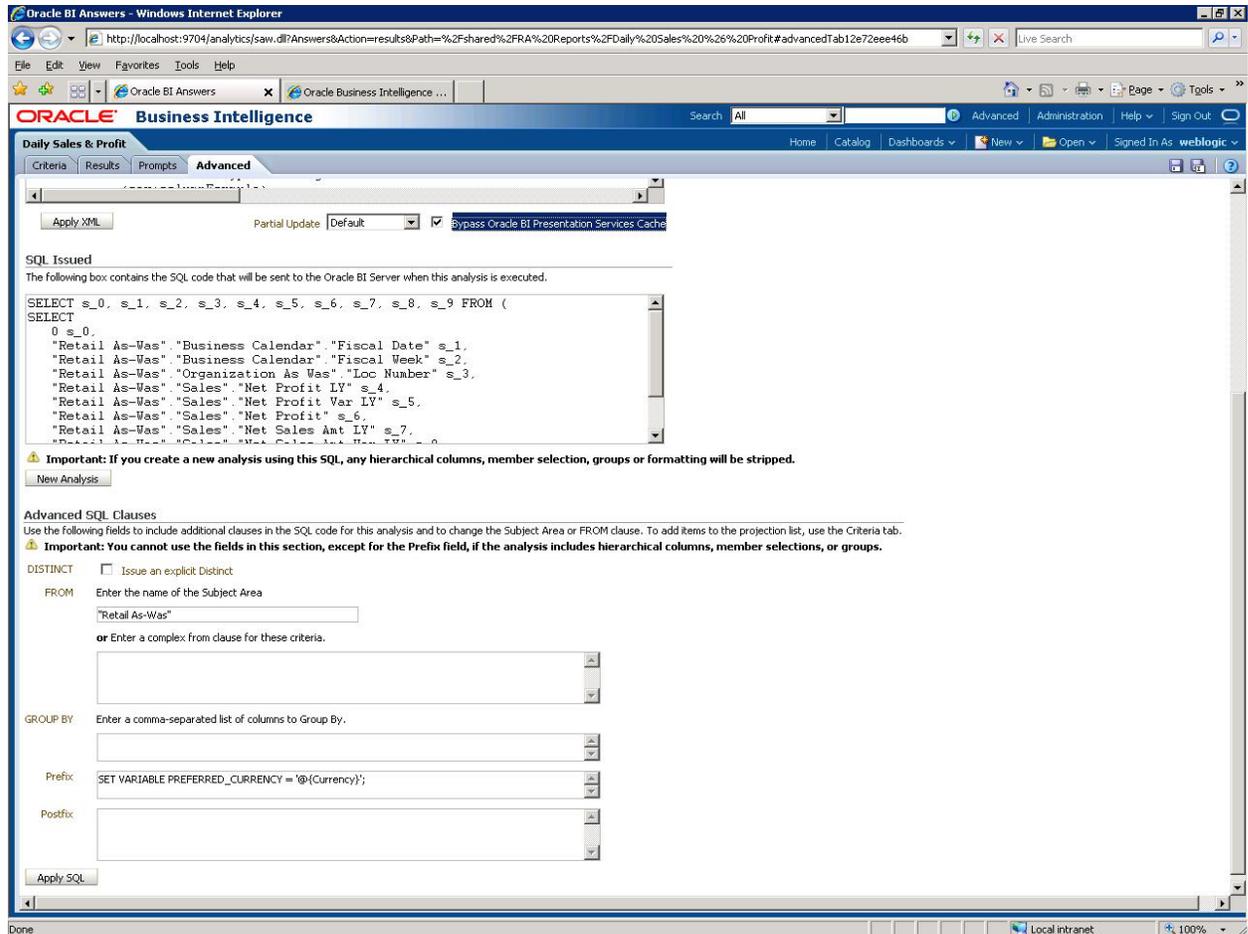
**Table 4–2** *Currency Mapping*

Currency Mapping	Currency
Document Currency	EURO
Global 1 Currency	US
Global 2 Currency	CAD
Global 3 Currency	AUD

Retail Insights includes a prebuilt prompt and a report (Daily Sales and Profit Analysis) that enables support for multiple currencies. All the amount metrics are defined to support these five types of currencies.

To use this functionality, in a report, follow these steps:

1. Create the report with required amount metrics.
2. Select the **Advanced** tab.



3. Under **Advanced SQL Clauses**, in the **Prefix** text box, add the following:

```
SET VARIABLE PREFERRED_CURRENCY = '{@Currency}';
```

4. At the top, select the check box **Bypass Oracle BI Presentation Services Cache**.

5. At the bottom, click **Apply SQL**.

6. Save the report.

7. Create a dashboard and add this report, along with the currency prompt.

The currency prompt has five currencies preloaded. Select the preferred currency, click **Apply**, and the metrics will be calculated accordingly to the currency selected.

## Additional Notes for Creating or Modifying Reports

The following are additional considerations and suggestions for designing Oracle Retail Insights reports.

- Planning and stock ledger reports cannot be created below subclass and week, because data for these fact areas have the lowest levels of subclass and week.
- Comp and BOH (beginning on-hand) metrics are only supported at week level. You must also use a prompt or filter on week or a higher level of the time dimension.

- For point in time reporting, you must have a prompt on an attribute of the time dimension.
- When reporting on any transformation metrics, you must have a prompt or filter on the time calendar.
- To compare as-is, as-was, and point in time results for the same report, create a single dashboard with these reports on three different pages. The same report cannot include both as-is and as-was results.
- Wherever there are many-to-many relationships, you must have prompts or filters on one value to avoid double-counting. For example, there can be overlapping seasons, and the same items can belong to both seasons. If there is no filter or prompt on season, the items common to both seasons can be double-counted. Another example of this is an item list, where the same item can be in multiple item lists. A filter or prompt on item list will ensure that correct data is displayed.
- Retail Insights does not store attribute values that do not have associated facts. For example, Retail Insights will not consume location lists that do not have any associated locations.
- Customer Order Demand cannot be analyzed by the Fulfillment Channel.
- Order Fulfillment cannot be analyzed by the Demand Channel.
- Demand and Fulfillment analysis is not supported by Season Dimension.
- Market Item and Retail Item side-by-side analysis is not supported.
- Season Based reporting is not supported for Market Item and Consumer Reports.
- Market Item reporting is only supported for the As-Is Subject area.
- Users should not drill from Customer Segment to Customer, even though this drill path has been enabled in Oracle BI EE. Drilling may cause performance issues if the proper aggregates have not been created for Customer attributes.

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## Dimensions and Attributes

Retail Insights dimensions and attributes represent the structure and activities of a retail organization and make measurement possible. Data is stored at low levels to allow maximum flexibility in reporting. Dimensions and their attributes allow you to summarize this information at higher levels where it is needed to support business decision-making. For example, the Sales fact table holds data at the location, item, and day level. The time, product, and organization dimensions allow you to summarize this data at any level at which it is needed.

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**Note:** This chapter contains selective lists of dimensions and attributes. See [Appendix B, "Reporting on Oracle BI Repository Objects"](#) for information about producing comprehensive listings of Oracle BI repository objects.

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### Business Calendar

The business calendar (fiscal calendar) is a dimension based on a retailer's calendar and is not aligned with the Gregorian/solar calendar. It is used in place of the Gregorian calendar to eliminate discrepancies in the number of days per month, as well as number of weekend days per month. The business calendar is sometimes just called the time calendar.

The business calendar can be based on a variation of the 4-5-4 calendar or the 13-period calendar. Both of these types of calendars allocate exactly seven days to every week, unlike the Gregorian calendar. Most facts are qualified by a calendar attribute.

The following is the hierarchy of the Business Calendar dimension.

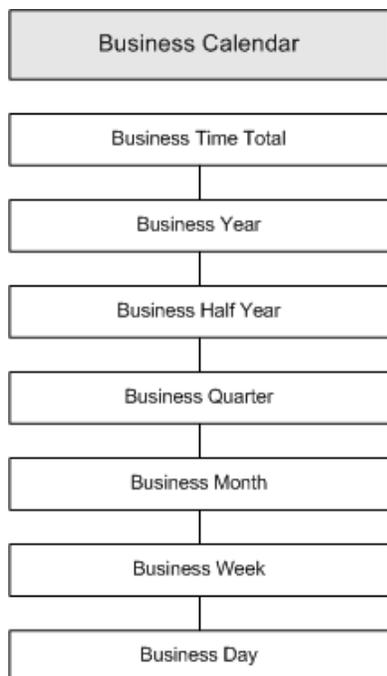


Table 5–1 lists the attributes of the Business Calendar dimension.

**Table 5–1 Business Calendar Dimension Attributes**

Attribute	Definition
Fiscal Period	The period of time, generally a month, reflected in financial statements.
Fiscal Year Number	Represents the period of year which company uses for calculating its annual fiscal statement.
Fiscal Year	Represents the period of year which company uses for calculating its annual fiscal statement.
Fiscal Year Start Date	Represents the start date of fiscal year for the company.
Fiscal Year End Date	Represents the end date of fiscal year for the company
Fiscal Half Year	Fiscal half-year period name.
Fiscal Quarter	Represents the fiscal quarter for the company
Fiscal Period Start Date	Represents the start date of fiscal period for the company.
Fiscal Period End Date	Represents the end date of fiscal period for the company.
Fiscal Week	Represents the fiscal week for the company.
Fiscal Week Start Date	Represents the start date of fiscal week for the company.
Fiscal Week End Date	Represents the end date of fiscal week for the company.
Fiscal Day Name	Fiscal Day Name
Fiscal Date	Represents the fiscal date.

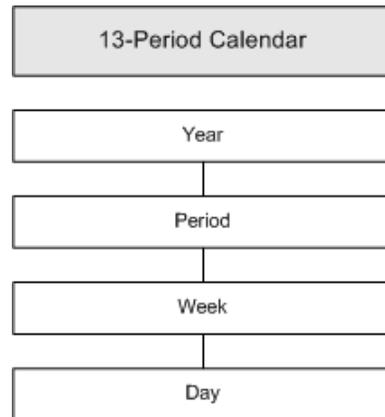
## 4-5-4 Calendar

The 4-5-4 calendar is the default calendar. The calendar can be implemented as 4-5-4, 4-4-5, or 5-4-4, depending upon your needs. In addition, you determine the day of the

week on which each week begins and ends. Every quarter contains 13 full weeks. Quarters have two 4-week months and one 5-week month.

## 13-Period Calendar

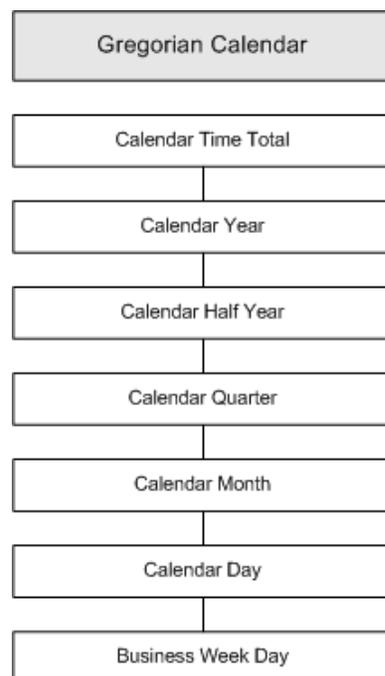
A 13-period calendar year is divided into 13 periods of four weeks (28 days). Every fifth or sixth year, there are 53 weeks. The calendar has a 28-year cycle of 6 years, 5 years, 6 years, 6 years, and 5 years. The 13-period calendar hierarchy is as follows.



## Gregorian Calendar

The Gregorian calendar is a solar calendar that is based on the length of the earth's revolution around the sun. The Gregorian calendar is divided into 11 months of 30 or 31 days, plus February. February has 28 or 29 days, depending on whether the year is a leap year (occurring every four years). Thus, the Gregorian year is either 365 or 366 days.

The following is the hierarchy of the Gregorian calendar.



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**Note:** Only one type of business calendar (4-5-4 or 13-period) can be installed for Retail Insights, in addition to the Gregorian calendar.

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**Table 5–2** *Gregorian Calendar Dimension Attributes*

Attribute	Definition
Year Number	This is the Gregorian Year Number
Year	This is the Gregorian Year
Year Start Date	This is the Gregorian Year Start Date
Year End Date	This is the Gregorian Year End Date
Half Year	This is the Gregorian Half Year
Quarter	This is the Gregorian Quarter
Month	Indicate the month.
Month Start Date	This is the start date of the gregorian month.
Month End Date	This is the end date of the gregorian month.
Week	This is the Gregorian Week
Week Start Date	This is the Gregorian Week Start Date
Week End Date	This is the Gregorian Week End Date
Day Name	This is the Gregorian Day Name
Date	This is the Gregorian Date

## Time of Day

The Time of Day dimension permits analysis in the areas of loss prevention and employee productivity, where identifying problems and trends requires the use of hourly or smaller time increments. In addition, the Time of Day dimension allows analysis of sales and return transactions on an hourly basis.

The following is the hierarchy for the Time of Day dimension.

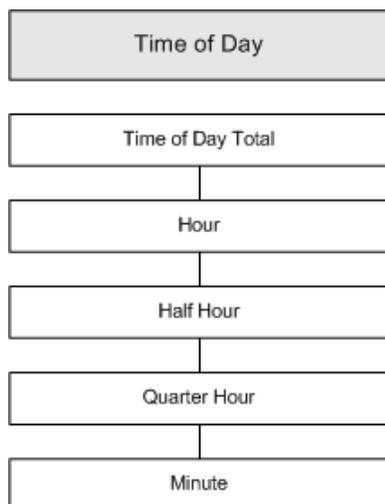


Table 5–3 lists the attributes of the Time of Day dimension.

**Table 5–3 Time of Day Dimension Attributes**

Attribute	Definition
Hour Number 24 Hour Format	Hour portion in 24-hour format.
Qtr Hour Interval	A quarter-hour time slice within the 24-hour period, starting at 0:00 - 0:15 to 23:45 - 23:59, numbered from 1 to 4 to indicate the quarter of that hour.
Minute Number	Minute portion in 24-hour or 12-hour format, numbered from 1 to 60 to indicate the minute of that hour.

## Employee

The Employee dimension stores data about the employees who work for a retailer. The Employee dimension is attached to sales transactions and is used for productivity and loss prevention reporting.

The employee data that is supplied by Oracle Retail Merchandising System (RMS) relates only to stores and warehouses and does not include headquarters employees. Other types of employee data that do not exist in RMS, but are desirable for reporting, pertain to employee hours worked and compensation.

Table 5–4 lists the attributes of the Employee dimension.

**Table 5–4 Employee Dimension Attributes**

Attribute	Definition
Cashier Flag	Indicator of whether if the employee is a cashier, with values of "Y" for yes and "N" for no. An employee can be both a cashier and a salesperson at the same time.
Sales Rep Flag	Indicator of whether the employee is a salesperson, with values of "Y" for yes and "N" for no. An employee can be both a cashier and a sales person at the same time.

## Cluster

Understanding consumer shopping behavior is important to help retailers when planning assortment, pricing, promotions and other key merchandising decisions.

This includes understanding:

- Who shops (or is expected to shop) the merchandise area (Department or Class)
- How they would shop the merchandise area as well as other merchandise areas when in the store

This information helps retailers develop strategies and tactical execution plans that are tailored to meet specific customers needs, thus maximizing customer satisfaction while meeting retailers overall business objectives around increased profitability and growth.

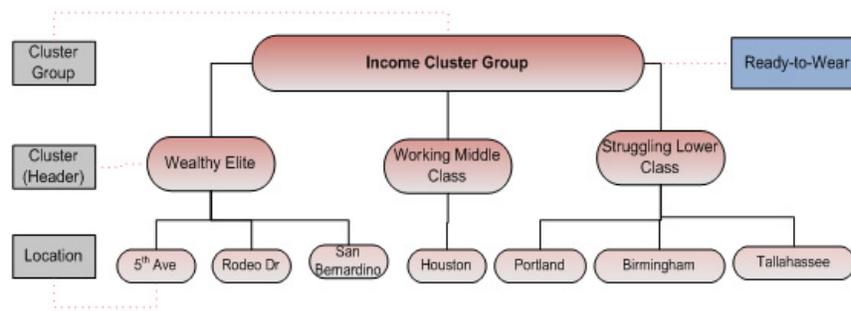
Understanding the makeup of the local consumers shopping each individual store is important in developing assortment, pricing and promotion strategies that are tailored to the local consumer needs. However, given the number of stores at a typical retailer, it is not possible to manually plan these at the individual store level. Hence the need for the intelligent grouping of similar stores into clusters.

Clustering stores enables retailers to manage large chains (that is, greater than 500 locations) in an efficient manner. Effective clustering should involve a small number of

clusters providing maximum differentiation among one another, while minimizing the difference between the locations within each cluster. In other words, stores in a single cluster should be fairly homogeneous, while the clusters themselves should be heterogeneous.

Stores can be clustered based on their similarity in attributes such as performance, size or format of store, weather, or based on similarity in customer make up based on their demographic attributes.

Clusters are organized into the following hierarchy: Cluster Group - Cluster - Location: below is an example hierarchy.



## Cluster Attributes

**Table 5-5 Cluster Attribute Dimensions**

Attribute	Definition
Cluster Group Code	The cluster group code is a business code that is also a unique identifier for a cluster group
Cluster Group Label	The cluster group label is a short description of why the cluster group was built.
Cluster Group Type	Cluster groups are built for multiple reasons, the cluster group type states what the cluster group was built for. Valid cluster group types could be promo, price, markdown, assortment, inventory, replenishment, performance, etc. The cluster group type should be considered required, as it is the only attribute to make sure cluster groups are unique.
Cluster Code	The cluster code is a business code that is also a unique identifier for a cluster within a cluster group.
Cluster Name	The cluster name is a short description of the cluster.
Cluster Description	The cluster description is a long description of the cluster.
Primary Life-stage	Primary life-stage is the most prominent life-stage within a cluster - since clusters can be made up of multiple customer segments - there can be more than one life-stage present. Hence this attribute being the primary or most prominent life-stage attribute value.
Primary Ethnicity	Primary ethnicity is the most prominent ethnicity within a cluster - since clusters can be made up of multiple customer segments - there can be more than one ethnicity present. Hence this attribute being the primary or most prominent ethnicity attribute value.

**Table 5–5 (Cont.) Cluster Attribute Dimensions**

<b>Attribute</b>	<b>Definition</b>
Primary Education Level	Primary education level is the most prominent education level within a cluster - since clusters can be made up of multiple customer segments - there can be more than one education level present. Hence this attribute being the primary or most prominent education level attribute value.
Primary Typical Lifestyle	Primary typical lifestyle is the most prominent typical lifestyle within a cluster - since clusters can be made up of multiple customer segments - there can be more than one typical lifestyle present. Hence this attribute being the primary or most prominent typical lifestyle attribute value.
Primary Income Level	Primary income level is the most prominent income level within a cluster - since clusters can be made up of multiple customer segments - there can be more than one income level present. Hence this attribute being the primary or most prominent income level attribute value.
Primary Dwelling Type	Primary dwelling type is the most prominent dwelling type within a cluster - since clusters can be made up of multiple customer segments - there can be more than one dwelling type present. Hence this attribute being the primary or most prominent dwelling type attribute value.
Primary Age Class	Primary age class is the most prominent age class within a cluster - since clusters can be made up of multiple customer segments - there can be more than one age class present. Hence this attribute being the primary or most prominent age class attribute value.

## Consumer Attributes

Growing retailers need to attract new customers, and the key to attracting customers is understanding them. Oracle Retail Insights offers a means for retailers to understand and attract new customers and in so doing grow their businesses.

Retailers can use Oracle Retail Insights' Consumer Analysis to develop a deep understanding of consumers (that is, those shoppers who are their potential customers). It helps retailers understand the types of purchases each consumer segment makes, where the most desirable consumers live and shop, and in which product categories they should be competing for consumers. Building on that knowledge, retailers can build effective strategies to induce consumers to buy their products, and convert them from out-of-reach, obscure consumers to familiar, loyal, and revenue-producing customers.

**Table 5–6 Consumer Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
<b>Consumer Household Attributes</b>	
Head of Household Age	This attribute is the age of consumer who is designated head of the household.
Household Size	This attribute is the size of a consumer's household.
Income	This attribute lists the income of a household.
Number of Children	This attribute lists the number of children aged 0 to 12 residing in a household.
Number of Teens	This attribute lists the number of teenagers residing in a household.

**Table 5–6 (Cont.) Consumer Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Number of Adults	This attribute lists the number of adults residing in a household.
Number of Seniors	This attribute lists the number of seniors residing in a household.
<b>Consumer Household Group</b>	
Household Size	This attribute lists the number of residents of a household.
Household Income	This attribute lists the income for a household.
Household Income Level	This attribute lists the income level for a household.
Male Age Range	This attribute lists the age range of the male who is designated as the head of the household.
Female Age Range	This attribute lists the age range of the female who is designated as the head of household.
Household Head Age Level	This attribute lists the age level of the person who is designated as the head of the household.
Female Head Education	This attribute lists the highest education level attained by a female head of household.
Male Head Education	This attribute lists the highest education level attained by a male head of household.
Presence of Children	This attribute indicates the presence of children in a consumer's household. Possible values are "Y" and "N".
Ethnicity	This attribute indicates the ethnicity of a household.
Hispanic Household	This attribute indicates whether the household is Hispanic. This is primarily used by US grocery retailers to drive assortment decisions.
Female Head Occupation	This attribute lists the occupation of the female identified as the head of household.
Male Head Occupation	This attribute lists the occupation of the male identified as the head of household.
Female Head Employment	This attribute indicates the time spent at work by the female head of household. 1 = under 30 hours; 2 = 30-34 hours; 3 = 35+ hours; 9 = not employed for pay; 0 = no female head
Male Head Employment	This attribute indicates the time spent at work by the male head of household. 1 = under 30 hours; 2 = 30-34 hours; 3 = 35+ hours; 9 = not employed for pay; 0 = no male head.
Household Composition Group	This attribute lists the household level characteristic that classifies the type of adults residing in each home. This provides insight into the likely household makeup. Examples of Composition Groups are Single, Married, 2 Person, Group
Composition Group Indicator	This attribute lists the household level characteristic that further classifies the makeup of Household. For Household with Composition Group of Single, Composition Group Indicator can be Adult Male or Adult female, for Composition Group Married, Composition Group Indicator can be 1 Male and 1 Female occupant with the same surname.
Tenure Class	This attribute describes whether a majority of households in a segment live in homes that are owned or homes that are rented. In order to do this analysis, household table in RA, should support Home owner and Renter attributes.
<b>Consumer Attributes</b>	

**Table 5–6 (Cont.) Consumer Dimension Attributes**

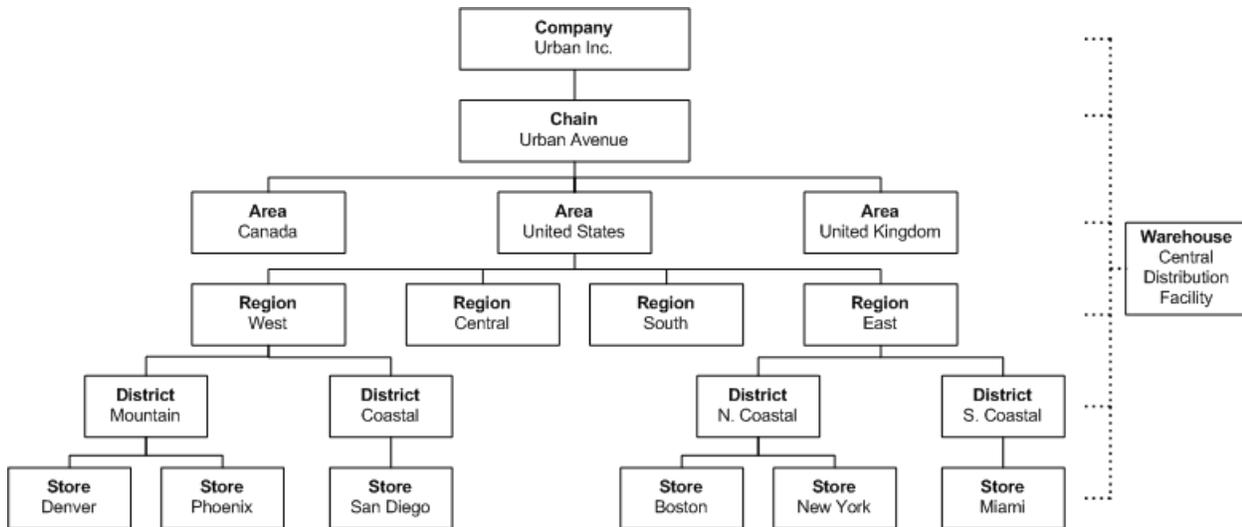
<b>Attribute</b>	<b>Definition</b>
Consumer Age Range	This attribute indicates the Age Range for a consumer. This demographic composition can indicate how consumers spend their money. Possible values for Age Range can be "Generation Y", "Generation X", "Younger Boomer", "Older Boomer", "Empty Nester", "Seniors".
Consumer Income Range	This attribute indicates a consumer's income range. This demographic composition can indicate the consumer's propensity to spend the money.
Consumer Gender	This attribute indicates a consumer's gender.
Consumer Ethnicity	This attribute indicates a consumer's ethnicity.
Consumer Nationality	This attribute indicates the nationality of a consumer.
Educational Background	This attribute indicates the educational background of a consumer.
Consumer Occupation	This attribute indicates the occupation of a consumer.
Consumer Region	This attribute indicates the region where a consumer lives.
Consumer Religion	This attribute indicates a consumer's religion.
<b>Consumer Distribution</b>	
Allocation Type	This attribute indicates whether the distribution for a department and store is applicable for customer segment or consumer segment.
<b>Consumer Segment</b>	
Family Size	This attribute indicates the family size for a demographics based segment.
Consumer Segment Name	This attribute indicates the name of the consumer segment.
Consumer Segment Type	This attribute indicates the type of the consumer segment.
Employment Class	Employment Class collapses a broad range of occupational classes to six categories: Management (Mgmt), Professional (Prof), White Collar, Blue Collar (BC), Service, and Mostly Retired. Employment is classified primarily using the distribution of occupational categories for each segment, supplemented by the index scores.

## Organization

The Organization dimension mirrors the structure of the retail company, allowing analysis at every level of the organization. Assessing the contribution of a child attribute to its parent attributes (for example, location to region or chain) allows an analyst to identify the segments of the larger organization that are performing as planned, and those where performance is below expectations. In addition, the Organization hierarchy makes it possible to analyze sales by channel and perform comparable stores analysis.

The majority of business measurements in Retail Insights reference data by attributes of the Organization dimension. Sales and profit, markdowns, stock position, and most other data is held by location, the lowest-level attribute in the Organization dimension hierarchy.

The following diagram illustrates an example organization hierarchy.



Organization starts at company level, with chain, area, region, district, and store at the lower levels of the hierarchy. A warehouse is a physical storage and distribution facility where inventory may be received, held, and transferred to other locations such as stores. A warehouse can be attached to any level of the organizational hierarchy for reporting purposes, but this is not a requirement.

### Sets of Books

Multinational retailers need to maintain multiple sets of books in their financial systems. This need can be driven by a number of different factors such as the following:

- A company divided into different legal entities (such as brands)
- A company having operations in different countries (with different currencies and calendars)

When a company operates with multiple sets of books, they may have different physical instances of their business and accounting systems to support this segregation, or they may use a single physical instance of their systems to support the different sets of books. When operating with multiple sets of books in a single installation, a company partitions its general ledger according to the sets of books. Each set of books has its own chart of accounts and other identifying characteristics, such as the primary currency and accounting calendar. The company may also partition other data along these lines to help segregate data more efficiently. Sets of books can segregate structural data as well as the chart of accounts.



**Table 5–7 (Cont.) Wholesale Customer Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Customer End Date	This is the date the organization's customer relationship ended. It could be something like the end of the latest sales contract that was not renewed.
Customer Category Code	This field indicates to which category the customer belongs.
Line of Business	Line of business.
SIC Code	This is the Standard Industry Classification code, a four-digit code used by the US government for classifying industries.
SIC Name	Standard Industry Classification name.
Govt ID Type	Government ID Type
Govt ID Value	Government ID Value
Service Provider Flag	This attribute indicates the organization is a service provider.
Potential Sales Volume	This is the potential sales volume of the organization. This should be a range of volume amounts. For example [0-500,000], [500,000-1,000,000] and [1,000,000+].
Annual Revenue	This is the organization's annual revenue amount.
Supplier ID	This is the supplier ID if the organization is a supplier.
Customer Number	This is the internal customer number assigned to the organization.
Primary Contact Name	This is the primary contact name for the organization.
Primary Contact Phone Number	This is the primary phone number for the organization.
Base Currency Code	This is the base currency code of the organization.

## Stockholding Franchise Locations

Franchising is the sales and distribution of products to customers who license a retailer's trade name or services, or both, for a fee. Example services provided could include assortment planning, ordering, and store inventory management. A franchise leases the name of the operating retailer but is not owned by them; however in many situations a retailer manages its franchise stores very similarly to how it manages its own corporate stores, including managing its inventory. In such a situation retailers should create stockholding franchise locations as a way to manage their inventory. Because stockholding franchise locations and corporate locations function similarly, Oracle Retail Insights enables retailers to analyze them similarly while retaining the ability to segregate sales at franchise locations from sales at corporate locations.

## Non-Stockholding Franchise Locations

If a retailer does not wish to manage the inventory of its franchise locations, those locations can be set up as non stock holding franchise locations and analyzed accordingly. The retailer will retain the ability to analyze franchise sales separately from sales at corporate locations.

## Organization Attributes

Table 5–8 lists the attributes of the Organization dimension.

**Table 5–8 Organization Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Company	Name of a company. Company is the highest attribute within the Organization hierarchy. A company consists of one or more chains.
Company Number	Unique ID from the source system that identifies a company.
Chain	Name of a chain. A chain consists of one or more areas.
Chain Number	Unique ID from the source system that identifies a chain.
Chain Mgr	Name of a chain manager.
Area	Name of an area. An area consists of one or more regions.
Area Number	Unique ID from the source system that identifies an area.
Area Mgr	Name of an area manager.
Region	Name of a region.
Region Number	Unique ID from the source system that identifies a region.
Region Mgr	Name of a region manager.
District	Name of a district. A district consists of one or more locations.
District Number	Unique ID from the source system that identifies a district.
District Mgr	Name of a district manager.
Loc	Lowest attribute within the organization hierarchy. It identifies a warehouse, store, or partner within the company.
Loc Number	Unique ID from the source system that identifies a location.
Loc List	Name of a location list. A location list is an intentional grouping of locations for reporting purposes.
Loc List ID	Unique ID from the source system that identifies a location list. A location list is an intentional grouping of locations for reporting purposes.
Loc Trait	Name of a location trait. A location trait is an attribute of a location that is used to group locations with similar characteristics.
Loc Trait ID	Unique ID from the source system that identifies a location trait. A location trait is an attribute of a location that is used to group locations with similar characteristics.
Tsf Entity ID	Unique ID from the source system that identifies a transfer entity. A transfer entity is a group of locations that share legal requirements around product management. A location can belong to only one transfer entity, and a transfer entity can belong to multiple organization units.
Org Unit ID	Unique ID from the source system that identifies a financial organization unit. An organization unit can belong to only one set of books.
SOB ID	Unique ID from the source system that identifies a financial set of books. A set of books represents an organizational structure that groups locations based on how they are reported from an accounting perspective.

**Table 5–8 (Cont.) Organization Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Tsf Entity Desc	Detailed description of a transfer entity. A transfer entity is a group of locations that share legal requirements around product management. A location can be associated with only one transfer entity, and a transfer entity can be associated with multiple organization units.
Comp Flag	Indicator of whether a location has been opened for configurable time, with values of "Y" for yes and "N" for no. Generally, comparable stores are locations that are in operation for at least 53 weeks.
Store Type	Indicator of the type of store, with values of "Company," "Wholesale," and "Franchise."
Address Type	Type of address. Values are as follows: <ul style="list-style-type: none"> <li>■ 01 – Business</li> <li>■ 02 – Postal</li> <li>■ 03 – Returns</li> <li>■ 04 – Order</li> <li>■ 05 – Invoice</li> <li>■ 06 – Remittance</li> </ul>
Loc Name3	Three-character abbreviation of a location name.
Loc Name10	Ten-character abbreviation of a location name.
Loc Name Secondary	Secondary name of a location.
Address Line 1	First line of street address.
Address Line 2	Second line of street address.
Address Line 3	Third line of street address.
City	City of a location.
Postal Code	Postal code of a location.
Phone Number	Primary phone number of a location.
Loc Type	Type of location, with values of "Store," "Warehouse," and "External Finisher."
Linear Distance	Total merchandisable space of a location. Feet is the unit of measure.
VAT Region ID	Unique ID from the source system that identifies the Value Added Tax (VAT) region in which a store is located.
VAT Included Flag	Indicator of whether Value Added Tax (VAT) is included in the retail price, with values of "Y" for yes and "N" for no.
Currency Code	Base currency code of the organization.
Break Pack Flag	Indicator of whether a warehouse is capable of distributing less than the supplier's case quantity, with values of "Y" for yes and "N" for no.
Stockholding Flag	Indicator of whether a location can hold stock, with values of "Y" for yes and "N" for no. In a non-multichannel environment, the value is always "Y".
Loc Mgr	Name of the manager of the organization.
Mall	Name of the mall in which a store is located.

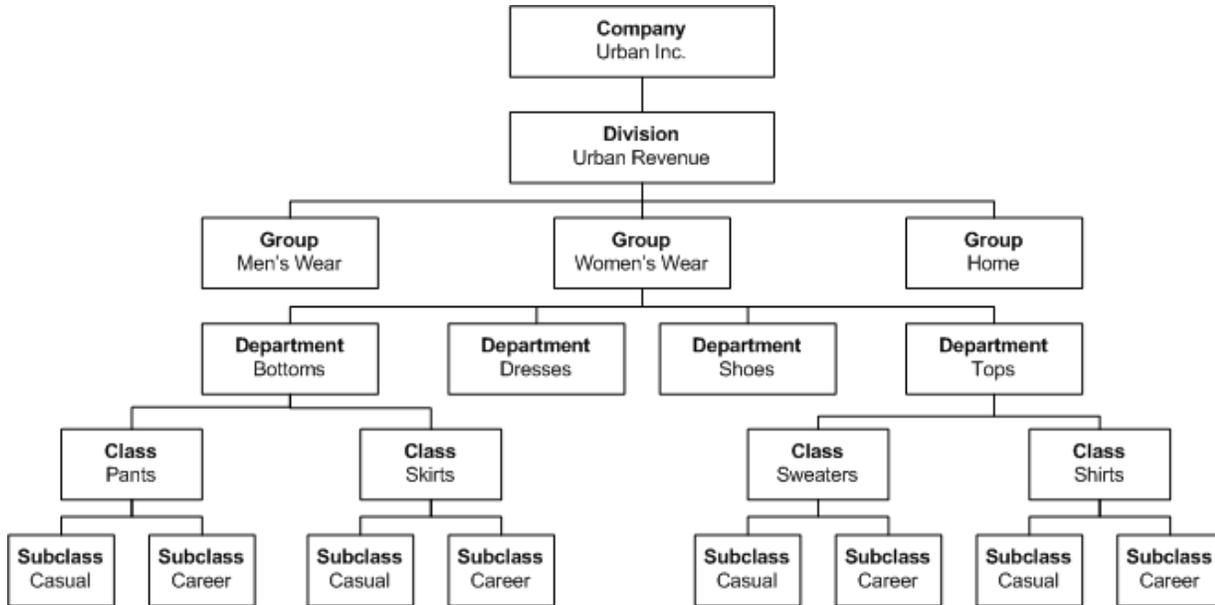
**Table 5–8 (Cont.) Organization Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Loc Open Date	Open date of a location.
Loc Close Date	Close date of a location.
Selling Area	Total square footage of a store's selling area.
Remodel Date	Date that a location was last remodeled.
Tsf Zone ID	Unique ID from the source system that identifies a transfer zone. A transfer zone is an intentional grouping of locations for transferring owned inventory from one location to another. A location can belong to only one transfer zone.
Promo Zone ID	Unique ID from the source system that identifies a promotion zone. A promotion zone is an intentional grouping of locations for promotion activity. A location can belong to only one promotion zone.
Total Area	Total square footage of a location.
Default WH ID	Warehouse that can be used as the default for creating cross-dock masks. This determines which stores may be sourced by a warehouse, and it only contains virtual warehouses in a multichannel environment.
Store Format Desc	Description of a store format. Examples are Conventional Store, Supermarket, Virtual Store, Catalog Store, and Hard Discount.
Store Format ID	Unique ID from the source system that identifies a store format.
State	State name of a location.
Country	Country name of a location.
Banner ID	Unique ID from the source system that identifies a banner. A banner is the name of a retailer's subsidiary.
Banner	Name of a banner. A banner is the name of a retailer's subsidiary.
Channel	Name of a channel. A channel is a method for a retailer to interact with a customer, and it is an outlet for sale and delivery of goods and services to the customer. A retailer can have multiple outlets, such as brick-and-mortar stores, Web sites, and catalogs.
Channel ID	Unique identifier associated with a channel.
Channel Type	Type of channel to interact with a customer. The values are "Brick and Mortar," "Webstore," and "Catalog."
Virtual WH Flag	Indicator of whether a location is a virtual warehouse, with values of "Y" for yes and "N" for no.
Physical WH ID	Unique ID from the source system that identifies a physical warehouse that is assigned to a virtual warehouse.
State Code	Code that identifies the state of the location.
Sister Store ID	Location that will be used to relate a current store to the historical data of an existing store.
Store Class	Type of store class, which retailers can use to group their stores. The best stores are typically considered "A" stores, the next-best "B" stores, and so on. Values can be "A," "B," "C," "D," "E," and "X".

## Product

The Product dimension represents the product lines that the company sells. The Product dimension is essential to the department manager who needs to know which items turn the highest profit, or how an item performs within the market as a whole. Because of its importance for analysis in the retail environment, attributes from the Product dimension are present in nearly every data mart in Retail Insights. In most cases, data is kept at the lowest level in the hierarchy (item), to allow maximum flexibility and detail in reporting.

The following diagram illustrates an example product hierarchy.



## Product Differentiators

Differentiators are used to define the characteristics of an item. Characteristics such as size, color, flavor, scent, and pattern are attached to items as differentiators within Oracle Retail Merchandising System (RMS). Differentiators hold all item differentiator identifiers, along with their associated National Retail Federation (NRF) industry codes.

Oracle Retail Insights comes with the following differentiators as an example for reference:

- Style (Color only)
- Color for Style

They are arranged in the following hierarchy: Style (Color only) > Color for Style > Item.

These are just an example and can be added to or modified as needed to make them relevant to a specific retail business.

Style (Color Only)	Color for Style	Item	Gross Sales Amt
159627	110059627~Green	RA Level 2 Item:Green:Large 110059631	25
		RA Level 2 Item:Green:Small 110059630	15

## Product Attributes

Table 5–9 lists the attributes of the Product dimension:

**Table 5–9 Product Dimension Attributes**

Attribute	Definition
Company Number	Unique ID from the source system that identifies a company.
Company	Name of a company. A company consists of one or more divisions.
Division Number	Unique ID from the source system that identifies a division.
Division	Name of a division. A division is the highest category of merchandise within an organization. Typically a division is used to signify the overall category of merchandise, such as hardlines or apparel.
Division Buyer Number	Unique ID from the source system that identifies a division buyer.
Division Buyer	Name of a division buyer, an executive responsible for purchasing merchandise to be sold in a store or retail channel for a particular division.
Division Merchant Number	Unique ID from the source system that identifies a division merchant.
Division Merchant	Name of a division merchant.
Group Number	Unique ID from the source system that identifies a group.
Group	Name of a group. A group is the next level of merchandise in a hierarchy below division. A group consists of one or more departments. A group can belong to only one division.
Group Buyer Number	Unique ID from the source system that identifies a group buyer.
Group Buyer	Name of a group buyer. A group buyer is an executive responsible for purchasing merchandise to be sold in a store or retail channel for a particular group.
Group Merchant Number	Unique ID from the source system that identifies a group merchant.
Group Merchant	Name of a group merchant.
Department Number	Unique ID from the source system that identifies a department.
Department	Name of a department. A department is the next level below group in the merchandise hierarchy. A group can have multiple departments. Key information about how inventory is tracked and reported is stored at the department level.
Department Buyer Number	Unique ID from the source system that identifies a department buyer.
Department Buyer	Name of a department buyer, an executive responsible for purchasing merchandise to be sold in a store or retail channel for a particular department.
Department Merchant Number	Unique ID from the source system that identifies a department merchant.
Department Merchant	Name of a department merchant.
Profit Calc Type	Indicator of the profit calculation type, with values of "Direct Cost" and "Retail Inventory".
Purchase Type	Indicator of the purchase type of merchandise, with values of "Owned", "Consignment", and "Concession."

**Table 5–9 (Cont.) Product Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
OTB Calc Type	Indicator of the open-to-buy calculation type, with values of "Cost" and "Retail."
Class Number	ID within a department that uniquely identifies a class.
Class	Name of a class. A class is the next level below department in the merchandise hierarchy. A department can have multiple classes. A class provides the means to group products within a department. A class consists of one or more subclasses.
Class Buyer Number	Unique ID from the source system that identifies a class buyer.
Class Buyer	Name of a class buyer, an executive responsible for purchasing merchandise to be sold in a store or retail channel for a particular class.
Class Merchant Number	Unique ID from the source system that identifies a class merchant.
Class Merchant	Name of a class merchant.
Subclass Number	ID within a department number and class number that uniquely identifies a subclass. A class can have multiple subclasses.
Subclass	Name of a subclass. A subclass defines the type of merchandise sold in a department and class.
Subclass Buyer Number	Unique ID from the source system that identifies a subclass buyer.
Subclass Buyer	Name of a subclass buyer, an executive responsible for purchasing merchandise to be sold in a store or retail channel for a particular subclass.
Subclass Merchant Number	Unique ID from the source system that identifies a subclass merchant.
Subclass Merchant	Name of a subclass merchant.
Item Number	Unique ID from the source system that identifies an item.
Item	Detailed description of an item. Item is the lowest-level attribute within a product hierarchy. Sales and inventory facts are tracked at one of the predetermined levels within the Item attribute.
Pack Sellable Number	Unique code from the source system that identifies a sellable pack. A sellable pack is a collection of items that is sold as a single unit.
Pack Simple Number	Unique code from the source system that identifies a simple pack. A simple pack is a pack in which the component items are the same.
Pack Orderable Number	Unique code from the source system that identifies an orderable pack. An orderable pack is a collection of items that is ordered as a single unit.
Pack Flag	Indicator of whether an item is a pack. A pack item is a collection of items that can be ordered or sold as a single unit.
Package Size	Size of the product printed on packaging.
Package UOM	Unit of measurement in which a package size is measured.
Item Level	Indicator of the level within an item family, with values of 1, 2, and 3.
Transaction Level	Indicator of the level within an item family that inventory is tracked, with values of 1, 2, and 3.

**Table 5–9 (Cont.) Product Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Item Level 1 Number	Item number of the highest level in an item family.
Item Level 1 Desc	Item description of the highest level in an item family.
Item Level 2 Number	Item number of the second level in an item family.
Item Level 2 Desc	Item description of the second level in an item family.
Item Level 3 Number	Item number of the lowest level in an item family.
Item Level 3 Desc	Item description of the lowest level in an item family.
Original Retail	Original retail price of an item per unit and is stored in the primary currency.
Mfg Recommended Retail	Recommended manufacturer’s retail price of an item per unit, stored in the primary currency.
Pack Number	Item number where PACK_FLG = Y. A pack item is a collection of items that can be ordered or sold as a single unit.
Pack Item Quantity	Quantity of a pack component item units that make up a pack.
Pack Desc	Item description where PACK_FLG = Y. A pack item is a collection of items that can be ordered or sold as a single unit.
Pack UOM	Standard unit of measurement for a pack item.
Item List ID	Unique ID from the source system that identifies an item list. An item list is an intentional grouping of items for operational purposes.
Item List Desc	Detailed description of an item list. An item list is an intentional grouping of items for operational purposes.
UDA Head ID	Unique ID from the source system that identifies a user-defined attribute of an item. A UDA head is a parent of a UDA detail.
UDA Head Desc	Detailed description of a user-defined attribute of an item. A UDA head is a parent of a UDA detail.
UDA Detail ID	Unique ID from the source system that identifies a user-defined attribute detail of an item. A UDA detail can be a child of only one UDA parent.
UDA Detail Desc	Detailed description of a user-defined attribute detail of an item. A UDA detail can be a child of only one UDA parent.
Diff Type	Indicator of the differentiator type, with example values of “Size,” “Color,” “Flavor,” “Scent,” and “Pattern.” A differentiator type is a parent of a differentiator.
Diff ID	Unique ID from the source system that identifies an item differentiator. Differentiators define the characteristics of an item. A differentiator can be a child of only one differentiator type.
Diff Desc	Description of an item differentiator. A differentiator can be a child of only one differentiator type.
UOM	Standard unit of measurement for an item.

**Table 5–9 (Cont.) Product Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Item Number Type Code	Indicator of the type of numbering system used to identify an item. Values are as follows: <ul style="list-style-type: none"> <li>▪ Oracle Retail Item Number</li> <li>▪ UCC12</li> <li>▪ UCC12 with Supplement</li> <li>▪ UCC8</li> <li>▪ UCC8 with Supplement</li> <li>▪ EAN/UCC-8</li> <li>▪ EAN/UCC-13</li> <li>▪ EAN/UCC-13 with Supplement</li> <li>▪ ISBN-10</li> <li>▪ ISBN-13</li> <li>▪ NDC/NHRIC – National Drug Code</li> <li>▪ PLU</li> <li>▪ Variable Weight PLU</li> <li>▪ SSCC Shipper Carton</li> <li>▪ EAN/UCC-14</li> <li>▪ Manual</li> <li>▪ Custom Item Type</li> </ul>
Item Input Flag	Indicator of whether an item holds inventory for an item transformation, with values of “Y” for yes and “N” for no.
Merchandise Flag	Indicator of whether an item is merchandise, with values of “Y” for yes and “N” for no.
Pack Retail Flag	Indicator of whether a pack has its own unique retail price, or if a pack retail price is the sum of its components’ retail prices, with values of “Y” for yes and “N” for no.

**Table 5–10 Product Split Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Style	This attribute displays the style of an item.
Color	This attribute displays the color of an item.
Size	This attribute displays the size of an item.
Fabric	This attribute displays the fabric of an item.
Flavor	This attribute displays the flavor of an item.
Scent	This attribute displays the scent of an item.

## Promotion

A promotion is an attempt to stimulate the sale of particular merchandise. This can be accomplished by temporarily reducing its price, advertising it, or linking its sale to offers of other merchandise at reduced prices or free. A promotion can take place for many different reasons, such as the desire to attract a certain type of customer, increase sales of a particular class of merchandise, introduce new items, or gain competitive

advantage. Tracking of sales and demand by promotion allows retailers to assess the success in attracting customers to purchase items that are placed on promotion.

A single promotion can be part of a larger effort or event. Several promotions can be associated with an event. For example, a summer sale event might consist of multiple promotions.

There are a number of formats in which a promotion can be offered. Some common examples of these formats are as follows:

- Get a specific percent off the price of an item
- Buy a certain quantity of an item and get a certain amount off the total purchase value
- Buy a certain item and get a discount on another item
- Get free shipping and handling

Every promotion has one of the following promotion formats:

- General: Get a percent or amount discount on an item.
- Threshold: Buy a certain quantity or amount of an item and get a percent or amount discount on the item.
- Mix and Match: Buy a certain quantity or amount of item A and get a percent or amount discount on item B.
- Service: Get a percent or amount discount on service charges. (If the promotion format is Service, there is a service type. A service type could be monogramming, gift wrap, personalization, or shipping and handling.)

Typically, a promotion on an item is not applied universally. It might be triggered only for certain stores, for certain media, for certain customer types, or for certain offer coupons. The type of circumstance that triggers a promotion is called the promotion trigger type. In a brick-and-mortar market, a promotion is always triggered by the store. In a direct-to-consumer market, there can be different trigger types such as Source Code, Media Code, Selling Item Code, or Customer Type. One promotion can be triggered by only one promotion trigger type.

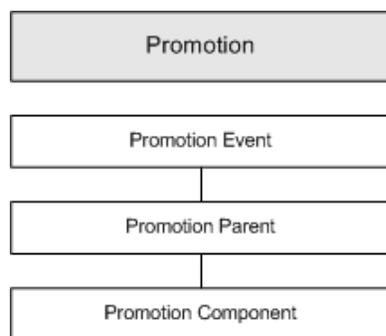


Table 5–11 lists the attributes of the Promotion dimension.

**Table 5–11 Promotion Dimension Attributes**

Attribute	Definition
Promo Event ID	Unique ID from the source system that identifies a promotion event, an event for which one or more promotions are offered.
Promo Event Desc	Description of a promotion event, an intentional grouping of promotion parents.

**Table 5–11 (Cont.) Promotion Dimension Attributes**

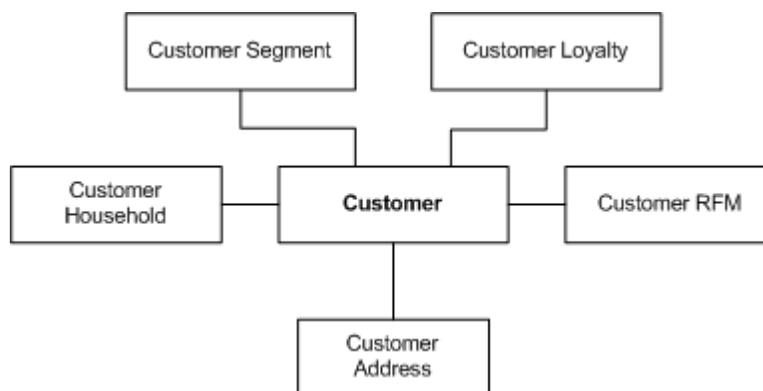
<b>Attribute</b>	<b>Definition</b>
Promo Event Start Date	Date from which the source record (in the source system) is effective. This represents the start date of a promotion event.
Promo Event End Date	Date until which the source record (in the source system) is effective. This represents the end date of a promotion event.
Promo Event Theme Desc	Description of a promotion event theme that is used to further identify and describe the promotion event.
Promo Parent ID	Unique ID from the source system that identifies a promotion parent. A promotion parent is an intentional grouping of promotion components within a promotion event. A promotion parent is only a child of a single promotion event. Multiple promotion parents within a promotion event can have overlapping timeframes within the promotion event.
Promo Parent Name	Name of a promotion parent. A promotion parent is an intentional grouping of promotion components within a promotion event. A promotion parent is only a child of a single promotion event. Multiple parents within a promotion event can have overlapping timeframes within the promotion event.
Promo Parent Desc	Description of a promotion parent. A promotion parent is an intentional grouping of promotion components within a promotion event. A promotion parent can only be a child of a single promotion event. Multiple parents within a promotion event can have overlapping timeframes within the promotion event.
Promo Parent Start Date	Date from which the source record (in the source system) is effective. This represents the start date of a promotion parent.
Promo Parent End Date	Date until which the source record (in the source system) is effective. The value is extracted from the source system whenever available. This represents the end date of a promotion parent.
Promo Component ID	Unique ID from the source system that identifies a promotion component. A promotion component is an intentional grouping of promotion details within a promotion parent. A promotion component is always a child of a single promotion parent, which is only a child of a single promotion event. Multiple promotion components within a promotion parent can have overlapping timeframes within the promotion parent.
Promo Component Name	Name of a promotion component. A promotion component is an intentional grouping of promotion details within a promotion parent. A promotion component is always a child of a single promotion parent, which is only a child of a single promotion event. Multiple components within a promotion parent can have overlapping timeframes within the promotion parent.
Promo Component Start Date	Date from which the record in the source system is effective. Start date of a promotion component.
Promo Component End Date	Date until which the record in the source system is effective. This represents the end date of a promotion component.

**Table 5–11 (Cont.) Promotion Dimension Attributes**

Attribute	Definition
Promo Component Type	<p>Promotion component type that is applied to a promotion component, with the following values:</p> <ul style="list-style-type: none"> <li>■ 0 - Multi-buy</li> <li>■ 1 - Simple</li> <li>■ 2 - Threshold</li> <li>■ 6 - Finance</li> </ul> <p>A promotion component type is the method to implement a price discount, reward, or credit/financing.</p>

## Customer

Knowledge of the customers' preferences and buying behavior allows the retailer to increase sales through up-selling efforts, target customers for promotions, and prevent defection to competitors. In Retail Insights, customer information and transaction history can be used to segment the customer base by one of several methods. This analysis yields important information about who the best customers are, and the affinity of customer segments to particular products.



Oracle Retail Insights has the ability to store customer addresses. It does not store sensitive information that could be used to identify individual customers; however, the data warehouse can be customized to bring in this information if a retailer requires it.

Customer address information will be sourced from an external customer management system. Oracle Retail Insights will provide a Source Independent Load interface to feed customer address along with other customer attributes from the Oracle Retail Insights staging tables to the customer dimension.

Table 5–12 lists the attributes of the Customer dimension.

**Table 5–12 Customer Dimension Attributes**

Attribute	Definition
Customer Individual Gender Code	Code for an individual's gender.
Customer Individual Gender	An individual's gender, for example: male, female, not declared.
Customer Individual Marital State Code	Code for an individual's marital state (marital status).

**Table 5–12 (Cont.) Customer Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Customer Individual Marital State	An individual's marital state (marital status), for example: single, married, divorced, widowed.
Annual Income	Customer's annual income.
Education Background Code	Code for the education background code of the customer.
Recency Category	Recency category of the customer.
Customer Primary City	Customer primary city of residence.
Customer Primary State Code	Code for customer primary state.
Customer Primary State	Customer primary state.
Customer Primary Postal Code	Customer primary postal code.
Customer Primary Country	Customer primary country.
Address ID	Customer address ID.
Churn Score	Score indicating the likelihood of customer retention.
Customer Status Code	Status code for a customer.
Customer Status Code Description	Status of a customer, for example: potential, first-time, regular.
Education Background	Education background of a customer, for example: bachelor's degree, master's degree).
Ethnicity Code	Code for the ethnicity of the customer, for example: H = Hispanic, G = German, U = Unknown.
Nationality Code	Code for the nationality of the customer.
Customer Type	Type of customer
Nationality	Nationality of the customer.
Occupation Code	Code for the occupation of the customer.
Occupation	Occupation of the customer.
Prospect Flag	Flag to indicate someone who has visited or shopped online, but has not purchased. The retailer may have some information about such prospect customers.
Recency Category Code	Code indicating how recently the customer purchased.
Recency Category	Score indicating how recently the customer purchased.
Frequency Category Code	Code indicating how often a customer purchases.
Frequency Category	Score indicating how often a customer purchases.
Monetary Category Code	Code indicating the monetary value of a customer's purchase.
Monetary Category	Score indicating the monetary value of customer's purchase.
RFM Categories Code	Code indicating the customer's total RFM Score.
RFM Categories	Score indicating the combined recency, frequency, and monetary value of a customer.
Churn Score Range Sort	Sort range for churn score.
Churn Score Range	Range of churn score.

**Table 5–12 (Cont.) Customer Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Customer Address Type Code	Code for the type of customer address.
Customer Address Type	Type of address, for example: billing address, delivery address.
Years at Address	Number of years for which the specific address has been in use.
Customer Address Class Code	Code indicating the class of the address.
Customer Address Class	Class of address, for example: residential address, commercial address.
Primary Address Flag	Flag that indicates if the address can be used for all customer communication and reporting purposes.
City	Indicates the City.
State Code	State code.
State	State.
Postal Code	Postal code.
Country	Indicates the Country.
Opt Out Flag	Flag indicating if the address or e-mail address may or may not be marketable.
Customer Birth Month	Customer month of birth.
Customer Birth Year	Customer year of birth.
Age	Indicates the age of customer based on year and month of birth.
Age Range	This demographic attribute for customer represent the range in which his age lies. This attribute will be typically configured by user based on their business needs.
Customer Income Band	Range in which customer's income falls.
Ethnicity Name	Ethnicity of the customer, for example: H = Hispanic, G = German, U = Unknown.
Dwelling Status	The dwelling status classifies all dwellings according to whether they are occupied, unoccupied, or under construction during the time period of the data collection.
Dwelling Size	This attribute lists the floor area for a dwelling unit expressed in the standard unit of measure.
Dwelling Type	This attribute lists the dwelling unit occupied by, or intended for occupancy by, one household. Examples include: detached house, flat, apartment, tenement, trailer park, etc.
Dwelling Tenure	The dwelling tenure attribute refers to the period of the occupancy of a private household in a dwelling. It is expressed in number of years.
Religion	This attribute identifies a customer's religion.
Religion Code	This attribute is the code for a customer's religion.
Social Class	Status hierarchy by which customers are classified on the basis of esteem and prestige. Values - Upper Class, Upper Middle class, Lower middle class, Upper lower class, lower class.
Social Class Code	Code indicating the status hierarchy by which customer are classified on the basis of esteem and prestige.

**Table 5–12 (Cont.) Customer Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Family Lifecycle	Indicates the family lifecycle of the customer, Examples include: bachelor, married with no children (DINKS: Double Income, No Kids), full-nest, empty-nest, or solitary survivor.
Family Lifecycle Code	Code indicating the family lifecycle of the customer.
Metro Area Size	Size of population in the metro area where the customer lives.
Activity	Activity based on AIO survey.
Activity Code	Activity code based on AIO survey.
Attitude	This attribute indicates the customer's attitude.
Attitude Code	Code indicating customer's attitude.
Benefit Sought	The main benefits the customer looks for in a product. For example, health, taste, and so on.
Benefit Sought Code	Code based on benefits sought.
Climate	This indicates the weather patterns for the customer's area.
Climate Code	The code indicates the weather patterns.
Customer Lifetime Value	This attribute is a forecast of customer profitability.
Customer Lifetime Value Code	This is the code for customer lifetime value.
Customer Lifetime Value Range	This is the range in which the customer's value falls, for example, Very High/High/Medium/Low
Customer Profitability Code	This is the code for customer profitability.
Customer Profitability	This attribute is a historical analysis of customer profitability, for example, High/Medium/Low.
Interest	This attribute indicates interest based on AIO survey.
Interest Code	Code indicating customer's interests.
Occasion	This attribute indicates when a customer tends to purchase or consume the product. It can be holidays and events that stimulate purchases
Occasion Code	Code indicating when customer tends to purchase or consume the product.
Opinion	This attribute indicates (but is not limited to) customer's political opinions, environmental awareness, sports, arts and cultural issues.
Opinion Code	Code indicating customer opinions.
Readiness to Buy	This attribute indicates customer buying mindset.
Readiness to Buy Code	Code indicating the customer buying mindset.
Hours Worked	The number of hours the customer works.
Age of Kids	This attribute will contain predefined ranges for a customer. The generic range of values will be Range - 0-3, 3-6, 6-10, 11-18, 0-16.
Population Density	Population density of the customer's area. Possible values can be urban, suburban, or rural.
No of Teens	This attribute is the number of teens in the customer's household.

**Table 5–12 (Cont.) Customer Dimension Attributes**

Attribute	Definition
Usage Rate	This indicates light, medium and heavy product usage by the customer.
Years Primary Store	This attribute is the number of years the customer has shopped at their primary grocery store.

## Customer Segmentation

Customer segmentation is the process of identifying and classifying customers according to their current and future value to your business. Segmentation identifies your most and least valuable customers based on how frequently and recently customers have purchased, and the monetary value and profitability of their business. You can use this information to establish programs and policies that protect your most valued customers against defecting to a competitor. In addition, segmentation assists the marketing analyst in identifying customers whose purchasing history indicates the potential to become more profitable, as well as those who contribute little value to your business.

Your best customers are those who:

- Have purchased goods or services from you recently
- Purchase from you frequently
- Spend a large amount of money

[Table 5–13](#) lists the attributes of the Customer Segment dimension.

**Table 5–13 Customer Segment Dimension Attributes**

Attribute	Definition
Customer Segment Name	Name of the customer segment.
Customer Segment Type	Indicates the type of customer segment.
Customer Segment Age Range	This attribute indicates the age group for customer segment. This attribute can be used by marketers to devise, and endorse items specifically for the needs and perceptions of age groups.
Customer Segment Gender Code	The code indicating gender of customer segment.
Customer Segment Gender	This attribute defines the gender of customer segment. Gender drives marketing decisions for categories like clothing, hairdressing, magazines and toiletries and cosmetics, and so on.
Customer Segment Family Size	Indicates the Family Size for a demographics based segment.
Customer Segment Generation Code	Generation code for creating demographic segments.
Customer Segment Generation	Generation for creating demographic segments. Possible value can be Baby-boomers, Generation X and so on.
Customer Segment Annual Income Range	The attribute defines target customer segment income range. Retailers will use this attribute to potentially target affluent customers with luxury goods and convenience services. Low Income range customers may be targeted with every day value or discounted items and services.
Customer Segment Occupation Code	Occupation code to classify customer into occupational categories.

**Table 5–13 (Cont.) Customer Segment Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Customer Segment Occupation	Occupation for purposes of segmenting into occupational categories.
Customer Segment Education Background Code	Educational background code to classify customer into different education categories.
Customer Segment Education Background	Educational background to classify customer into different education categories.
Customer Segment Ethnicity Code	The code to identify ethnic groups to find customers with special interests.
Customer Segment Ethnicity	This attribute identifies ethnic groups to find customers with special interests.
Customer Segment Nationality Code	Nationality code for the purpose of demographics based segmentation.
Customer Segment Nationality	This attribute identifies nationality to find customers with special interests.
Customer Segment Religion Code	Religious code for the purpose of demographics based segmentation.
Customer Segment Religion	This attribute identifies religious groups to find customers with special interests.
Customer Segment Social Class Code	Code indicating the status hierarchy by which customer are classified on the basis of esteem and prestige.
Customer Segment Social Class	Status hierarchy by which customer are classified on the basis of esteem and prestige. Values - Upper Class, Upper Middle class, Lower middle class, Upper lower class, lower class.
Customer Segment Family Lifecycle Code	Code indicating the family lifecycle of the segment.
Customer Segment Family Lifecycle	Indicates the family lifecycle of the segment, Examples include: bachelor, married with no children (DINKS: Double Income, No Kids), full-nest, empty-nest, or solitary survivor.
Customer Segment Region Code	Region code for the purpose of geographic based segmentation. Possible value can be continent, country, state, or even neighborhood.
Customer Segment Region	Region value for the purpose of geographic based segmentation. Possible value can be continent, country, state, or even neighborhood.
Customer Segment Metro Area Size	Size of population for creating geographic based customer segments.
Customer Segment Population Density	Population density for creating geographic customer segments, Possible values can be urban, suburban, or rural.
Customer Segment Climate Code	The code indicates the weather patterns.
Customer Segment Climate	This indicates the weather patterns for the purpose of geographic based segmentation.
Customer Segment Benefit Sought Code	Benefits sought code for purposes of segmentation based on benefits sought.
Customer Segment Benefit Sought	The main benefits consumers look for in a product. For example, health, taste, and so on.

**Table 5–13 (Cont.) Customer Segment Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Customer Segment Usage Rate	This indicates light, medium and heavy product usage segments.
Customer Segment Readiness To Buy Code	Code indicating the customer segment's buying mindset.
Customer Segment Readiness To Buy	This attribute indicates customer segment's buying mindset.
Customer Segment Occasion Code	Code indicating when segment tends to purchase or consume the product.
Customer Segment Occasion	This attribute indicates when segment tends to purchase or consume the product. It can be holidays and events that stimulate purchases
Customer Segment Activity Code	Activity code based on AIO survey.
Customer Segment Activity	Activity based on AIO survey. This attribute can be used to create Psychographic segments.
Customer Segment Interest Code	Code indicating customer segment's interests.
Customer Segment Interest	Indicates interest based on AIO survey. This attribute can be used to create Psychographic segments.
Customer Segment Opinion Code	Code indicating customer segment's opinions.
Customer Segment Opinion	This attribute indicates (but is not limited to) customer segments political opinions, environmental awareness, sports, arts and cultural issues.
Customer Segment Attitude Code	Code indicating customer segment's attitude.
Customer Segment Attitude	This attribute indicates the customer segment's attitude. This can be used to create Psychographic segments.
Customer Segment Value Code	Code indicating customer segment's value.
Customer Segment Value	This attribute indicates the customer segment's value. This can be used to create Psychographic segments.
Customer Segment Source Type	This attribute indicates whether the customer segment was based on customers or households.

### Customer Segment Allocation

The customer segment allocation folder under Customer Insights Cloud Service in Oracle Retail Insights enables analysis of the association of a retailer's customer segments to its merchandise and organization hierarchies. That association enables the targeting of specific customer segments with promotions by indicating in what locations and what products a customer segment is most likely to purchase. Note that this is purely for dimensional reporting.

For example, if a merchant sees a strong association between customer segment: farmer; subclass: plows; locations: Midwest Region, she will want to ensure that she has an extended assortment of the plows subclass for that Region. That way she is driving sales as well as meeting or exceeding customer expectations.

The Customer Segment Allocation association itself is done by external systems and interfaced to Oracle Retail Insights. The association level needs to be predefined in the configuration file to determine at what level of the merchandise and organization hierarchy customer segment allocation should be tracked. For example, a retailer could configure association at subclass and store level, or department and region level, or whatever levels are appropriate for their organization. Regardless of what level is chosen during configuration, it is not recommended to drill up or down on those merchandise or organization hierarchy levels during reporting, as that will provide incorrect results.

## RFM Analysis

RFM analysis is a database marketing methodology that ranks your customers based on their purchase history. This method employs three criteria for ranking customers according to their value to your company. These criteria are described in the following subsections.

### Recency

Recency indicates the amount of time that has elapsed since the customer's last purchase. It is an established principle of marketing that the more recently customers have purchased from you, the more likely they are to make another purchase. Recency is calculated as the number of elapsed days between the last day of the period being analyzed and the date of the last purchase. Customers with the fewest number of days rank in the highest group. Customers with the largest number of days rank in the lowest group.

### Frequency

Frequency profiling measures the number of times that a customer has purchased from you since a specified date. The greater the frequency of purchases, the more likely a customer purchases from you in the future. The value is determined for each customer based on a count of the number of days on which transactions occurred for this customer. Customers are rated and placed in segments based on this value.

### Monetary

Monetary profiling measures value according to the amount of money a customer has spent in the course of a specified time period. Customers are ranked according to the "total" monetary value of their purchases and assigned to a segment based on this value.

## Customer Loyalty

Loyal customers are among the retailer's most precious assets. A loyal customer contributes to your business on a regular basis over an extended period of time and almost always ranks as one of your best customers.

When used in conjunction with RFM analysis, these metrics allow you to assess the importance of various items to your best customers.

In Retail Insights, customer's loyalty scores are tracked at individual customer as well as customer segment level for various grains of promotion, calendar, style, brand and merchandising hierarchy.

Loyalty attributes indicate the likelihood of purchase of merchandise by a given customer or customer segment for the supported attributes.

[Table 5–14](#) lists the attributes of the Customer Loyalty dimension.

**Table 5–14 Customer Loyalty Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Seg Dept Loyalty Score	Customer Segment's loyalty scores for Department, Location and Day. This score is an indication of customer segment's experience of purchase of products or services.
Seg Dept Loyalty Score by Promo	Customer segment's loyalty score for Department, Location and Day by Promotion Component Type. This score is an indication of customer segment's experience of purchase of products or services.
Seg Class Loyalty Score	Customer segment's loyalty score for Class, Location and Day. This score is an indication of customer segment's experience of purchase of products or services.
Seg Class Loyalty Score by Promo	Customer segment's loyalty score for Class, Location and Day by Promotion Component Type. This score is an indication of customer segment's experience of purchase of products or services.
Seg Subclass Loyalty Score	Customer segment's loyalty score for Subclass, Location and Day. This score is an indication of customer segment's experience of purchase of products or services.
Seg Subclass Loyalty Score by Promo	Customer segment's loyalty score for Subclass, Location and Day by Promotion Component Type. This score is an indication of customer segment's experience of purchase of products or services.
Seg Style Brand Loyalty Score	Customer segment's loyalty score for Style, Brand, Location and Day. This score is an indication of customer segment's experience of purchase of products or services.
Seg Style Brand Loyalty Score by Promo	Customer segment's loyalty score for Style, Brand, Location and Day by Promotion Component Type. This score is an indication of customer segment's experience of purchase of products or services.
Cust Dept Business Month Loyalty Score	Customer's loyalty score for Department, Location and Business Month. This score is an indication of customer's experience of purchase of products or services.
Cust Dept Business Month Loyalty Score by Promo	Customer's loyalty score for Department, Location and Business Month by Promotion Component Type. This score is an indication of customer's experience of purchase of products or services.
Cust Class Business Month Loyalty Score	Customer's loyalty score for Class, Location and Business Month. This score is an indication of customer's experience of purchase of products or services.
Cust Class Business Month Loyalty Score by Promo	Customer's loyalty score for Class, Location and Business Month by Promotion Component Type. This score is an indication of customer's experience of purchase of products or services.
Cust Style Business Month Brand Loyalty Score	Customer's loyalty score for Style, Brand, Location and Business Month. This score is an indication of customer's experience of purchase of products or services.
Cust Style Business Month Brand Loyalty Score by Promo	Customer's loyalty score for Style, Brand, Location and Business Month by Promotion Component Type. This score is an indication of customer's experience of purchase of products or services.
Cust Dept Greg Month Loyalty Score	Customer's loyalty score for Department, Location and Gregorian Month. This score is an indication of customer's experience of purchase of products or services.

**Table 5–14 (Cont.) Customer Loyalty Dimension Attributes**

Attribute	Definition
Cust Dept Greg Month Loyalty Score by Promo	Customer's loyalty score for Department, Location and Gregorian Month by Promotion Component Type. This score is an indication of customer's experience of purchase of products or services.
Cust Class Greg Month Loyalty Score	Customer's loyalty score for Class, Location and Gregorian Month. This score is an indication of customer's experience of purchase of products or services.
Cust Class Greg Month Loyalty Score by Promo	Customer's loyalty score for Class, Location and Gregorian Month by Promotion Component Type. This score is an indication of customer's experience of purchase of products or services.
Cust Style Greg Month Brand Loyalty Score	Customer's loyalty score for Style, Brand, Location and Gregorian Month. This score is an indication of customer's experience of purchase of products or services.
Cust Style Greg Month Brand Loyalty Score by Promo	Customer's loyalty score for Style, Brand, Location and Gregorian Month by Promotion Component Type. This score is an indication of customer's experience of purchase of products or services.

## Household

Table 5–15 lists the Customer Household attributes supported by Retail Insights.

**Table 5–15 Customer Household Attributes**

Attribute	Definition
Household Income	Indicates the household income.
Household Class Id	Code for household class.
Household Class	Household class for a customer. Possible values are Nuclear/Joint/Single Parent, Double Income/Single Income.

## Supplier

A supplier is a company that supplies goods or a service to another company. In the retail industry, the supplier supplies the retailer with goods, and the retailer sells those goods to customers. The same item can be supplied by multiple suppliers. As a result, a primary supplier is assigned to an item. When reporting by supplier, all items that are sold are attributed to the primary supplier.

Retail Insights supports multiple supplier sites for each supplier. A supplier site is the location from which the supplier ships merchandise. Terms and conditions can be defined at the supplier site level.

The attributes in the Supplier dimension allow the business analyst to rate supplier performance based on delivery history and the quality of products. This information can be used to identify suppliers whose performance is below standard, as well as those who are in compliance with expectations.

The following is the hierarchy of the Supplier dimension.

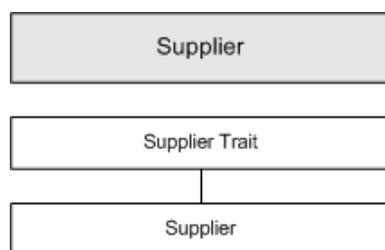


Table 5–16 lists the attributes of the Supplier dimension.

**Table 5–16 Supplier Dimension Attributes**

Attribute	Definition
Supplier Number	Unique ID from the source system that identifies a supplier.
Supplier	Trading name of a supplier.
Supplier Parent	Supplier level. For a supplier site, this value contains the parent supplier number. Sites represent physical locations from which suppliers ship. A null value indicates that this is a supplier.
QC Flag	Indicator of whether orders from a supplier require quality control, with values of "Y" for yes (unless overridden by the user when the order is created) and "N" for no, indicating that no quality control is required for this supplier unless indicated by the user during order creation. Quality control for suppliers involves checking the quality of the merchandise received (for example, damaged or over-ripened) and whether received shipments contain the quantity on the receiving label.
VMI Status	Status with which vendor-managed inventory (VMI) purchase orders are created, with values of "A" for approved and "W" for worksheet. A null value indicates that the supplier is not a VMI supplier. A VMI supplier does inventory planning for the retailer. A VMI supplier is also responsible for replenishing and reordering the retailer's supply.
Pre Mark Flag	Indicator of whether a supplier's premarked inventory is in separate containers for cross-dock shipping to stores, with values of "Y" for yes and "N" for no.
EDI Flag	Indicator of whether a supplier electronically sends advance shipping notices (ASN), with values of "Y" for yes and "N" for no.
Intl Currency Flag	Indicator of whether a supplier operates in the same currency as the retailer's primary currency, with values of "Y" for yes and "N" for no.
Currency Code	Code of the currency that a supplier uses for business transactions.
Supplier Status	Indicator of whether supplier is currently active, with values of "A" for active and "I" for inactive.
Supplier Start Date	Date the supplier record was first inserted into the data warehouse.
Supplier End Date	Date the supplier was deleted from the source system.
Currency Description	Description of the currency that a supplier uses for business transactions.
Supplier Name 2	Secondary name of a supplier.

**Table 5–16 (Cont.) Supplier Dimension Attributes**

Attribute	Definition
Primary Flag	Indicator of whether the supplier is the primary supplier for the item, with values of “Y” for yes and “N” for no. Each item has only one primary supplier. This field does not apply to sub-transaction-level items.
Pack Size	Number of items in a pack. Orders for the item must be placed in multiples of this quantity.
In Order Qty	Minimum quantity of the item that can be ordered at one time.
Max Order Qty	Maximum quantity of the item that can be ordered at one time.
Lead Time	Number of days needed between the date an order for an item is written and the delivery from the supplier to the store or warehouse.
Pickup Lead Time	Number of days needed between the date an item leaves a supplier and the delivery to an initial receiving location.
Inner Pack Size	Break pack size for an item. A break pack is a pack within a larger container.
Supplier Trait ID	Unique ID from the source system that identifies a supplier trait. A supplier trait is an attribute of a supplier, used to group suppliers with similar characteristics.
Supplier Trait Desc	Description of a supplier trait. A supplier trait is an attribute of a supplier, used to group suppliers with similar characteristics.
VPN	Vendor product number (VPN) associated with this item.

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**Note:** Supplier attributes are currently not supported in As-Is subject area in the Customer reporting area.

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## Retail Type

The Retail Type attribute represents the price type at which items were sold or held as inventory. There are four values for Retail Type:

- Regular
- Promotional
- Clearance
- Intercompany

This attribute segments a number of business measurements by price type, including sales and profit, stock position and value, markdowns, markups, and competitor pricing. This information is valuable when determining a pricing strategy, analyzing inventory value, or evaluating a competitor.

[Table 5–17](#) describes the Retail Type attribute.

**Table 5–17 Retail Type Attribute**

Attribute	Definition
Retail Type	Price type of an item. Values are as follows: <ul style="list-style-type: none"> <li>■ R - Regular</li> <li>■ P - Promotion</li> <li>■ C - Clearance</li> <li>■ I - Intercompany</li> </ul> If an item is on promotion and clearance at the same time, the retail type is "C".

## Product Season

Product season functionality allows you to categorize each item according to different seasons, and phases within seasons. For example, you can assign a season of "Spring" to a group of items, according to the supplier's deliveries of fashion items. Those relationships can be further broken down into the phases, such as "Spring I" and "Spring II." These item-season relationships are then loaded into Retail Insights. You can query sales and inventory data, for example, based on all items in the spring season.

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**Note:** On a given day, an item can belong to more than one season and more than one phase within a season. Seasonality is designed to group by item/location/day to avoid double-counting.

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The following is the hierarchy of the Product Season dimension.



Table 5–18 lists the attributes of the Product Season dimension.

**Table 5–18 Product Season Dimension Attributes**

Attribute	Definition
Season ID	Unique ID from the source system that identifies a season. A season is a designated timeframe that may or may not correspond with the Gregorian or business/fiscal calendars.
Season Desc	Description of a season. A season is a designated timeframe that may or may not correspond with the Gregorian or business/fiscal calendars.
Season Start Date	Date from which the source record (in the source system) is effective. This represents the start date of a season.

**Table 5–18 (Cont.) Product Season Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Season End Date	Date until which the source record (in the source system) is effective. This represents the end date of a season.
Phase ID	Unique ID from the source system that identifies a phase. A phase is a designated timeframe that may or may not correspond with the Gregorian or business/fiscal calendars; however, it falls within a season and is always a child of a single season. Multiple phases within a season may have overlapping timeframes within the season.
Phase Desc	Description of a season phase. A phase is a designated timeframe that may or may not correspond with the Gregorian or business/fiscal calendars; however, it falls within a season and is always a child of a single season. Multiple phases within a season may have overlapping timeframes within the season.
Phase Start Date	Date from which the source record (in the source system) is effective. This represents the start date of a phase.
Phase End Date	Date until which the source record (in the source system) is effective. This represents the end date of a phase.

## Trade Area

A trade area is the geographic area serviced by a retail store or proposed retail store. A trade area is defined by whether a consumer shops at the store, and a retailer may have multiple trade areas for the site (primary, secondary, tertiary). Trade areas should be defined in such a way that retailers can determine the demographic, psychographic, or population data for the geography served by the store. This data is pulled from market area data, which is usually based on census blocks in the U.S. The trade area provides a mechanism to map market area data to a specific store because the census blocks (or other method used to store market area data) do not correlate directly to the geographic area served by a store. Examples of ways to define a trade area include using traffic flow studies, a retail gravity model, a zip code method, or commuting data.

**Table 5–19 Trade Area Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Trade Area Name	Indicates the name of the trade area
Trade Area Description	This attribute provides a description of the trade area.
Trade Area Type	This attribute describes the type of trade area. Valid values could include Urban, Suburban, Rural, and others.
Pull factor	Pull factors are ratios that estimate the proportion of local sales that occurs in a town.
Commuter population	Number of people who commute in this trade area.
Peak Season Population	The number of people in the Trade Area during peak 'population' season. This is common in Trade Areas with high tourist population ebb and flow.
Tourist Population	The number of people that are tourists in a Trade Area.
State Population	The number of people in the state that the Trade Area resides.
Number of Households	The number of households within a trade area.

**Table 5–19 (Cont.) Trade Area Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Average Family Size	The average number of people within a household that reside in a trade area.
Per Capita Income	The income divided by the total population of a Trade Area.
Avg Num of Vehicles	Average number of vehicles per household in this trade area.
Average Drive Time	This attribute indicates the average time in minutes consumers must drive from their homes to shop.

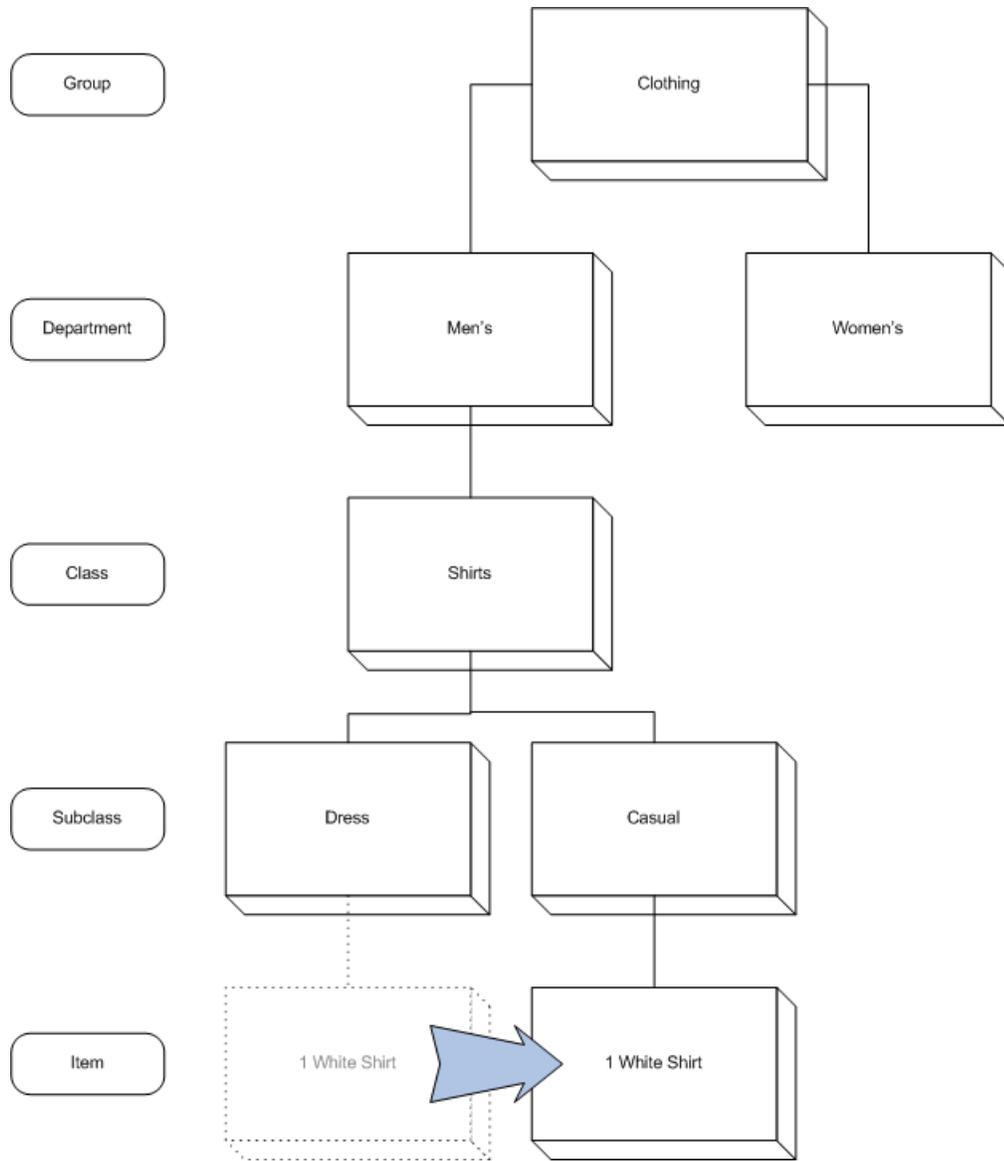
## Reclassification

Reclassification occurs when any entity in a dimension changes its place in the dimension hierarchy, or when one or more attributes of an entity are changed. Reclassification affects Retail Insights reporting, whether you are using as-is, as-was, or point in time analysis. See "[Analysis Methods](#)" in [Chapter 4, "Creating and Modifying Reports"](#) for more information.

## Major Reclassification and Lower-Level Dimensions

A major change occurs whenever an entity changes its place in the product hierarchy (group, department, and item can be reclassified) or in the organization hierarchy (area, region, district, and location can be reclassified). This type of reclassification alters the relationship among entities in a hierarchy.

For example, a single item (white shirt) might be reclassified from the Dress to the Casual subclass.



Only the Product and Organization dimensions can undergo major changes, and they are referred to as lower-level dimensions. They are dimensions with major changeable lower levels. Because Product and Organization are aggregating dimensions, a major change results in an altered data aggregation within their hierarchies.

The history of an entity before and after the major change can be tracked and compared. For example, an item can be moved from one subclass to another within its product hierarchy of department and class. While there are many good reasons for a retailer to move, or reclassify, an item in this way, Retail Insights still needs to track sales for that item from its new location in the product hierarchy, both before and after the change.

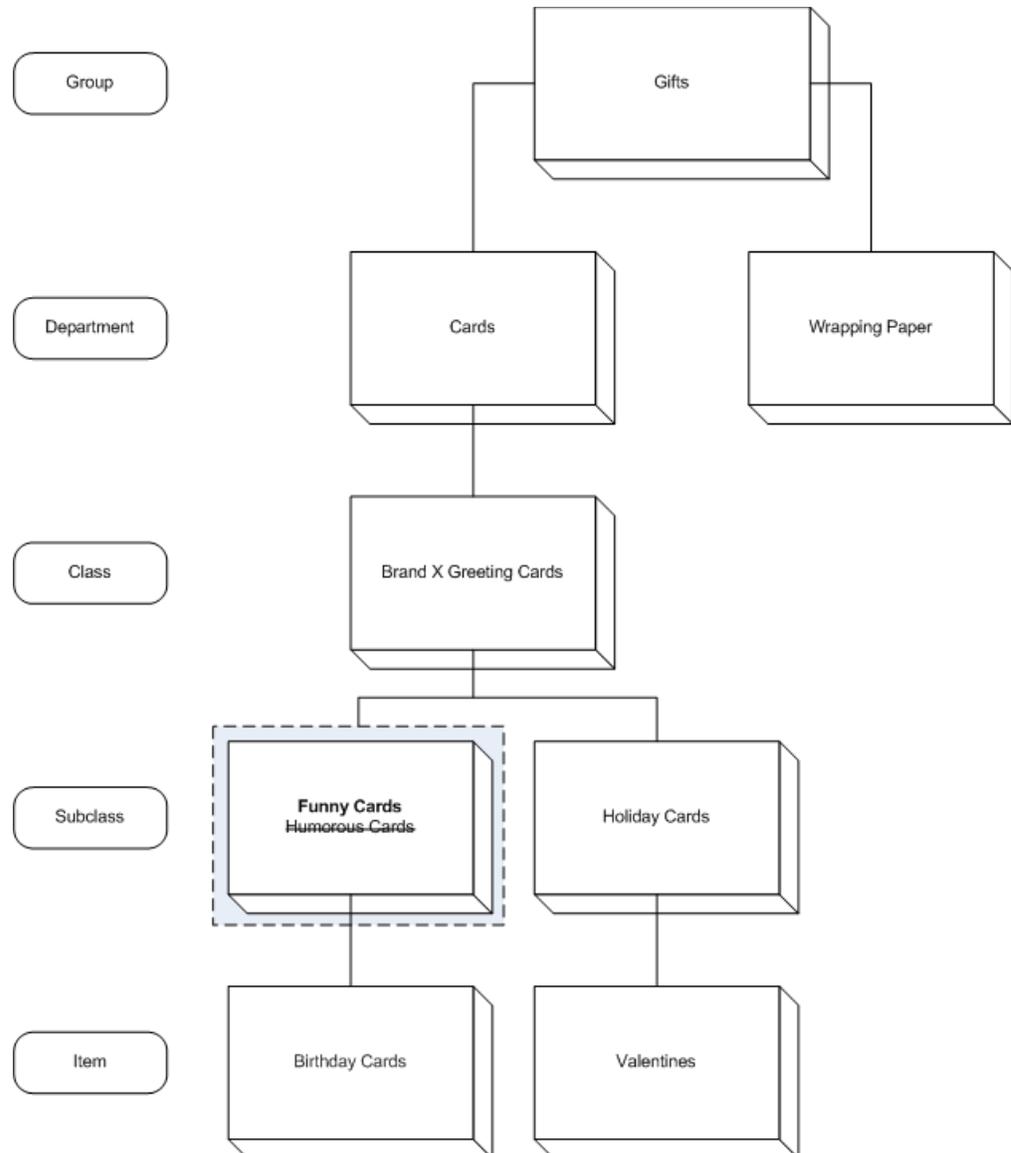
Retail Insights handles major changes by assigning the reclassified item (to use the same example) a new surrogate key. The surrogate key, along with the dimension's identifier, allow a means to track the dimension, and all transactions related to it, at any point in time.

## Minor Changes and Top-Level Dimensions

A minor change means that an attribute of an entity is changed, but its position in the hierarchy remains the same. The dimensions that can only undergo minor changes are known as top level dimensions and consist of every dimension except organization and product. The levels of the top level dimensions cannot be reclassified; they are static.

Product and organization dimensions can undergo minor changes, but minor changes are not significant enough to alter their hierarchies.

For example, a description of a subclass might be changed from “Humorous Cards” to “Funny Cards.”



This type of change does not alter the relationship of a subclass to any other level of the hierarchy above or below it. The record is simply updated to reflect the description change; a new surrogate key does not need to be inserted. Minor change dimension processing in Retail Insights is less complex than major change processing.

## Customer Order

Oracle Retail Insights' customer order functionality allows retailers to analyze transactions that cross multiple channels, and enables analysis of Oracle's Commerce Anywhere capabilities. It has two dimensions: customer order demand and customer order fulfillment.

For most retailers, effective customer order management has become critical as customers no longer shop only in brick and mortar stores, but expect the ability to interact with retailers across a variety of channels. A customer order is an agreement between the retailer and the customer in which the customer pays for an item and the retailer agrees to make the item available for pickup or delivery at a later date. It consists of two parts, demand and fulfillment. Demand involves facilitating the capturing of customer orders via an e-commerce site, a mobile device, an in-store kiosk or any other similar method. The order fulfillment process, in which the customer takes possession of the product, must be properly managed across those channels to avoid jeopardizing relationships with valued customers who want a seamless experience. An order management system, such as DOO (Distributed Order Orchestration) and GOP (Global Order Promising), is used to manage the order throughout its lifecycle. When an order is initially taken, this application will determine where the order should be sourced based on customer preferences and rules related to fulfillment options set by a retailer (e.g. cost, lead times). Oracle Retail Insights provides a comprehensive set of metrics to help retailers achieve customer satisfaction. Included are key performance measurements for customer order demand and customer order fulfillment.

Oracle Retail Insights' customer order dimension supports a number of different attributes of a customer order to allow performance analysis of retailer's business across all channels. A complete list of these attributes and their descriptions is in the following sections. These attributes allow a user to slice and dice customer order data for analyses by order delivery information, order status, and other customer order details.

For example, if an item in an order line is sold as a substitute for another item (perhaps the original item is unavailable), then both the original item and the substitute item will be identified as such. These attributes can be used to analyze the demand for the original item the customer wanted and the alternative items that were actually ordered and delivered.

Order status is also captured so that retailers can track the order lifecycle and analyze orders based on whether they are backordered, complete, canceled, etc. to discover potential issues involved with customer satisfaction that excessive backorders or cancellations might indicate. A large amount of canceled orders, for instance, could mean there is a group of upset customers who are returning items with which they are unsatisfied or for which delivery time was too late to be acceptable.

Finally, a retailer can identify how an order was shipped, through the requested shipment type and requested shipment method attributes, which identify the carrier and the service type being used to fulfill the order. This could be used in conjunction with the order status analysis to determine if customer dissatisfaction correlates to a specific shipment type or method.

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**Note:** When using Customer Order Promotion Transaction, Customer Order Transaction, Customer Order Status, and Customer Order Fulfillment dimensions, Salesperson and/or Cashier attributes should be used to represent an employee. Employee Name should not be used with these facts.

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**Table 5–20 Customer Order Demand Attributes**

<b>Attribute</b>	<b>Definition</b>
CO Header Demand Status	<p>This attribute provides the status of the customer order header, which could be unique to the retailer's order management system.</p> <p>Using this attribute a user can identify the status of customer order. Some of the statuses could be "Order Initiate", "Back-ordered", "Partial Picked", "Picked", "Partial Shipped", "Shipped", "Completed" and "Cancelled".</p>
CO Line Demand Status	<p>This attribute provides the status of the customer order line, which could be unique to the retailer's order management system.</p>
Sales Person	<p>This attribute lists the retailer's sales person who was responsible for the transaction and was credited with originating the sale.</p>
Cashier	<p>This attribute lists the employee who processed the sales transaction by receiving the tender from customer.</p>
Customer Service Representative	<p>This attribute lists the employee who helped the customer with any questions or sold them value-added services (re-packaging, gift packing, gift cards, etc).</p>
Origin Demand Channel	<p>This attribute lists the location deemed the point of origin for the customer order.</p> <p>There are several channels, such as call center, website, SMS advertisement, store cashier, and sales person that could be considered the Origin Demand Channel.</p>
Submit Demand Channel	<p>The location deemed the generation of demand or point of submission for the customer order.</p> <p>There are several channels, such as customer service center, website, kiosk at store, and store POS system that could be considered the submit demand channel.</p> <p>The origin demand channel and submit demand channel may or may not be the same for a customer order.</p>
CO Header Number	<p>Each customer order has header information that is primarily customer-related, pertains to the entire order, and is uniquely identified by a Customer Order header number.</p> <p>Header information also contains information about the conditions that affect how the system processes an order, such as fulfillment type, fulfillment method and delivery dates. Most of the remaining header information consists of default values from the Address Book, Customer Billing Instructions, and Customer Master, such as tax code and area, and shipping address information.</p>
CO Line Number	<p>The customer order line number is used to uniquely identify the customer order line information, which includes detailed information about the items on the order, such as quantities, prices, status, and shipped quantities. It also contains the customer order header number to identify the order to which the line belongs.</p>
Requested Shipment Type	<p>This attribute provides the type of requested shipment for the customer order line.</p> <p>Some shipment types could be "Direct Ship to Customer", "Store Pickup", etc.</p>

**Table 5–20 (Cont.) Customer Order Demand Attributes**

<b>Attribute</b>	<b>Definition</b>
Requested Shipment Method	<p>Requested Shipment Method is more granular information about the Requested Shipment Type attribute. It defines the method of shipping to the customer.</p> <p>If the shipment type is "direct ship to cust" the method might be "overnight" or "ground".</p> <p>If the shipment type is "Store Pickup" the method would refer to how the goods were made available at the store, such as "WH-to-Store transfer", or "Stock from Store", etc.</p>
CO Line Original Item	If an item is not available it may be replaced with a substitute item. In that case Oracle Retail Insights stores the original item as the CO Line Original Item attribute.
CO Line Substitute Item	If a customer orders an item that is not available, a retailer may decide to substitute a similar item that is available to be shipped immediately. This attribute displays the substitute item.
CO Retail Type	This attribute displays the price type that was recorded for the line item. The possible values could be R-Regular, P-Promotion, and C-Clearance.
CO Cancel Reason	This attribute is the reason given by the customer for canceling an order. Examples could be "Backorder Abandon," "Late Delivery," etc.

**Table 5–21 Customer Order Fulfillment Organization Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Fulfillment Company Number	This attribute displays the unique ID from the source system that identifies a fulfillment company.
Fulfillment Company	Name of a fulfillment company. Fulfillment Company is the highest attribute within the fulfillment Organization hierarchy. A fulfillment company consists of one or more fulfillment chains.
Fulfillment Chain Number	This attribute displays the unique ID from the source system that identifies a fulfillment chain.
Fulfillment Chain	This attribute displays the name of a fulfillment chain. A fulfillment chain consists of one or more areas.
Fulfillment Area Number	This attribute displays the unique ID from the source system that identifies a fulfillment area.
Fulfillment Area	This attribute displays the name of a fulfillment area. A fulfillment area consists of one or more regions.
Fulfillment Region Number	This attribute displays the unique ID from the source system that identifies a fulfillment region.
Fulfillment Region	This attribute displays the name of a fulfillment region. A fulfillment region consists of one or more districts.
Fulfillment District Number	This attribute displays the name of the unique ID from the source system that identifies a fulfillment district.
Fulfillment District	This attribute displays the name of a fulfillment district. A fulfillment district consists of one or more locations.
Fulfillment Location Number	This attribute displays the unique ID from the source system that identifies a fulfillment location.

**Table 5–21 (Cont.) Customer Order Fulfillment Organization Dimension Attributes**

Attribute	Definition
Fulfillment Location	This attribute displays the lowest level within the fulfillment organization hierarchy. It identifies a fulfillment warehouse, fulfillment store, or partner within the fulfillment company.
Fulfillment Channel ID	The ID of channel in which a customer order is fulfilled.
Fulfillment Channel	The channel in which a customer order is fulfilled.

**Table 5–22 Customer Order Tender Attributes**

Attribute	Definition
Sales Transaction Number	This attribute displays a unique number through which the sales transaction can be identified. The transaction number is used to add detailed information about the item sales on the transaction, such as quantities, prices, discounts and tender amounts.
Tender Type	The form of payment made for a customer order sales transaction. Examples of tender types include cash, credit card, or gift card.
Transaction Type	This attribute differentiates cross channel liability transactions from normal sales, return transactions, and wholesale sales and return transactions. This is an internally generated attribute used by Oracle Retail Insights.

## Reason

The Reason dimension makes it possible to track why a particular action was taken in the areas of inventory adjustment and sales. Return reasons such as "wrong item shipped" or "defective" are tracked by Return Reason. Inventory adjustments are tracked by Inv Adjustment Reason. The Reason attributes do not form a drillable hierarchy.

**Table 5–23 Reason Attributes**

Attribute	Definition
Reason Code	To identify the reason why a particular action had performed depending on the subject area used (For example: Inv Adjustments, Return to Vendor, cost change, price change etc.)
Reason Description	A detailed description of the reason why a particular action had performed depending on the subject area used (For example: Inv Adjustments, Return to Vendor, cost change, price change etc.)
Status Code	To identify the status of the element depending on the subject area used. (For example: Inv Status, Customer order status etc.)
Status Description	A detailed description of the status depending on the subject area used. (For example: Inv Status, Customer order status etc.)
Status Class	This Attribute can be used to identify the different functional areas that status is used for. (For example: Inv Status, Customer order status etc.)
Reason Category	This attribute gives the category of reason for different functionalities (For example: Inventory Adjustment, RTV etc.)

## Inventory Transfer

Inventory Transfers are stock movements between a retailer's locations. Inventory Transfers analysis will enable retailers to improve sales and avoid out of stocks by moving stock to locations where it is most needed. Depending on the transaction codes used in creating Inventory Transfers the transfer type is captured in Retail Insights as Normal, Book and Inter Company transfer types. Retail Insights will not support Transfers functionality for Transformable items. Retail Insights holds the inventory Transfers at item, to location, from location, transfer type and day level.

**Table 5–24 Inventory Transfer Attributes**

Attribute	Definition
Transfer Type Code	Indicates the code for Transfer Type. This is based on the origin of the transfer request and determines how transfer behaves.
Transfer Type Description	Indicates the description for Transfer Type. This is based on the origin of the transfer request and determines how transfer behaves. Different Transfer Types that are supported are - Normal Transfer, Book Transfer, Inter Company.
Tsf Zone ID	Unique ID from the source system that identifies a transfer zone. A transfer zone is an intentional grouping of locations for transferring owned inventory from one location to another. A location can belong to only one transfer zone.
Tsf Zone Desc	Detailed description of a transfer zone. A transfer zone is an intentional grouping of locations for transferring owned inventory from one location to another. A location can belong to only one transfer zone.
Tsf Entity ID	Unique ID from the source system that identifies a transfer entity. A transfer entity is a group of locations that share legal requirements around product management. A location can belong to only one transfer entity, and a transfer entity can belong to multiple organization units.
Tsf Entity Desc	Detailed description of a transfer entity. A transfer entity is a group of locations that share legal requirements around product management. A location can belong to only one transfer entity, and a transfer entity can belong to multiple organization units.

## Transfer from Organization

The Transfer from Organization dimension allows tracking of inventory transfers from a location or other organizational attribute. This permits analysis of the number of units transferred and the retail and cost value of the transfer in the organization.

**Table 5–25 Transfer From Organization Attributes**

Attribute	Definition
From Chain Number	Chain in the company from which a transfer originates
From Chain	Name of the chain from where the transfer originated.
From Area Number	Area in the chain from which a transfer originates.
From Area	Name of the Area under the chain from which a transfer originates.
From Region Number	Region in the area from which a transfer originates.
From Region	Name of the Region under the area from which a transfer originates.

**Table 5–25 (Cont.) Transfer From Organization Attributes**

Attribute	Definition
From District Number	District Number from which a transfer originates.
From District	Name of the District under the region from which a transfer originates.
From Loc Number	Warehouse, store, or partner location number from which a transfer originates.
From Loc	Warehouse, store, or partner location name from which a transfer originates.
From Tsf Entity ID	Transfer entity ID from which a transfer originates.
From Tsf Entity Desc	Transfer entity description from which a transfer originates.
From Tsf Zone ID	Transfer Zone ID from which a transfer originates.
From Tsf Zone Desc	Transfer Zone description from which a transfer originates.

## Retail Insights Attribute Metadata

The following chart provides information about Retail Insights attribute metadata. Users please be aware that you cannot mix facts across as-is, as-was, and point-in-time subject areas.

**Table 5–26 Retail Insights Attribute Metadata**

Merchandise Insights Cloud Service	Customer Insights Cloud Service	Attributes	As-Is	As-Was	Point in Time
X		Business Calendar	X	X	X
X		Employee	X	X	X
	X	Cluster	X	X	
	X	Consumer Group	X	X	
	X	Consumer Household Group	X	X	
X		Organization	X	X	X
X		Stockholding Franchise	X	X	X
X		Non-Stockholding Franchise	X	X	X
X		Product	X	X	X
X		Promotion	X	X	
	X	Customer	X	X	X
	X	Customer Segment	X	X	X
	X	Customer Segment Allocation	X	X	
	X	Household	X	X	X
	X	Customer Segment Loyalty		X	
X		Supplier	X	X	X
X		Retail Type	X	X	X
X		Product Season Phase	X	X	X
	X	Trade Area	X		

**Table 5–26 (Cont.) Retail Insights Attribute Metadata**

Merchandise Insights Cloud Service	Customer Insights Cloud Service	Attributes	As-Is	As-Was	Point in Time
	X	Market Item	X		
X		Customer Order	X	X	
X		Customer Order Origin Channel	X	X	
X		Customer Order Submit Channel	X	X	
X		Customer Order Tender Type	X	X	
X		Fulfillment Organization	X	X	
X		Gregorian Calendar	X	X	X
X		Customer Order Fulfillment	X	X	
X		Customer Order Status	X	X	
X		Reason	X	X	
X		Shipment Method	X	X	
X		Shipment Type	X	X	
X		Tender Type	X	X	
X		Time of the day	X	X	X
X		Return to Vendor	X	X	
X		Inventory Adjustments	X	X	
X		Inventory Transfers	X	X	

## Market Item

One of the critical components available with Oracle Retail Insights reporting is the ability for a retailer to compare its own performance to that of the market. Market Item attributes allow the retailer to make assortment, promotional and space allocation decisions within a wider context. By comparing its own trends to that of the market it is possible to identify and respond to opportunities and problems quickly and effectively.

**Table 5–27 Market Item Dimension Attributes**

Attribute	Definition
All Store	Represents the highest level of Market Item hierarchy.
Market Dept	Indicates the second level of Market Item hierarchy.
Market Category	The range of products purchased by a business organization or sold by a retailer is broken down into discrete groups of similar or related products; these groups are known as product categories (examples of grocery categories might be: tinned fish, washing detergent, toothpastes).
Market Subcategory	Each market category divides into sub-categories. A pre requisite to defining the sub-categories is that trends behind the categories are known. Subcategory is defined as grouping of common differentiating characteristics within a larger category.

**Table 5-27 (Cont.) Market Item Dimension Attributes**

<b>Attribute</b>	<b>Definition</b>
Market Segment	The next level below Market subcategory. Key information about how inventory is tracked and reported is stored at the Market Segment level.
Market Sub-segment	The next level below Market Segment. This is equivalent to Subclass level of Retailer's merchandising hierarchy.
Market Item Description	Description of the item including characteristics of the market item.
Market Item Brand	Displays the brand associated with the market item. This is level 10 of Market Item hierarchy.
Market Sub Brand	A subcomponent of a brand. For example, if a brand were "Super Cola", the subbrand might be "Super Cola Light".
Market Brand Owner	Brand owner for the Item.
Market Brand Owner Number	Brand owner for the Item.
Market Item Flavor	Indicates the flavor of Market Item.
Market Item Pattern	Indicates the pattern of Market Item.
Market Item Scent	Indicates the scent of Market Item.
Market Item Size	Indicates the size of market item.
Market Package Type	The package type defines as the packaging method chosen by the market item. After choosing the packaging type, retailer should specify the dimensions of the item. The following types of packaging types are available Case Pallet Each.
Market Parent Company	The next level below Market Sub-segment. It Indicate the parent company for the given market item hierarchy.
Vendor Name	The name of the vendor who supplies the market item.
Multi Pack	The multi-pack is defined as package of several individual pack items sold as a unit. This can be broken into multiple pack items.
Universal Product Code	Twelve-digit barcode printed or affixed on virtually everything sold in supermarkets or retail stores, including books, magazines, candy, etc., for automatic checking-out at the cashier counter. UPC not only identifies an item, it also provides real time information on quantity sold, and inventory and ordering information.



Metrics (measures) are performance measurements that allow you to analyze business performance. They are usually numeric values. A metric can be as simple as the sum of the values in a fact column, or a highly complex calculation that contains mathematical operators.

A metric can be viewed as a statement that specifies how a performance measure is calculated. The basic component of a metric is a formula that specifies the calculation to be made. A metric can contain other components that specify additional criteria for calculating the metric.

Oracle Retail Insights provides an extensive set of predefined business measures and key performance indicators for business intelligence in a retail environment. You can create your own metrics with the tools available in Oracle BI.

Retail Insights metrics are stored in presentation tables. These tables contain table descriptions that include the level and nature of information provided and the functional area in which the metrics are used. For each metric, the presentation tables contain a description that includes the following:

- Metric type, such as count or system metric
- Functional area, such as net cost
- Definition (for example, base cost is defined as the initial cost before any discounts are applied)
- Constraints (for example, net profit data is only available by primary supplier)

In the Oracle BI interface, you can access a summary description of a metric as follows:

1. Right-click on the metric name.
2. Select **Properties**.

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**Note:** See [Appendix B, "Reporting on Oracle BI Repository Objects"](#) for information about producing comprehensive listings of Oracle BI repository objects.

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**Note:** See [Appendix C, "Retail Insights Metric Definitions"](#) for a complete list of Retail Insights metrics.

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## Comparable Stores Analysis

Comparable (comp) stores are stores that are open for business for a set period of time and were in operation within the time period of analysis. In other words, comp stores are really established stores as opposed to new or closed stores. Comp store measurements are important to an analyst because profits and sales from the more established stores provide stable indicators of business performance. New or closed stores tend to be more volatile and can have a skewing effect on business performance indicators. Sales and profits from new or closed stores are not really comparable in business analysis, and as a result, they are not included in the comp store measurements.

Retail Insights utilizes a mathematical formula based on the store open date to determine if a store is comp or not. When a store location is open for 53 weeks, and is still in operation, the store becomes comp.

The Comp Store Measurements measure the growth in sales and profit, excluding the impact of newly opened stores. Sales and profits from new stores are not reflected in same-store comparisons until those stores are open for 53 weeks before the beginning of the current year's comp period. These stores must also be still open at the end of the current year's comp period. A comp period can be a month, a quarter, or a year.

With this approach, stores whose open dates are not captured in the source system are not included in these comparisons. Each store needs to have a store open date as well as a store close date, if a store is closed. If there is no close date, the store is assumed to be still in operation.

## Cost and Profit

Cost and profit analysis helps a retailer to understand the financial impact of various business decisions such as:

- Stock levels for high-profitability items
- Deals negotiation for low-profitability items
- Promotions worthiness

Profit is calculated as the difference between sales amount and cost of the item in the transaction. The cost of the item in the sales transaction is based on the weighted average cost of that item in the merchandising system at the end of the day.

Net cost (sometimes called deal cost) measures are held at the supplier level.

Net cost is populated with data from Oracle Retail Merchandising System (RMS) or another source system. The data from RMS consists of cost values that represent different discounts on base cost that the supplier provides. These discounts can include the following:

- Deals with deal partners for items, or items at specific locations  
Deal partners can be suppliers, wholesalers, distributors, and manufacturers. Within a deal, you create deal components, specify the items for the deal component, and define thresholds.
- Fixed deals with suppliers  
Your organization receives payments from suppliers in return for mentioning their products in promotions, or for displaying their products on prime shelf space.
- Bracket costing deals with suppliers

Your organization receives a certain deal price on an order, depending on the size of the order. Different types of brackets can be established based on mass, volume, pallet, case, each, or stat case.

## Markdowns and Markups

Retailers plan markdown strategies carefully, as they make pricing decisions for their products with an eye toward keeping inventories at optimal levels, while driving gross margin revenue across key areas of the merchandise hierarchy.

Retail Insights markdown analysis allows reporting on a range of data related to markdowns and markups. These include permanent and point-of-sale markdowns and markups, as well as markup and markdown cancellations, at granularities of item, location, day, and retail type (regular, promotion, and clearance).

A buyer planning a promotion strategy for a category of goods might be interested in promotional markdown totals in a certain department, year to date. On the other hand, a finance executive might want to analyze clearance markdown amounts compared to promotional markdown amounts at the corporate level, on the same report with profit comparisons from clearance versus promotional sales.

## Sales Forecast

A sales forecast is a calculation of the potential sales of an item for a future period, based on past performance of the product. Sales forecast analysis helps a retailer to develop a marketing budget, allocate resources, and get a early sense of deviations from financial goals. Sales forecast analysis also helps the retailer to determine the effectiveness of forecasting techniques.

Retail Insights stores sales forecast data at the item-location-week level. The sales forecast quantities exclude value-added tax (VAT).

## Inventory Adjustments

Inventory Adjustments are changes to inventory level in units, retail and cost value. Inventory Adjustment analysis provides visibility to Inventory analysts, Inventory controllers, Inventory managers, Category managers and store managers for analyzing the reasons and plan accordingly to overcome the potential problems that are causing the stock adjustments. Inventory Adjustments impact the stock ledger as the inventory value for a location is impacted. Ending stock value will be increase/decreased making the stock as over-valued or de-valued.

Retail Insights holds the inventory adjustment units and value by reason code at item, location and day level.

## Inventory Transfers

Inventory transfer is the movement of stock between the retailer's locations. Inventory transfers analysis will help the retailer in taking appropriate and profitable decisions to improve the sales by initiating stock transfer from nearby locations to avoid lost sales.

Retail Insights supports three types of transfers, normal, book and intercompany, with an attribute called transfer type.

- Book transfer items are inventory units moved from one part of the retailer's location to the virtual location.

- Normal transfers are the inventory moved between the retailer's physical locations. (Store or warehouse)
- Intercompany transfer items are inventory units moved from one legal entity into another legal entity. RDW holds transfer units and cost and retail values of transferred units.

Inventory transfers are held at the item or subclass, destination (to) location, shipping (from) location, and day or week levels.

## Inventory Receipts

Inventory receipts are units purchased and placed in inventory. Inventory receipts analysis provides visibility to and control of your accrued liabilities for inventory items. Inventory receipts transactions are recorded in the general ledger at the time of receipts.

Retail Insights holds the number of units purchased at the day and week level, at both retail and cost value. Inventory receipts are held at item level for day and week and at subclass (segment) level for day and week.

## Return to Vendor

RTV units are units returned to the vendor for any reason (overstock, poor quality, etc.). Return to vendor analysis gives retailer valuable insights for evaluating vendor performance.

Retail Insights maintains record of RTV units and the value of RTV units in cost and retail amount. RTV facts are held at the item/supplier/location/day/return reason level.

## Sales

Sales reporting helps the merchandising executive to identify sales key performance indicators and determine the operational effectiveness of sales, to evaluate whether sales achieve the results set during sales planning. This can help sales managers to take timely corrective actions when they see deviations from projected values.

*Gross sales value* is the total amount the retailer sells to consumers. Gross sales value is calculated by multiplying the unit price of an item by the number sold to consumers. *Returns* are the portion of sales that are returned to the store for a refund. *Sales value* is the net value after customer returns are subtracted from gross sales value.

Retail Insights maintains gross sales and returns for amounts and numbers of units in separate fact columns. Separation of these values allows analysis of returns and the use of gross sales in calculations where this is desirable. Net sales value is required for most calculations.

In addition, the retailer may need to track sales according to price type to allow analysis of sales for promotional and clearance items. Retail Insights holds sales amount and units by retail price type to allow analysis at this level.

## Sales Pack

A *sales pack* is a group of individual items grouped together by the retailer to be sold as one item. An example is a bottle of shampoo and a bottle of conditioner, both individual items on their own, but packaged together to be sold as a unique pack item.

Retailers require visibility to pack sales contribution information by regular, clearance, and promotion retail types. This analysis provides the ability to compare and contrast location performance of pack sales using retail type measures.

These metrics can help to determine:

- How a SKU sold as a single item
- How the pack itself has sold historically
- How a SKU sold when it was included in a specific pack

Retail Insights extraction, transformation, and loading processing prorates the value of a pack into its component items (see "[Prorating of Packs](#)" later in this section). This helps in analysis of component pack item contribution to pack sales.

### Prorating of Packs

The prorating of a pack's value into its component items requires calculation. The following formulas are used for prorating packs:

$$\text{Item Prorated Sales Value} = \text{Pack Sales Value} * \text{Item Prorate \%}$$

$$\text{Item Prorate \%} = (\text{Item Price} * \text{Pack Item Qty}) / \text{Pack Component Sales Value}$$

$$\text{Pack Component Sales Value} = (\text{Item A Price} * \text{Item A Qty}) + (\text{Item B Price} * \text{Item B Qty}) + (\text{Item C Price} * \text{Item C Qty}) + \dots + (\text{Item n Price} * \text{Item n Qty})$$

### Example

Pack A has a pack sales value of \$90,000. Each pack is priced at \$9 and contains the following:

**Table 6–1 Pack A Example**

Item	Quantity	Price
Item A	2	\$4
Item B	1	\$2
Item C	1	\$1

### Calculation Steps

1. Calculate pack component sales value:
  - a. Item A Price \* Quantity of Item A in Pack A  
 $4 * 2 = 8$   
 Item B Price \* Quantity of Item B in Pack A  
 $2 * 1 = 2$   
 Item C Price \* Quantity of Item C in Pack A  
 $1 * 1 = 1$
  - b.  $8 + 2 + 1 = 11$
2. Calculate item prorate percent:
  - $8/11 = .7273$  (Item A)
  - $2/11 = .1818$  (Item B)
  - $1/11 = .0909$  (Item C)

3. Calculate item prorated sales value:

$\$90,000 * .7273 = \$65,457.00 = \text{Item A Prorated Sales Value}$

$\$90,000 * .1818 = \$16,362.00 = \text{Item B Prorated Sales Value}$

$\$90,000 * .0909 = \$8,181.00 = \text{Item C Prorated Sales Value}$

## Supplier Invoice

Supplier invoice reporting can help retailers achieve control of a supplier's payment process and assess the discrepancies for a supplier.

*Supplier invoice cost* is the actual cost as shown on the supplier invoice (from Oracle Retail Invoice Matching or other source system). *Supplier invoice purchase order cost* is the expected cost previously agreed upon in the purchase order, before any deals or discounts. A difference between the two can reflect deals, discounts, clerical errors, or dishonesty.

Supplier invoice cost and supplier invoice purchase order cost are held at the supplier-item-location-day level.

## Supplier Performance and Compliance

The merchandising organization must carefully select, monitor, and adjust relationships with suppliers. Before negotiations with suppliers, the retailer can prepare by running supplier performance and compliance reports.

- Supplier performance considers typical merchandising measures such as net sales, profit/margin, markups, and return rates, to compare the profitability and inventory costs of goods provided by different primary suppliers.
- Supplier compliance measures allow buyers to assess supplier delivery timeliness and purchase order fill rates. For example, how many advance shipping notices came in early, on time, and late? Were overall purchase order counts at expected levels, under, or over?

This analysis can help the retailer to negotiate supplier-funded promotion negotiations and supplier bill-backs, and reward responsive and flexible suppliers. This in turn can reduce inventory costs, prevent out-of-stock conditions, and increase profitability.

## Supplier Performance

This functional area focuses on reporting that provides supplier performance information based on key performance indicators. Collection of this data makes the following types of analyses possible:

- Compare and contrast supplier performance over time
- Compare and contrast department performance by primary supplier
- Monitor department performance in terms of sales volume and value
- Compare and contrast market supplier with supplier performance

### Primary Supplier

Department managers in particular need to understand sales and profit contribution information about their suppliers. Retailers can monitor supplier performance better by identifying suppliers of profitable items, measuring contributions to total

department performance, and identifying how categories are performing relative to other categories, and relative to last year.

Unless facts (such as net cost) are stored by supplier, all facts in that data can only be attributed to the primary supplier.

### Performance Metrics

The following types of measures are a part of supplier performance:

- Sales and profit
  - Sales value and variance in sales value from last year
  - Sales units and variance in sales units from last year
  - Profit amount and variance in percent profit from last year
  - Percent contribution to total sales value for the department
- Inventory position and movement
  - Sell-through
  - Stock turns
  - Beginning stock on hand (BOH) and ending stock on hand (EOH) retail value
  - Receipts
  - Gross margin return per dollar of inventory (GMROI)

- Net (deal) cost

Net cost (sometimes referred to as deal cost) measures are held at the supplier level. Net cost is populated with data from Oracle Retail Merchandising System (RMS) or another source system. The data consists of cost values that represent different discounts on base cost that the supplier provides. These discounts may be:

- Deals with deal partners for items, or items at specific locations
 

Deal partners can be suppliers, wholesalers, distributors, and manufacturers. Within a deal, you create deal components, specify the items for the deal component, and define thresholds.
- Fixed deals with suppliers
 

Your organization receives payments from suppliers in return for mentioning their products in promotions or for displaying their products on prime shelf space.
- Bracket costing deals with suppliers
 

Your organization receives a certain deal price on an order, depending on the size of the order. Different types of brackets can be established based on mass, volume, pallet, case, each, or stat case.

## Supplier Compliance

Supplier compliance measures supplier performance based on key performance indicators such as timeliness and accuracy of deliveries. The supplier compliance functionality supports supplier evaluation based on the following parameters:

- Timeliness
- Delivery accuracy

- Order fulfillment

### Supplier Invoice Cost

Supplier invoice cost is the actual cost as shown on the supplier invoice (from Oracle Retail Invoice Matching or other application). Supplier invoice purchase order cost is the expected cost previously agreed upon in the purchase order, before any deals or discounts. A difference between the two can be reflective of deals, discounts, clerical errors, or dishonesty.

Supplier invoice cost and supplier invoice purchase order cost are held at the supplier-item-location-day level.

### Receipts by Supplier

Retail Insights supplier compliance data provides the ability to report receipt units grouped by supplier, item, location, and day. For example, the fact column RECEIVED\_QTY contains the quantity from the qty\_received column in the RMS SHIPSKU table.

The supplier compliance data does not contain cost or sales data, so it cannot be used to report sales or cost by supplier. The quantity in the supplier compliance data should not be confused with receipt units in the inventory movement data.

### Timeliness

Timeliness measures the supplier's ability to deliver according to schedule. Early, late, and on-time shipments are tracked in the supplier compliance area. You can measure supplier timeliness on a daily basis.

$$\text{Timeliness} = \frac{\text{No of On Time Deliveries}}{(\text{No of On Time Deliveries} + \text{No of Early Deliveries} + \text{No of Late Deliveries})}$$

For example, if the number of on-time deliveries is 75 and the total of all deliveries is 100, the timeliness rating is 75 percent.

Missed deliveries are deliveries that did not take place within the time frame specified. A late delivery is also a missed delivery. Because the timeliness measure would not be meaningful if two of its components were counted twice, missed deliveries are not included in the timeliness measure. Missed deliveries can be reported at the supplier-location-time level as a separate metric.

### Delivery Accuracy

Delivery accuracy measures the supplier's ability to deliver the correct items and quantities on the order. The rating is determined by comparing the total number of deliveries for the supplier to the number of deliveries where the quantity or item was incorrect.

$$\text{Delivery Accuracy} = \frac{\text{Number of ASN Expected Deliveries}}{\text{Number of Deliveries}}$$

where:

$$\text{Number of Deliveries} = \text{No of ASN Expected Deliveries} + \text{No of ASN Over Deliveries} + \text{No of ASN Under Deliveries} + \text{No of Mismatched Deliveries}$$

A mismatched delivery is a delivery that contains at least one mismatched item.

For example, if the number of on-time deliveries is 75 and the total number of deliveries is 100, the delivery accuracy rating is 75 percent.

## Order Fulfillment

Order fulfillment measures the supplier's ability to deliver on order in full. The rating is determined by calculating the ratio of completely filled order to the total number of orders.

$$\text{Order Fulfillment} = \text{No of Full Order Deliveries} / \text{Total Orders}$$

where:

$$\text{Total Orders} = \text{Orders Received in Full} + \text{Orders Received in Part} + \text{Orders Received in Excess}$$

For example, a supplier earns an order fulfillment rating of 75 percent if the total number of orders is 4 and the number of partial deliveries is 1.

## Supplier Performance and Compliance Metrics

Metrics under the Supplier Scorecard dashboard concentrate on supplier compliance measures of timeliness, order fulfillment, and delivery accuracy. They enable comparison and evaluation of supplier performance.

## Inventory Position Analysis

Retail Insights holds stock position at a very low level, which is the ending position for every day for every item at every stockholding location. The available stock position measures include quantity, retail value, and cost amount (usually interfaced from source systems based on weighted average cost calculation).

There are three distinct groupings of stock position in Retail Insights:

- On-hand stock (goods owned by the retailer and received in a location)
- In-transit stock (goods owned by the retailer, received into one location such as a distribution center, but currently in transit to another store or warehouse)
- On-order stock (goods on an approved Purchase Order which have not yet been received)

Two examples of on-hand measures are ending on-hand (EOH) for a time period, as well as beginning on-hand (BOH) for a time period. The EOH position for week 1 is the BOH position for week 2.

Stock position is a constant state in which a value or position shifts over time. Stock on hand is at a certain position at the beginning and end of a week and at any point between. Positional values cannot be added together to arrive at a meaningful number. For example, the ending stock-on-hand values for the days in a week do not add up to the ending value for a week. Rather, there is a position at the end of each day and, in this example, the ending position for the week is the same as the position for the last day of the week. For this reason, positional measurements are semi-additive. They are not additive in the time dimension. In other dimensions, they act much like transactions. For example, the ending on-hand value for a subclass can be determined by adding the ending on-hand values for all items in that subclass.

Comparing ending inventory value to the same period last year is a typical scorecard measure, but deeper analysis and more complex calculations are also required. Retail Insights offers critical inventory calculations such as gross margin return on investment (GMROI), weeks of supply, stock turnover, sell-through, and the critical out of stock percentage measures.

A buyer might use one of these calculations to pair net sales and net profit measures on the same report with the out-of-stock percentage for the current month, to assess whether a certain department had low sales performance because of stock unavailability.

## Wholesale

Wholesale metrics enable reporting on wholesale transactions as distinct from regular retail transactions, allowing retailers to understand how their wholesale business is working as a stand-alone operation. This will keep the wholesale business from being lost in the noise of their overall sales. The list below is unique wholesale metrics, but also all the regular sales metrics can be used to do wholesale analysis by filtering for transactions at wholesale locations.

## Franchise

Oracle Retail Insights has three types of franchise metrics: Stockholding Franchise, Non-Stockholding Franchise, and Franchise. Which one a retailer uses will depend on their relationship with their franchise locations: if they manage inventory and replenishment for their franchisees, then Stockholding Franchise metrics are more useful, but if their franchisees operate relatively independently, Non-Stockholding Franchise metrics would be appropriate. Markdown and Markup metrics are simply known as Franchise metrics because there is no way to distinguish between stockholding and non-stockholding for this type of metric.

## Consumer

Consumer analysis is a method by which retailers will analyze their target consumers in order to determine the most effective strategies to improve both their sales and profitability. This analysis can be done by consumer, date, trade areas, consumer segments, historical performance, price strategies, promotions, clearances, demographics and loyalty programs.

## Price

Pricing analytics can help retailers determine the optimal pricing of products. It focuses on the proposed pricing of merchandise. Cost elements and profit components are not evaluated as part of pricing.

Retail Insights holds price as a retail value for an item, day, and location. For the purpose of analysis, the average price is calculated over the time period selected for the report.

## Planning

Retail Insights holds facts for both preseason (original) and in-season (current) planning in several reporting areas, including sales, markdowns, receipts, inventory, gross margin, and open-to-buy, in both dollars and units.

The following abbreviations are used in the names of Planning metrics:

- CPC: Current plan for cost-based planning
- CPR: Current plan for retail-based planning
- OPC: Original plan for cost-based planning

- OPR: Original plan for retail-based planning

## Stock Ledger

Retail Insights information for stock ledger analysis comes from Oracle Retail Merchandising System (RMS).

The lowest-level stock ledger facts are kept at the subclass and week level. This gives Retail Insights visibility to store/subclass/week level and subclass/month level. Stock ledger reporting is not available at the item and day levels. Reports and drills into data that are lower than the subclass/week level return null values for stock ledger facts.

If you receive stock ledger information from RMS, the RMS stock ledger feed to Retail Insights supports either a 4-5-4 fiscal calendar or Gregorian calendar.

If you have a Gregorian stock ledger, reporting in Retail Insights can be done at the subclass, location, and month levels. Reports and drills into data that are lower than the subclass/month level return null values for stock ledger facts.

If you have a 4-5-4 stock ledger, you can analyze the stock ledger at the subclass, location, week, and month levels. Reports and drills into data that are lower than the subclass/week level return null values for stock ledger facts.

Any other calendars, such as a 13-period time calendar, are not supported by the RMS interface to Retail Insights for stock ledger facts. If an RMS user customizes the stock ledger to use a 13-period calendar, there are inconsistencies with the RMS stock ledger interface to Retail Insights unless modifications are made.

Because the month-level stock ledger is directly related to the RMS MONTH\_DATA table, data for a specific month is available in Retail Insights after the close of that month.

## Baseline

Baseline metrics are derived from data mined during a period of time when an item is not on promotion.

The baseline process brings sales transaction data from Retail Insights into a suitable structure for performing baseline calculations. The process first transfers sales data by week, identifying which weeks are suitable to be included for baseline calculation. A set of item/location weekly sales is suitable for baseline calculation only if it does not have promotion sales for the week. The number of weeks of sales data to use for baseline calculation is configurable, with a default suggested value of 16 weeks, eight weeks prior to the promotional week and eight weeks after. You can configure both the number of weeks included and whether they are pre-promotion or post-promotion weeks. For example, 14 weeks might be included in the calculation, with eight weeks pre-promotion and six weeks post-promotion. After processing, the calculated baseline metrics are returned to Retail Insights.

These metrics are calculated at the promotion component/item/location/week level. They include baseline units, sales, profit, and transactions.

Baseline metrics can be used by a buyer during category planning, to establish expected sales for a category before promotions are added. This can help identify the level of promotion needed for the category to hit sales targets. A planner might decide that sales goals can be reached without promotions, or by promoting very little, thus saving money and adding to category margins.

Baseline metrics can also be used to calculate lift for promoted products; that is, how much over the baseline did sales increase when this category was promoted? If the

difference between baseline and promoted weeks is large, and baseline sales are unacceptably low, it might be concluded that customers are shopping the category only for promoted items. Promotions might need to be cut back or changed, to avoid conditioning customers to buy items only when they are on promotion. If the difference is too small, the promotions might not be effective and not worth the cost to run them.

## Trial and Repeat

Retailers want to analyze the impact of new item introductions, and item promotions, to see whether customers come back a second and third time after trying something new. Something new may be a new item introduction, or the first time an item is put on promotion, perhaps as part of raising that item (or Brand's) profile, and so on. Trial and Repeat Metrics can help to analyze the repeat purchase behavior of customer household for the merchandise.

## Market Basket Analysis

Market Basket Analysis reports can be used to understand what sells with what, including probability and profitability of market baskets. Such reports can be used to shape promotions, optimize product placement and support store planogram decisions. These metrics can help you understand the statistical relationship between sales of different merchandise.

## Customer

The Customer Insights Cloud Service module enables you to perform retail analysis around customers and customer segments. The following are some example business questions that Customer metrics can help to answer:

- Who are my most profitable customers? Who are my most frequent shoppers?
- Are my customers only buying items from me when they are on promotion?
- What does a customer buy from me on a typical shopping trip? Does it vary by where they live or how much money they make?
- Which of my departments appeal to which of my customers? That is, who is shopping in my stores and what are they shopping for?

## Promotion

Retail Insights has a number of metrics against which to measure a promotional sales, cost and forecast as well as Promotion Campaign costs. These metric provide useful insight into the processes of managing actual marketing cost, evaluating financial performance of marketing tactics, and analyzing forecast and actual spending.

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**Note:** Promotion Budget only supports as-is reporting.

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**Note:** Amount facts are in local and primary currency only.

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## Cluster

A cluster is a group of stores. Retailers make store clusters for various reasons, but the general idea is that stores in a cluster should have some key element or elements in common, which differentiates them from stores in other clusters. These elements could involve business objectives like store performance benchmarking, inventory management, and assortment/space planning. Then clusters can be used for analysis of sales, inventory, and promotions. Performance, inventory, ranging, trade area analysis, and union analysis are examples of elements around which clusters are built.

Oracle Retail Insights' cluster metrics enable retailers to analyze their clusters' sales, inventory position, inventory receipts and promotions, so that any analysis that might normally be limited to some aspect of the organizational hierarchy can instead be performed on a retailers' customized store cluster, enabling precise, actionable analysis.

## Customer Order

Customer orders lie at the heart of the modern retail experience. Virtually every customer transaction that takes place outside of a brick-and-mortar store is captured as part of a customer order, whether it is a normal sale, cancellation, return or exchange. A customer order consists of a customer order header that contains one or more customer order lines. Oracle Retail Insights' customer order metrics allow retailers the flexibility to analyze the performance of their business across the various selling channels their customers use.

Retail Insights supports a number of different metrics related to customer orders to allow performance analyses of omnichannel retailing. A list of the major metrics (minus the time transformations such as LY and LW) is below.

## Similarity Score

Similarities calculate how likely a customer is to switch from one item to another in a range from 0 to 1. For example, if the similarity rate for Toothpaste A and Toothpaste B is 0.75 while the similarity rate for Toothpaste A and Toothpaste C is 0.21, the customer is more likely to switch to Toothpaste B than Toothpaste C.

## Retail Insights Metric Metadata

The following chart shows Retail Insights metric metadata. Users should be aware that you cannot mix facts across as-is, as-was, and point-in-time subject areas.

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**Note:** Performance of reports that contain YTD metrics may become less optimal as the end of the fiscal year approaches, due to the increasing amount of data that accumulates. Users should be aware of this and take steps to mitigate any performance effects, such as being specific with filters and prompts to get back the smallest amount of data necessary for analysis.

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Table 6–2 Metric Metadata

Merchandise Insights Cloud Service	Customer Insights Cloud Service	Metrics	As-Is	As-Was	Point in Time
X		Cost and Profit	X	X	X
X		Markdowns and Markups	X	X	X
X		Sales Forecast	X	X	X
X		Inventory Receipts	X	X	X
X	X	Sales	X	X	X
X		Sales Pack	X	X	X
X		Supplier Invoice	X	X	X
X		Supplier Performance and Compliance	X	X	X
X		Inventory Position	X	X	X
	X	Wholesale	X	X	
X		Franchise	X	X	X
X		Price	X	X	X
X		Planning		X	
X		Stock Ledger		X	
	X	Trial and Repeat	X	X	
X		Sales Promotion	X	X	X
X		Customer Order	X	X	
X		Customer Order Promotion Transaction	X	X	
X		Customer Order Status Fact	X	X	
X		Customer Order Transaction	X	X	
X		Touch Point	X	X	
	X	Retail Promotion Actuals	X	X	X
	X	Retail Promotion Forecast	X	X	X
	X	Promotion Baseline	X	X	
	X	Promotion Budget	X	X	
	X	Consumer Spend	X	X	
	X	Sales Promotion	X	X	
	X	Inventory Position		X	
X		Return to Vendor	X	X	
X		Inventory Adjustment	X	X	
X		Inventory Transfers	X	X	
X		Similarity Score	X	X	

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## Time Series Conversion Functions

There are two types of time conversions, table-based and expression-based:

- Table-based conversions use a relationship table in the data warehouse to define the conversion from one time period to another.
- Expression-based conversions perform transformations by using mathematical expressions.

All of the Retail Insights conversions are expression-based. Oracle BI does not use transformation tables to create metrics; however, some Retail Insights views in Oracle BI are created based on transformation tables. Those views are used to create some complex metrics such as Comp, Comp Base, and BOH (beginning on hand).

Time conversions are used to compare values from different time periods to discover and analyze time-based trends. Some examples of common time conversions are:

- This year versus last year
- Month-to-date comparisons

Any time conversion function can be included as part of the definition of a metric. For example, applying the Last Year conversion to a Sales Value metric creates a Sales Value (Last Year) metric that calculates the sales for last year. Multiple conversions can be applied to the same metric.

Each time conversion in Retail Insights is defined at all the levels applicable for that transformation. For example:

- The Last Week conversion is defined at the day and week levels.
- Last Month is defined at the day, week, and month levels.
- Last Year is defined at the day, week, month, quarter, half-year, and year levels.

These definitions improve query performance.

The Last Year time transformation works differently depending on whether the retailer is using the Gregorian calendar or Business calendar. For the Gregorian calendar the Last Year corresponds to the current week last year, while for the Business calendar the Last Year will be 52 or 53 weeks from the current week.

### Example Time Conversions

The following are some examples of the time conversions in Retail Insights.

**Table A-1 Time Conversions**

<b>Conversion</b>	<b>Summary</b>
Last Month	Returns the corresponding last month fact data for the time period selected.
Last Week	Returns the corresponding last week fact data for the time period selected.
Last Year	Returns the corresponding last year fact data for the time period selected.
Month to Date	Returns the corresponding month-to-date fact data for the time period selected.

**Examples of Metrics That Use Time Conversion**

The following are some metrics that illustrate time conversion capabilities. You can also extend these metrics for other time transformations. For more information, see the *Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition*.

**Table A-2 Metrics that use Time Conversion**

<b>Metric</b>	<b>Summary</b>
Net Sales Amt	Sales amount excluding returns. It indicates the actual money amount received from sales.
Net Sales Amt LY	Last year's difference of gross sales amount minus returns amount.
Net Sales Amt LY YTD	Last year's year-to-date difference between gross sales amount and returns amount.
Net Sales Amt MTD	Month-to-date difference between gross sales amount and returns amount.
Net Sales Amt LW	Last week's difference between gross sales amount and returns amount.
Net Sales Amt MTD Var LY	Month-to-date net sales amount variance compared to last year. This metric tests a retailer's sales performance on business-critical months such as holidays or the end of the financial year.
Net Sales Amt WTD	Week-to-date difference between gross sales amount and returns amount.
Net Sales Amt YTD	Year-to-date difference between gross sales amount and returns amount.

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## Reporting on Oracle BI Repository Objects

You can use the Oracle BI Repository Documentation utility to export information about Oracle BI repository objects. This information can include:

- Mappings of presentation columns to logical and physical columns
- A metadata dictionary to provide information about metrics and attributes

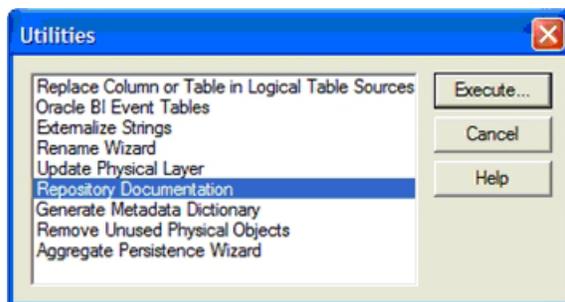
See the *Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition* for information about using the Oracle BI Administration Tool and utilities. That document describes the procedures in detail.

### Generating Documentation of Repository Mappings

You can save documentation of repository mappings to a .CSV (comma-separated values) file. You can import a file with comma-separated values into a spreadsheet, database, or other application.

Follow these steps:

1. From the Tools menu in the Oracle BI Administration Tool, select **Utilities**.
2. From the Utilities dialog, select **Repository Documentation**.



3. Click **Execute**.
4. When prompted, save the .CSV file in the folder you prefer.



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## Retail Insights Metric Definitions

This appendix contains a complete list of Oracle Retail Insights metrics. See [Chapter 6, "Metrics"](#) for additional information about metrics.

### Cost/Profit

**Table C-1 Cost/Profit Metrics**

<b>Metric</b>	<b>Definition</b>
Supplier Base Cost	Initial cost without additional charges added, such as handling or shipping charges, sales tax, or deals or discounts for an item/location.
Supplier Net Cost	Initial base cost after any trade, cash, or off-invoice discounts for an item/location. This calculation can be used as an accurate idea of the real cost of a purchase.
Supplier Net Net Cost	Bottom line cost of an item after all discounts, fees, and charges have been calculated. It is net cost less any bill-back amounts for an item/location.
Supplier Dead Net Cost	Primary supplier's net net cost, less any rebate amounts for an item/location.
Supplier Base Profit	Difference between sales revenue generated by an item and its base cost.
Supplier Net Profit	Bottom line profit, calculated from money left over after paying all expenses and taxes. This is calculated from the primary supplier's net cost for an item/location.
Supplier Net Net Profit	Profit calculated from the primary supplier's net net cost for an item/location.
Supplier Dead Net Profit	Net result of all revenues and costs from every business activity. It is profit calculated from the primary supplier's dead net cost for an item/location.
Supp Base Cost	Initial base cost prior to any deals or discounts.

### Markdowns

**Table C-2 Markdowns Metrics**

<b>Metric</b>	<b>Definition</b>
Mkdn Amt	Amount by which a seller reduces the price for an item to make it desirable to customers. This is the difference between the original retail and selling price.
Clr Mkdn Amt	Amount of reduction to the original selling price for reasons such as decline in overall prices of goods, excessive competition, special sale, damaged merchandise, or excess supply.
Pro Mkdn Amt	Amount of temporary reduction to a selling price to boost sales. This markdown is normally for a specified period of time, at the end of which the product price is raised back to the normal selling price.
Pmt Mkdn Amt	Amount of permanent reduction to the selling price of inventory. This type of markdown is used to remove slow-selling merchandise or replace out-of-date merchandise.
Mkup Amt	Extra amount a retailer charges a customer for an item, over and above what the retailer paid the supplier. This is the difference between the selling price and original retail.
Mkdn Cancelled Amt	Value of a clearance markdown amount that has been cancelled.
Mkup Cancelled Amt	Value of a markup amount that has been cancelled. A markup cancellation is used to correct an unintentional error in a previous markup.
Mkdn Qty	Quantity of units on clearance, promotion, and permanent markdown.
Clr Mkdn Qty	Quantity of units on clearance markdown.
Pro Mkdn Qty	Quantity of units on promotion markdown.
Pmt Mkdn Qty	Quantity of units on permanent markdown.
Mkup Qty	Quantity of inventory units on clearance, promotion, and permanent markup.
Mkdn Cancelled Qty	Quantity of units on which the markdown has been cancelled.
Mkup Cancelled Qty	Quantity of units on which the markup has been cancelled.
Mkdn to Sales Amt	Ratio of the markdown amount as a fraction of gross sales amount. The lower ratio depicts the efficiency of the marketing and pricing strategies of a retailer. This metric determines the sales driven by markdowns.
Mkdn Amt LW	Last week's value of markdowns.
Clr Mkdn Amt LW	Last week's value of clearance markdowns.
Pro Mkdn Amt LW	Last week's value of promotion markdowns.
Pmt Mkdn Amt LW	Last week's value of permanent markdowns.
Mkup Amt LW	Last week's value of markups.
Mkdn Qty LW	Last week's quantity of units on markdown.
Clr Mkdn Qty LW	Last week's quantity of units on clearance markdown.
Pro Mkdn Qty LW	Last week's quantity of units on promotion markdown.
Pmt Mkdn Qty LW	Last week's quantity of units on permanent markdown.
Mkup Qty LW	Last week's quantity of units on markup.
Mkdn Amt LY	Last year's value of markdowns.
Clr Mkdn Amt LY	Last year's value of clearance markdowns.
Pro Mkdn Amt LY	Last year's value of promotion markdowns.
Pmt Mkdn Amt LY	Last year's value of permanent markdowns.
Mkup Amt LY	Last year's value of markups.

**Table C-2 (Cont.) Markdowns Metrics**

<b>Metric</b>	<b>Definition</b>
Mkdn Qty LY	Last year's quantity of units on markdown.
Clr Mkdn Qty LY	Last year's quantity of units on clearance markdown.
Pro Mkdn Qty LY	Last year's quantity of units on promotion markdown.
Pmt Mkdn Qty LY	Last year's quantity of units on permanent markdown.
Mkup Qty LY	Last year's quantity of units on markup.
Mkdn Amt WTD	Week-to-date value of markdowns.
Clr Mkdn Amt WTD	Week-to-date value of clearance markdowns.
Pro Mkdn Amt WTD	Week-to-date value of promotion markdowns.
Pmt Mkdn Amt WTD	Week-to-date value of permanent markdowns.
Mkup Amt WTD	Week-to-date value of markups.
Mkdn Qty WTD	Week-to-date quantity of units on markdown.
Clr Mkdn Qty WTD	Week-to-date quantity of units on clearance markdown.
Pro Mkdn Qty WTD	Week-to-date quantity of units on promotion markdown.
Pmt Mkdn Qty WTD	Week-to-date quantity of units on permanent markdown.
Mkup Qty WTD	Week-to-date quantity of units on markup.
Mkdn to Sales Amt WTD	Week-to-date ratio of markdown amount as a fraction of gross sales amount.
Mkdn Amt MTD	Month-to-date value of markdowns.
Clr Mkdn Amt MTD	Month-to-date value of clearance markdowns.
Pro Mkdn Amt MTD	Month-to-date value of promotion markdowns.
Pmt Mkdn Amt MTD	Month-to-date value of permanent markdowns.
Mkup Amt MTD	Month-to-date value of markups.
Mkdn Qty MTD	Month-to-date quantity of units on markdown.
Clr Mkdn Qty MTD	Month-to-date quantity of units on clearance markdown.
Pro Mkdn Qty MTD	Month-to-date quantity of units on promotion markdown.
Pmt Mkdn Qty MTD	Month-to-date quantity of units on permanent markdown.
Mkup Qty MTD	Month-to-date quantity of units on markup.
Mkdn to Sales Amt MTD	Month-to-date ratio of markdown amount as a fraction of gross sales amount.
Mkdn Amt YTD	Year-to-date value of markdowns.
Clr Mkdn Amt YTD	Year-to-date value of clearance markdowns.
Pro Mkdn Amt YTD	Year-to-date value of promotion markdowns.
Pmt Mkdn Amt YTD	Year-to-date value of permanent markdowns.
Mkup Amt YTD	Year-to-date value of markups.
Mkdn Qty YTD	Year-to-date quantity of units on markdown.
Clr Mkdn Qty YTD	Year-to-date quantity of units on clearance markdown.
Pro Mkdn Qty YTD	Year-to-date quantity of units on promotion markdown.
Pmt Mkdn Qty YTD	Year-to-date quantity of units on permanent markdown.
Mkup Qty YTD	Year-to-date quantity of units on markup.

**Table C-2 (Cont.) Markdowns Metrics**

<b>Metric</b>	<b>Definition</b>
Mkdn to Sales Amt YTD	Year-to-date ratio of markdown amount as a fraction of gross sales amount.
Pro Mkdn Amt LY LW	Last week's value of promotion markdowns for last year.
Mkdn Amt LY WTD	Week-to-date value of markdowns for last year.
Clr Mkdn Amt LY WTD	Week-to-date value of clearance markdowns for last year.
Pro Mkdn Amt LY WTD	Week-to-date value of promotion markdowns for last year.
Pmt Mkdn Amt LY WTD	Week-to-date value of permanent markdowns for last year.
Mkdn to Sales Amt LY WTD	Week-to-date ratio of markdown amount as a fraction of gross sales amount for last year.
Mkdn Amt LY MTD	Month-to-date value of markdowns for last year.
Clr Mkdn Amt LY MTD	Month-to-date value of clearance markdowns for last year.
Pro Mkdn Amt LY MTD	Month-to-date value of promotion markdowns for last year.
Pmt Mkdn Amt LY MTD	Month-to-date value of permanent markdowns for last year.
Mkdn to Sales Amt LY MTD	Month-to-date ratio of markdown amount as a fraction of gross sales amount for last year.
Mkdn Amt LY YTD	Year-to-date value of markdowns for last year.
Clr Mkdn Amt LY YTD	Year-to-date value of clearance markdowns for last year.
Pro Mkdn Amt LY YTD	Year-to-date value of promotion markdowns for last year.
Pmt Mkdn Amt LY YTD	Year-to-date value of permanent markdowns for last year.
Mkup Amt LY YTD	Year-to-date value of markups for last year.
Mkdn Qty LY YTD	Year-to-date quantity of units on markdown for last year.
Clr Mkdn Qty LY YTD	Year-to-date quantity of units on clearance markdown for last year.
Pro Mkdn Qty LY YTD	Year-to-date quantity of units on promotion markdown for last year.
Pmt Mkdn Qty LY YTD	Year-to-date quantity of units on permanent markdown for last year.
Mkup Qty LY YTD	Year-to-date quantity of units on markup for last year.
Mkdn to Sales Amt LY YTD	Year-to-date ratio of markdown amount as a fraction of gross sales amount for last year.
Mkdn Amt Var LW	Markdown amount variance compared to last week.
Clr Mkdn Amt Var LW	Clearance markdown amount variance compared to last week.
Pro Mkdn Amt Var LW	Promotion markdown amount variance compared to last week.
Pmt Mkdn Amt Var LW	Permanent markdown amount variance compared to last week.
Mkup Amt Var LW	Markup amount variance compared to last week.
Mkdn Qty Var LW	Markdown quantity variance compared to last week.
Clr Mkdn Qty Var LW	Clearance markdown quantity variance compared to last week.
Pro Mkdn Qty Var LW	Promotion markdown quantity variance compared to last week.
Pmt Mkdn Qty Var LW	Permanent markdown quantity variance compared to last week.
Mkup Qty Var LW	Markup quantity variance compared to last week.
Mkdn Amt Var LY	Markdown amount variance compared to last year.
Clr Mkdn Amt Var LY	Clearance markdown amount variance compared to last year.

**Table C-2 (Cont.) Markdowns Metrics**

<b>Metric</b>	<b>Definition</b>
Pro Mkdn Amt Var LY	Promotion markdown amount variance compared to last year.
Pmt Mkdn Amt Var LY	Permanent markdown amount variance compared to last year.
Mkup Amt Var LY	Markup amount variance compared to last year.
Mkdn Qty Var LY	Markdown quantity variance compared to last year.
Clr Mkdn Qty Var LY	Clearance markdown quantity variance compared to last year.
Pro Mkdn Qty Var LY	Promotion markdown quantity variance compared to last year.
Pmt Mkdn Qty Var LY	Permanent markdown quantity variance compared to last year.
Mkup Qty Var LY	Markup quantity variance compared to last year.
Pro Mkdn Amt LW Var LY	Last week's promotion markdown amount variance compared to last year.
Mkdn Amt WTD Var LY	Week-to-date markdown amount variance compared to last year.
Clr Mkdn Amt WTD Var LY	Week-to-date clearance markdown amount variance compared to last year.
Pro Mkdn Amt WTD Var LY	Week-to-date promotion markdown amount variance compared to last year.
Pmt Mkdn Amt WTD Var LY	Week-to-date permanent markdown amount variance compared to last year.
Mkup Amt WTD Var LY	Week-to-date markup amount variance compared to last year.
Mkdn Amt MTD Var LY	Month-to-date markdown amount variance compared to last year.
Clr Mkdn Amt MTD Var LY	Month-to-date clearance markdown amount variance compared to last year.
Pro Mkdn Amt MTD Var LY	Month-to-date promotion markdown amount variance compared to last year.
Pmt Mkdn Amt MTD Var LY	Month-to-date permanent markdown amount variance compared to last year.
Mkup Amt MTD Var LY	Month-to-date markup amount variance compared to last year.
Mkdn Qty MTD Var LY	Month-to-date markdown quantity variance compared to last year.
Clr Mkdn Qty MTD Var LY	Month-to-date clearance markdown quantity variance compared to last year.
Pro Mkdn Qty MTD Var LY	Month-to-date promotion markdown quantity variance compared to last year.
Pmt Mkdn Qty MTD Var LY	Month-to-date permanent markdown quantity variance compared to last year.
Mkup Qty MTD Var LY	Month-to-date markup quantity variance compared to last year.
Mkdn Amt YTD Var LY	Year-to-date markdown amount variance compared to last year.
Clr Mkdn Amt YTD Var LY	Year-to-date clearance markdown amount variance compared to last year.
Pro Mkdn Amt YTD Var LY	Year-to-date promotion markdown amount variance compared to last year.
Pmt Mkdn Amt YTD Var LY	Year-to-date permanent markdown amount variance compared to last year.
Mkup Amt YTD Var LY	Year-to-date markup amount variance compared to last year.
Mkdn Qty YTD Var LY	Year-to-date markdown quantity variance compared to last year.

**Table C-2 (Cont.) Markdowns Metrics**

<b>Metric</b>	<b>Definition</b>
Clr Mkdn Qty YTD Var LY	Year-to-date clearance markdown quantity variance compared to last year.
Pro Mkdn Qty YTD Var LY	Year-to-date promotion markdown quantity variance compared to last year.
Pmt Mkdn Qty YTD Var LY	Year-to-date permanent markdown quantity variance compared to last year.
Mkup Qty YTD Var LY	Year-to-date markup quantity variance compared to last year.
Comp Mkdn Amt	Amount of the clearance, promotion, and permanent markdown in comparable stores. This is the difference between the original retail and the selling price.
Comp Clr Mkdn Amt	Value of clearance markdowns in comparable stores.
Comp Pro Mkdn Amt	Value of promotion markdowns in comparable stores.
Comp Pmt Mkdn Amt	Value of permanent markdowns in comparable stores.
Comp Mkup Amt	Value of markups in comparable stores.
Comp Mkdn Qty	Quantity of units on markdown in comparable stores.
Comp Clr Mkdn Qty	Quantity of units on clearance markdown in comparable stores.
Comp Pro Mkdn Qty	Quantity of units on promotion markdown in comparable stores.
Comp Pmt Mkdn Qty	Quantity of units on permanent markdown in comparable stores.
Comp Mkup Qty	Quantity of units on markup in comparable stores.
Comp Mkdn Amt LY	Last year's value of markdowns in comparable stores.
Comp Clr Mkdn Amt LY	Last year's value of clearance markdowns in comparable stores.
Comp Pro Mkdn Amt LY	Last year's value of promotion markdowns in comparable stores.
Comp Pmt Mkdn Amt LY	Last year's value of permanent markdowns in comparable stores.
Comp Mkup Amt LY	Last year's value of markups in comparable stores.
Comp Mkdn Qty LY	Last year's quantity of units on markdown in comparable stores.
Comp Clr Mkdn Qty LY	Last year's quantity of units on clearance markdown in comparable stores.
Comp Pro Mkdn Qty LY	Last year's quantity of units on promotion markdown in comparable stores.
Comp Pmt Mkdn Qty LY	Last year's quantity of units on permanent markdown in comparable stores.
Comp Mkup Qty LY	Last year's quantity of units on markup in comparable stores.
Comp Mkdn to Sales Amt LY	Last year's ratio of markdown amount as a fraction of gross sales amount in comparable stores.
Comp Mkdn Amt Var LY	Markdown amount variance compared to last year for comparable stores.
Comp Clr Mkdn Amt Var LY	Clearance markdown amount variance compared to last year for comparable stores.
Comp Pro Mkdn Amt Var LY	Promotion markdown amount variance compared to last year for comparable stores.
Comp Pmt Mkdn Amt Var LY	Permanent markdown amount variance compared to last year for comparable stores.
Comp Mkup Amt Var LY	Markup amount variance compared to last year for comparable stores.
Comp Mkdn Qty Var LY	Markdown quantity variance compared to last year for comparable stores.
Comp Clr Mkdn Qty Var LY	Clearance markdown quantity variance compared to last year for comparable stores.

**Table C-2 (Cont.) Markdowns Metrics**

<b>Metric</b>	<b>Definition</b>
Comp Pro Mkdn Qty Var LY	Promotion markdown quantity variance compared to last year for comparable stores.
Comp Pmt Mkdn Qty Var LY	Permanent markdown quantity variance compared to last year for comparable stores.
Comp Mkup Qty Var LY	Markup quantity variance compared to last year for comparable stores.
Comp Mkdn Amt MTD	Month-to-date value of markdowns in comparable stores.
Comp Clr Mkdn Amt MTD	Month-to-date value of clearance markdowns in comparable stores.
Comp Pro Mkdn Amt MTD	Month-to-date value of promotion markdowns in comparable stores.
Comp Pmt Mkdn Amt MTD	Month-to-date value of permanent markdowns in comparable stores.
Comp Mkup Amt MTD	Month-to-date value of markups in comparable stores.
Comp Mkdn Qty MTD	Month-to-date quantity of units on markdown in comparable stores.
Comp Clr Mkdn Qty MTD	Month-to-date quantity of units on clearance markdown in comparable stores.
Comp Pro Mkdn Qty MTD	Month-to-date quantity of units on promotion markdown in comparable stores.
Comp Pmt Mkdn Qty MTD	Month-to-date quantity of units on permanent markdown in comparable stores.
Comp Mkup Qty MTD	Month-to-date quantity of units on markup in comparable stores.
Comp Mkdn Amt LY MTD	Month-to-date value of markdowns in comparable stores for last year.
Comp Mkdn Amt MTD Var LY	Month-to-date markdown amount variance compared to last year for comparable stores.
Comp Mkdn Amt YTD	Year-to-date value of markdowns in comparable stores.
Comp Clr Mkdn Amt YTD	Year-to-date value of clearance markdowns in comparable stores.
Comp Pro Mkdn Amt YTD	Year-to-date value of promotion markdowns in comparable stores.
Comp Pmt Mkdn Amt YTD	Year-to-date value of permanent markdowns in comparable stores.
Comp Mkup Amt YTD	Year-to-date value of markups in comparable stores.
Comp Mkdn Qty YTD	Year-to-date quantity of units on markdown in comparable stores.
Comp Clr Mkdn Qty YTD	Year-to-date quantity of units on clearance markdown in comparable stores.
Comp Pro Mkdn Qty YTD	Year-to-date quantity of units on promotion markdown in comparable stores.
Comp Pmt Mkdn Qty YTD	Year-to-date quantity of units on permanent markdown in comparable stores.
Comp Mkup Qty YTD	Year-to-date quantity of units on markup in comparable stores.
Gross Markdown %	The actual percentage of markdowns taken against an item or category.

**Forecast**

**Table C-3 Forecast Metrics**

<b>Metric</b>	<b>Definition</b>
Fcst Sales Qty	Number of sales units forecast for the given time period.
Fcst Sales Qty LW	Last week's forecast quantity of sales units for the given time period.
Fcst Sales Qty MTD	Month-to-date forecast quantity of sales units.
Fcst Sales Qty YTD	Year-to-date forecast quantity of sales units.
Fcst Sales Qty Var	Gross sales quantity variance compared to the forecast quantity.
Fcst Sales Qty LW Var	Last week's gross sales quantity variance compared to the forecast quantity.
Fcst Sales Qty MTD Var	Month-to-date gross sales quantity variance compared to the forecast quantity.
Fcst Sales Qty YTD Var	Year-to-date gross sales quantity variance compared to the forecast quantity.
Fcst Sales Qty NW	Next week's forecast quantity of sales units for the given time period.

## Inventory Receipts

**Table C-4 Inventory Receipts Metrics**

<b>Metric</b>	<b>Definition</b>
Receipts Qty	Quantity of inventory units received.
Receipts Cost	Cost value of inventory units received.
Receipts Retail	Retail value of inventory units received.
Receipts Qty LW	Last week's quantity of inventory units received.
Receipts Cost LW	Last week's cost value of inventory units received.
Receipts Retail LW	Last week's retail value of inventory units received.
Receipts Qty LY	Last year's quantity of inventory units received.
Receipts Cost LY	Last year's cost value of inventory units received.
Receipts Retail LY	Last year's retail value of inventory units received.
Receipts Qty WTD	Week-to-date quantity of inventory units received.
Receipts Cost WTD	Week-to-date cost value of inventory units received.
Receipts Retail WTD	Week-to-date retail value of inventory units received.
Receipts Qty MTD	Month-to-date quantity of inventory units received.
Receipts Cost MTD	Month-to-date cost value of inventory units received.
Receipts Retail MTD	Month-to-date retail value of inventory units received.
Receipts Qty YTD	Year-to-date quantity of inventory units received.
Receipts Cost YTD	Year-to-date cost value of inventory units received.
Receipts Retail YTD	Year-to-date retail value of inventory units received.
Receipts Qty LY LW	Last week's quantity of inventory units received for last year.
Receipts Cost LY LW	Last week's cost value of inventory units received for last year.
Receipts Retail LY LW	Last week's retail value of inventory units received for last year.
Receipts Qty LY WTD	Week-to-date quantity of inventory units received for last year.

**Table C-4 (Cont.) Inventory Receipts Metrics**

<b>Metric</b>	<b>Definition</b>
Receipts Cost LY WTD	Week-to-date cost value of inventory units received for last year.
Receipts Retail LY WTD	Week-to-date retail value of inventory units received for last year.
Receipts Qty LY MTD	Month-to-date quantity of inventory units received for last year.
Receipts Cost LY MTD	Month-to-date cost value of inventory units received for last year.
Receipts Retail LY MTD	Month-to-date retail value of inventory units received for last year.
Receipts Qty LY YTD	Year-to-date quantity of inventory units received for last year.
Receipts Cost LY YTD	Year-to-date cost value of inventory units received for last year.
Receipts Retail LY YTD	Year-to-date retail value of inventory units received for last year.
Receipts Qty Var LW	Inventory receipts quantity variance compared to last week.
Receipts Cost Var LW	Inventory receipts cost value variance compared to last week.
Receipts Retail Var LW	Inventory receipts retail value variance compared to last week.
Receipts Qty Var LY	Inventory receipts quantity variance compared to last year.
Receipts Cost Var LY	Inventory receipts cost value variance compared to last year.
Receipts Retail Var LY	Inventory receipts retail value variance compared to last year.
Receipts Qty WTD Var LY	Week-to-date inventory receipts quantity variance compared to last year.
Receipts Cost WTD Var LY	Week-to-date inventory receipts cost value variance compared to last year.
Receipts Retail WTD Var LY	Week-to-date inventory receipts retail value variance compared to last year.
Receipts Qty MTD Var LY	Month-to-date inventory receipts quantity variance compared to last year.
Receipts Cost MTD Var LY	Month-to-date inventory receipts cost value variance compared to last year.
Receipts Retail MTD Var LY	Month-to-date inventory receipts retail value variance compared to last year.
Receipts Qty YTD Var LY	Year-to-date inventory receipts quantity variance compared to last year.
Receipts Cost YTD Var LY	Year-to-date inventory receipts cost value variance compared to last year.
Receipts Retail YTD Var LY	Year-to-date inventory receipts retail value variance compared to last year.
Comp Receipts Qty	Quantity of inventory units received in comparable stores.
Comp Receipts Cost	Cost value of inventory units received in comparable stores.
Comp Receipts Retail	Retail value of inventory units received in comparable stores.
Comp Receipts Qty LY	Last year's quantity of inventory units received in comparable stores.
Comp Receipts Cost LY	Last year's cost value of inventory units received in comparable stores.
Comp Receipts Retail LY	Last year's retail value of inventory units received in comparable stores.
Comp Receipts Qty Var LY	Inventory receipts quantity variance compared to last year for comparable stores.

**Table C-4 (Cont.) Inventory Receipts Metrics**

<b>Metric</b>	<b>Definition</b>
Comp Receipts Cost Var LY	Inventory receipts cost value variance compared to last year for comparable stores.
Comp Receipts Retail Var LY	Inventory receipts retail value variance compared to last year for comparable stores.
IMU %	The initial markup is the average markup required on all products to cover the cost of all items, incidental expenses, and to obtain a reasonable profit.

## Sales

**Table C-5 Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Gross Sales Amt	Retail value of units sold, calculated by adding sale invoices. It includes VAT but excludes discounts.
Return Amt	Retail value of units returned. It Indicates lost revenue that is credited back to customers. Retailers should find opportunities to convert this to new sales.
Net Sales Amt	Sales amount excluding returns. It indicates the actual money amount received from sales.
Net Clr Sales Amt	Gross sales amount from clearance stock, excluding returns.
Net Pro Sales Amt	Difference between the gross sales amount and returns amount for promotion priced items.
Net Reg Sales Amt	Difference between gross sales amount and returns amount for regularly priced items.
Gross Sales Qty	Total units of merchandise sold.
Return Qty	Number of units returned.
Net Sales Qty	Difference between gross sales quantity and returns quantity.
Net Clr Sales Qty	Difference between gross sales quantity and returns quantity for clearance priced items
Net Pro Sales Qty	Difference between gross sales quantity and returns quantity for promotion priced items.
Net Reg Sales Qty	Difference between gross sales quantity and returns quantity for regularly priced items.
Gross Profit	Difference between sales revenue and the cost of units sold. It indicates the retailer's ability to mark up merchandise for sale.
Return Profit	Difference between the returns amount and the cost of units returned. The cost of units returned is the product of return quantity times average cost. It indicates the profit lost because of returns.
Net Profit	Difference between profit earned on gross sales minus returns profit.
Net Clr Profit	Difference between gross profit and returns profit for clearance priced items.
Net Pro Profit	Difference between gross profit and returns profit for promotion priced items.
Net Reg Profit	Difference between gross profit and returns profit for regularly priced items.
Net Emp Disc	Difference between gross employee discount amount and returns employee discount amount.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Gross Tax	Tax applied on total sales revenue. Expenses are not deducted when calculating the tax amount.
Return Tax	Taxes that have been accounted on returned merchandise.
Net Tax	Taxes payable by a company at the end of fiscal year. It is gross tax less returns tax.
Gross Manual Mkdn Amt	Difference between the original retail, after official price adjustments, and the price that was actually charged to the customer.
Return Manual Mkdn Amt	Difference between the original retail, after official price adjustments, and the price that was actually returned to the customer.
Net Manual Mkdn Amt	Difference between gross manual markdown amount and return manual markdown amount.
Gross Manual Mkup Amt	Difference between the price that was actually charged to the customer and the original retail after official price adjustments. These generally are indicators of cashier mistakes or system discrepancies.
Return Manual Mkup Amt	Difference between the price that was actually returned to the customer and the original retail after official price adjustments.
Net Manual Mkup Amt	Difference between gross manual markup amount and return manual markup amount. This is an indicator of discrepancies during manual markup sales and returns.
Sales Enter Item Count	Merchandise count that was manually entered by cashiers.
Return Enter Item Count	Returned merchandise count that was manually entered by cashiers.
Sales Scan Item Count	Sold merchandise count that was electronically scanned by cashiers.
Return Scan Item Count	Returned merchandise count that was electronically scanned by cashiers.
Gross Profit to Sales Amt	Ratio of profit achieved on total sales. The ratio reflects a company's ability to balance its costs with sales. It is a key performance indicator of a company's efficiency and performance.
Net Profit to Sales Amt	Ratio of net profit to net sales. It indicates the bottom-line profit a company keeps from money generated by sales. This is a key performance indicator of a company's profitability for investors.
Avg Net Retail	Average retail price of sold items. This is calculated by deducting any taxes or expenses.
Gross Sales Amt LW	Last week's value of units sold.
Return Amt LW	Last week's value of units returned.
Net Sales Amt LW	Last week's value of net sales.
Net Clr Sales Amt LW	Last week's value of net clearance sales.
Net Pro Sales Amt LW	Last week's value of net promotion sales.
Net Reg Sales Amt LW	Last week's value of net regular sales.
Gross Sales Qty LW	Last week's quantity of units sold.
Return Qty LW	Last week's quantity of units returned.
Net Sales Qty LW	Last week's quantity of net sales.
Net Clr Sales Qty LW	Last week's quantity of net clearance sales.
Net Pro Sales Qty LW	Last week's quantity of net promotion sales.
Net Reg Sales Qty LW	Last week's quantity of net regular sales.
Gross Profit LW	Last week's difference between sales revenue and the cost of units sold.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Return Profit LW	Last week's difference between the retail value of returns and the cost of units returned.
Net Profit LW	Last week's bottom line profit after accounting for returns.
Net Clr Profit LW	Last week's bottom line profit for clearance items after accounting for returns.
Net Pro Profit LW	Last week's bottom line profit for promotion items after accounting for returns.
Net Reg Profit LW	Last week's bottom line profit for regular items after accounting for returns.
Net Emp Disc LW	Last week's employee discount amount applied to sales after accounting for returns.
Gross Tax LW	Last week's tax applied on total sales revenue.
Return Tax LW	Last week's tax applied on total return value.
Net Tax LW	Last week's total taxes applied on sales revenue after accounting for returns.
Sales Enter Item Count LW	Last week's merchandise count that was manually entered by cashiers.
Return Enter Item Count LW	Last week's returned merchandise count that was manually entered by cashiers.
Sales Scan Item Count LW	Last week's sold merchandise count that was electronically scanned by cashiers.
Return Scan Item Count LW	Last week's returned merchandise count that was electronically scanned by cashiers.
Gross Profit to Sales Amt LW	Last week's ratio of profit achieved on total sales.
Net Profit to Sales Amt LW	Last week's ratio of net profit to net sales.
Avg Net Retail LW	Last week's average retail price of sold items.
Gross Sales Amt LY	Last year's value of units sold.
Return Amt LY	Last year's value of units returned.
Net Sales Amt LY	Last year's value of net sales.
Net Clr Sales Amt LY	Last year's value of net clearance sales.
Net Pro Sales Amt LY	Last year's value of net promotion sales.
Net Reg Sales Amt LY	Last year's value of net regular sales.
Gross Sales Qty LY	Last year's quantity of units sold.
Return Qty LY	Last year's quantity of units returned.
Net Sales Qty LY	Last year's quantity of net sales.
Net Clr Sales Qty LY	Last year's quantity of net clearance sales.
Net Pro Sales Qty LY	Last year's quantity of net promotion sales.
Net Reg Sales Qty LY	Last year's quantity of net regular sales.
Gross Profit LY	Last year's difference between sales revenue and the cost of units sold.
Return Profit LY	Last year's difference between the retail value of returns and the cost of units returned.
Net Profit LY	Last year's bottom line profit after accounting for returns.
Net Clr Profit LY	Last year's bottom line profit for clearance items after accounting for returns.
Net Pro Profit LY	Last year's bottom line profit for promotion items after accounting for returns.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Net Reg Profit LY	Last year's bottom line profit for regular items after accounting for returns.
Net Emp Disc LY	Last year's employee discount amount applied to sales after accounting for returns.
Gross Tax LY	Last year's tax applied on total sales revenue.
Return Tax LY	Last year's tax applied on total return value.
Net Tax LY	Last year's total taxes applied on sales revenue after accounting for returns.
Gross Manual Mkdn Amt LY	Last year's difference between the original retail, after official price adjustments, and the price that was actually charged to the customer.
Return Manual Mkdn Amt LY	Last year's difference between the original retail, after official price adjustments, and the price that was actually returned to the customer.
Net Manual Mkdn Amt LY	Last year's difference between gross manual markdown amount and return manual markdown amount.
Gross Manual Mkup Amt LY	Last year's difference between the price that was actually charged to the customer and the original retail after official price adjustments.
Return Manual Mkup Amt LY	Last year's difference between the price that was actually returned to the customer and the original retail after official price adjustments.
Net Manual Mkup Amt LY	Last year's difference between gross manual markup amount and return manual markup amount.
Sales Enter Item Count LY	Last year's merchandise count that was manually entered by cashiers.
Return Enter Item Count LY	Last year's returned merchandise count that was manually entered by cashiers.
Sales Scan Item Count LY	Last year's sold merchandise count that was electronically scanned by cashiers.
Return Scan Item Count LY	Last year's returned merchandise count that was electronically scanned by cashiers.
Gross Profit to Sales Amt LY	Last year's ratio of profit achieved on total sales.
Net Profit to Sales Amt LY	Last year's ratio of net profit to net sales.
Avg Net Retail LY	Last year's average retail price of sold items.
Gross Sales Amt WTD	Week-to-date value of units sold.
Return Amt WTD	Week-to-date value of units returned.
Net Sales Amt WTD	Week-to-date value of net sales.
Net Clr Sales Amt WTD	Week-to-date value of net clearance sales.
Net Pro Sales Amt WTD	Week-to-date value of net promotion sales.
Net Reg Sales Amt WTD	Week-to-date value of net regular sales.
Gross Sales Qty WTD	Week-to-date quantity of units sold.
Return Qty WTD	Week-to-date quantity of units returned.
Net Sales Qty WTD	Week-to-date quantity of net sales.
Net Clr Sales Qty WTD	Week-to-date quantity of net clearance sales.
Net Pro Sales Qty WTD	Week-to-date quantity of net promotion sales.
Net Reg Sales Qty WTD	Week-to-date quantity of net regular sales.
Gross Profit WTD	Week-to-date difference between sales revenue and the cost of units sold.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Return Profit WTD	Week-to-date difference between the retail value of returns and the cost of units returned.
Net Profit WTD	Week-to-date bottom line profit after accounting for returns.
Net Clr Profit WTD	Week-to-date bottom line profit for clearance items after accounting for returns.
Net Pro Profit WTD	Week-to-date bottom line profit for promotion items after accounting for returns.
Net Reg Profit WTD	Week-to-date bottom line profit for regular items after accounting for returns.
Net Emp Disc WTD	Week-to-date employee discount amount applied to sales after accounting for returns.
Gross Tax WTD	Week-to-date tax applied on total sales revenue.
Return Tax WTD	Week-to-date tax applied on total return value.
Net Tax WTD	Week-to-date total taxes applied on sales revenue after accounting for returns.
Gross Manual Mkdn Amt WTD	Week-to-date difference between the original retail, after official price adjustments, and the price that was actually charged to the customer.
Return Manual Mkdn Amt WTD	Week-to-date difference between the original retail, after official price adjustments, and the price that was actually returned to the customer.
Net Manual Mkdn Amt WTD	Week-to-date difference between gross manual markdown amount and return manual markdown amount.
Gross Manual Mkup Amt WTD	Week-to-date difference between the price that was actually charged to the customer and the original retail after official price adjustments.
Return Manual Mkup Amt WTD	Week-to-date difference between the price that was actually returned to the customer and the original retail after official price adjustments.
Net Manual Mkup Amt WTD	Week-to-date difference between gross manual markup amount and return manual markup amount.
Sales Enter Item Count WTD	Week-to-date merchandise count that was manually entered by cashiers.
Return Enter Item Count WTD	Week-to-date returned merchandise count that was manually entered by cashiers.
Sales Scan Item Count WTD	Week-to-date sold merchandise count that was electronically scanned by cashiers.
Return Scan Item Count WTD	Week-to-date returned merchandise count that was electronically scanned by cashiers.
Gross Profit to Sales Amt WTD	Week-to-date ratio of profit achieved on total sales.
Net Profit to Sales Amt WTD	Week-to-date ratio of net profit to net sales.
Avg Net Retail WTD	Week-to-date average retail price of sold items.
Gross Sales Amt MTD	Month-to-date value of units sold.
Return Amt MTD	Month-to-date value of units returned.
Net Sales Amt MTD	Month-to-date value of net sales.
Net Clr Sales Amt MTD	Month-to-date value of net clearance sales.
Net Pro Sales Amt MTD	Month-to-date value of net promotion sales.
Net Reg Sales Amt MTD	Month-to-date value of net regular sales.
Gross Sales Qty MTD	Month-to-date quantity of units sold.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Return Qty MTD	Month-to-date quantity of units returned.
Net Sales Qty MTD	Month-to-date quantity of net sales.
Net Clr Sales Qty MTD	Month-to-date quantity of net clearance sales.
Net Pro Sales Qty MTD	Month-to-date quantity of net promotion sales.
Net Reg Sales Qty MTD	Month-to-date quantity of net regular sales.
Gross Profit MTD	Month-to-date difference between sales revenue and the cost of units sold.
Return Profit MTD	Month-to-date difference between the retail value of returns and the cost of units returned.
Net Profit MTD	Month-to-date bottom line profit after accounting for returns.
Net Clr Profit MTD	Month-to-date bottom line profit for clearance items after accounting for returns.
Net Pro Profit MTD	Month-to-date bottom line profit for promotion items after accounting for returns.
Net Reg Profit MTD	Month-to-date bottom line profit for regular items after accounting for returns.
Net Emp Disc MTD	Month-to-date employee discount amount applied to sales after accounting for returns.
Gross Tax MTD	Month-to-date tax applied on total sales revenue.
Return Tax MTD	Month-to-date tax applied on total return value.
Net Tax MTD	Month-to-date total taxes applied on sales revenue after accounting for returns.
Gross Manual Mkdn Amt MTD	Month-to-date difference between the original retail, after official price adjustments, and the price that was actually charged to the customer.
Return Manual Mkdn Amt MTD	Month-to-date difference between the original retail, after official price adjustments, and the price that was actually returned to the customer.
Net Manual Mkdn Amt MTD	Month-to-date difference between gross manual markdown amount and return manual markdown amount.
Gross Manual Mkup Amt MTD	Month-to-date difference between the price that was actually charged to the customer and the original retail after official price adjustments.
Return Manual Mkup Amt MTD	Month-to-date difference between the price that was actually returned to the customer and the original retail after official price adjustments.
Net Manual Mkup Amt MTD	Month-to-date difference between gross manual markup amount and return manual markup amount.
Sales Enter Item Count MTD	Month-to-date merchandise count that was manually entered by cashiers.
Return Enter Item Count MTD	Month-to-date returned merchandise count that was manually entered by cashiers.
Sales Scan Item Count MTD	Month-to-date sold merchandise count that was electronically scanned by cashiers.
Return Scan Item Count MTD	Month-to-date returned merchandise count that was electronically scanned by cashiers.
Gross Profit to Sales Amt MTD	Month-to-date ratio of profit achieved on total sales.
Net Profit to Sales Amt MTD	Month-to-date ratio of net profit to net sales.
Avg Net Retail MTD	Month-to-date average retail price of sold items.
Gross Sales Amt YTD	Year-to-date value of units sold.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Return Amt YTD	Year-to-date value of units returned.
Net Sales Amt YTD	Year-to-date value of net sales.
Net Clr Sales Amt YTD	Year-to-date value of net clearance sales.
Net Pro Sales Amt YTD	Year-to-date value of net promotion sales.
Net Reg Sales Amt YTD	Year-to-date value of net regular sales.
Gross Sales Qty YTD	Year-to-date quantity of units sold.
Return Qty YTD	Year-to-date quantity of units returned.
Net Sales Qty YTD	Year-to-date quantity of net sales.
Net Clr Sales Qty YTD	Year-to-date quantity of net clearance sales.
Net Pro Sales Qty YTD	Year-to-date quantity of net promotion sales.
Net Reg Sales Qty YTD	Year-to-date quantity of net regular sales.
Gross Profit YTD	Year-to-date difference between sales revenue and the cost of units sold.
Return Profit YTD	Year-to-date difference between the retail value of returns and the cost of units returned.
Net Profit YTD	Year-to-date bottom line profit after accounting for returns.
Net Clr Profit YTD	Year-to-date bottom line profit for clearance items after accounting for returns.
Net Pro Profit YTD	Year-to-date bottom line profit for promotion items after accounting for returns.
Net Reg Profit YTD	Year-to-date bottom line profit for regular items after accounting for returns.
Net Emp Disc YTD	Year-to-date employee discount amount applied to sales after accounting for returns.
Gross Tax YTD	Year-to-date tax applied on total sales revenue.
Return Tax YTD	Year-to-date tax applied on total return value.
Net Tax YTD	Year-to-date total taxes applied on sales revenue after accounting for returns.
Gross Manual Mkdn Amt YTD	Year-to-date difference between the original retail, after official price adjustments, and the price that was actually charged to the customer.
Return Manual Mkdn Amt YTD	Year-to-date difference between the original retail, after official price adjustments, and the price that was actually returned to the customer.
Net Manual Mkdn Amt YTD	Year-to-date difference between gross manual markdown amount and return manual markdown amount.
Gross Manual Mkup Amt YTD	Year-to-date difference between the price that was actually charged to the customer and the original retail after official price adjustments.
Return Manual Mkup Amt YTD	Year-to-date difference between the price that was actually returned to the customer and the original retail after official price adjustments.
Net Manual Mkup Amt YTD	Year-to-date difference between gross manual markup amount and return manual markup amount.
Sales Enter Item Count YTD	Year-to-date merchandise count that was manually entered by cashiers.
Return Enter Item Count YTD	Year-to-date returned merchandise count that was manually entered by cashiers.
Sales Scan Item Count YTD	Year-to-date sold merchandise count that was electronically scanned by cashiers.
Return Scan Item Count YTD	Year-to-date returned merchandise count that was electronically scanned by cashiers.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Gross Profit to Sales Amt YTD	Year-to-date ratio of profit achieved on total sales.
Net Profit to Sales Amt YTD	Year-to-date ratio of net profit to net sales.
Avg Net Retail YTD	Year-to-date average retail price of sold items.
Net Sales Amt LY LW	Last week's value of net sales for last year.
Net Clr Sales Amt LY LW	Last week's value of net clearance sales for last year.
Net Pro Sales Amt LY LW	Last week's value of net promotion sales for last year.
Net Reg Sales Amt LY LW	Last week's value of net regular sales for last year.
Gross Sales Qty LY LW	Last week's quantity of units sold for last year.
Return Qty LY LW	Last week's quantity of units returned for last year.
Net Sales Qty LY LW	Last week's quantity of net sales for last year.
Net Clr Sales Qty LY LW	Last week's quantity of net clearance sales for last year.
Net Pro Sales Qty LY LW	Last week's quantity of net promotion sales for last year.
Net Reg Sales Qty LY LW	Last week's quantity of net regular sales for last year.
Gross Profit LY LW	Last week's difference between sales revenue and the cost of units sold for last year.
Return Profit LY LW	Last week's difference between the retail value of returns and the cost of units returned for last year.
Net Profit LY LW	Last week's bottom line profit after accounting for returns for last year.
Gross Sales Amt LY WTD	Week-to-date value of units sold for last year.
Return Amt LY WTD	Week-to-date value of units returned for last year.
Net Sales Amt LY WTD	Week-to-date value of net sales for last year.
Net Clr Sales Amt LY WTD	Week-to-date value of net clearance sales for last year.
Net Pro Sales Amt LY WTD	Week-to-date value of net promotion sales for last year.
Net Reg Sales Amt LY WTD	Week-to-date value of net regular sales for last year.
Gross Sales Qty LY WTD	Week-to-date quantity of units sold for last year.
Return Qty LY WTD	Week-to-date quantity of units returned for last year.
Net Sales Qty LY WTD	Week-to-date quantity of net sales for last year.
Net Clr Sales Qty LY WTD	Week-to-date quantity of net clearance sales for last year.
Net Pro Sales Qty LY WTD	Week-to-date quantity of net promotion sales for last year.
Net Reg Sales Qty LY WTD	Week-to-date quantity of net regular sales for last year.
Gross Profit LY WTD	Week-to-date difference between sales revenue and the cost of units sold for last year.
Return Profit LY WTD	Week-to-date difference between the retail value of returns and the cost of units returned for last year.
Net Profit LY WTD	Week-to-date bottom line profit after accounting for returns for last year.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Net Pro Profit LY WTD	Week-to-date bottom line profit for promotion items after accounting for returns for last year.
Net Sales Amt LY MTD	Month-to-date value of net sales for last year.
Net Sales Qty LY MTD	Month-to-date quantity of net sales for last year.
Net Profit LY MTD	Month-to-date bottom line profit after accounting for returns for last year.
Net Pro Profit LY MTD	Month-to-date bottom line profit for promotion items after accounting for returns for last year.
Avg Net Retail LY MTD	Month-to-date average retail price of sold items for last year.
Net Sales Amt LY YTD	Year-to-date value of net sales for last year.
Net Sales Qty LY YTD	Year-to-date quantity of net sales for last year.
Net Profit LY YTD	Year-to-date bottom line profit after accounting for returns for last year.
Net Pro Profit LY YTD	Year-to-date bottom line profit for promotion items after accounting for returns for last year.
Avg Net Retail LY YTD	Year-to-date average retail price of sold items for last year.
Gross Sales Amt Var LW	Gross sales amount variance compared to last week.
Return Amt Var LW	Return amount variance compared to last week.
Net Sales Amt Var LW	Net sales amount variance compared to last week.
Net Clr Sales Amt Var LW	Net clearance sales amount variance compared to last week.
Net Pro Sales Amt Var LW	Net promotion sales amount variance compared to last week.
Net Reg Sales Amt Var LW	Net regular sales amount variance compared to last week.
Gross Sales Qty Var LW	Gross sales quantity variance compared to last week.
Return Qty Var LW	Return quantity variance compared to last week.
Net Sales Qty Var LW	Net sales quantity variance compared to last week.
Net Clr Sales Qty Var LW	Net clearance sales quantity variance compared to last week.
Net Pro Sales Qty Var LW	Net promotion sales quantity variance compared to last week.
Net Reg Sales Qty Var LW	Net regular sales quantity variance compared to last week.
Gross Profit Var LW	Gross profit variance compared to last week.
Return Profit Var LW	Return profit variance compared to last week.
Net Profit Var LW	Net profit variance compared to last week.
Net Clr Profit Var LW	Net clearance profit variance compared to last week.
Net Pro Profit Var LW	Net promotion profit variance compared to last week.
Net Reg Profit Var LW	Net regular profit variance compared to last week.
Net Emp Disc Var LW	Net employee discount variance compared to last week.
Gross Tax Var LW	Gross tax variance compared to last week.
Return Tax Var LW	Return tax variance compared to last week.
Net Tax Var LW	Net tax variance compared to last week.
Gross Sales Amt Var LY	Gross sales amount variance compared to last year.
Return Amt Var LY	Return Amount variance compared to last year.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Net Sales Amt Var LY	Net sales amount variance compared to last year.
Gross Sales Qty Var LY	Gross sales quantity variance compared to last year.
Return Qty Var LY	Return quantity variance compared to last year.
Net Sales Qty Var LY	Net sales quantity variance compared to last year.
Net Profit Var LY	Net profit variance compared to last year.
Net Pro Profit Var LY	Net promotion profit variance compared to last year.
Net Pro Sales Amt LW Var LY	Last week's net promotion sales amount variance compared to last year.
Gross Sales Qty LW Var LY	Last week's gross sales quantity variance compared to last year.
Net Pro Profit LW Var LY	Last week's net promotion profit variance compared to last year.
Net Sales Amt WTD Var LY	Week-to-date net sales amount variance compared to last year.
Net Clr Sales Amt WTD Var LY	Week-to-date net clearance sales amount variance compared to last year.
Net Pro Sales Amt WTD Var LY	Week-to-date net promotion sales amount variance compared to last year.
Net Reg Sales Amt WTD Var LY	Week-to-date net regular sales amount variance compared to last year.
Gross Sales Qty WTD Var LY	Week-to-date gross sales quantity variance compared to last year.
Net Sales Qty WTD Var LY	Week-to-date net sales quantity variance compared to last year.
Net Clr Sales Qty WTD Var LY	Week-to-date net clearance sales quantity variance compared to last year.
Net Pro Sales Qty WTD Var LY	Week-to-date net promotion sales quantity variance compared to last year.
Net Reg Sales Qty WTD Var LY	Week-to-date net regular sales quantity variance compared to last year.
Net Pro Profit WTD Var LY	Week-to-date net promotion profit variance compared to last year.
Net Sales Amt MTD Var LY	Month-to-date net sales amount variance compared to last year.
Net Clr Sales Amt MTD Var LY	Month-to-date net clearance sales amount variance compared to last year.
Net Pro Sales Amt MTD Var LY	Month-to-date net promotion sales amount variance compared to last year.
Net Reg Sales Amt MTD Var LY	Month-to-date net regular sales amount variance compared to last year.
Net Sales Qty MTD Var LY	Month-to-date net sales quantity variance compared to last year.
Net Clr Sales Qty MTD Var LY	Month-to-date net clearance sales quantity variance compared to last year.
Net Pro Sales Qty MTD Var LY	Month-to-date net promotion sales quantity variance compared to last year.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Net Reg Sales Qty MTD Var LY	Month-to-date net regular sales quantity variance compared to last year.
Net Pro Profit MTD Var LY	Month-to-date net promotion profit variance compared to last year.
Net Sales Amt YTD Var LY	Year-to-date net sales amount variance compared to last year.
Net Clr Sales Amt YTD Var LY	Year-to-date net clearance sales amount variance compared to last year.
Net Pro Sales Amt YTD Var LY	Year-to-date net promotion sales amount variance compared to last year.
Net Reg Sales Amt YTD Var LY	Year-to-date net regular sales amount variance compared to last year.
Net Sales Qty YTD Var LY	Year-to-date net sales quantity variance compared to last year.
Net Clr Sales Qty YTD Var LY	Year-to-date net clearance sales quantity variance compared to last year.
Net Pro Sales Qty YTD Var LY	Year-to-date net promotion sales quantity variance compared to last year.
Net Reg Sales Qty YTD Var LY	Year-to-date net regular sales quantity variance compared to last year.
Net Pro Profit YTD Var LY	Year-to-date net promotion profit variance compared to last year.
Comp Gross Sales Amt	Value of units sold in comparable stores.
Comp Return Amt	Value of units returned in comparable stores.
Comp Net Sales Amt	Value of net sales in comparable stores.
Comp Net Clr Sales Amt	Value of net clearance sales in comparable stores.
Comp Net Pro Sales Amt	Value of net promotion sales in comparable stores.
Comp Net Reg Sales Amt	Value of net regular sales in comparable stores.
Comp Gross Sales Qty	Quantity of units sold in comparable stores.
Comp Return Qty	Quantity of units returned in comparable stores.
Comp Net Sales Qty	Quantity of net sales in comparable stores.
Comp Net Profit	Bottom line profit after accounting for returns in comparable stores.
Comp Net Clr Profit	Bottom line profit for clearance items after accounting for returns in comparable stores.
Comp Net Pro Profit	Bottom line profit for promotion items after accounting for returns in comparable stores.
Comp Net Reg Profit	Bottom line profit for regular items after accounting for returns in comparable stores.
Comp Gross Sales Amt LY	Last year's value of units sold in comparable stores.
Comp Return Amt LY	Last year's value of units returned in comparable stores.
Comp Net Sales Amt LY	Last year's value of net sales in comparable stores.
Comp Net Clr Sales Amt LY	Last year's value of net clearance sales in comparable stores.
Comp Net Pro Sales Amt LY	Last year's value of net promotion sales in comparable stores.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Comp Net Reg Sales Amt LY	Last year's value of net regular sales in comparable stores.
Comp Gross Sales Qty LY	Last year's quantity of units sold in comparable stores.
Comp Return Qty LY	Last year's quantity of units returned in comparable stores.
Comp Net Sales Qty LY	Last year's quantity of units sold in comparable stores.
Comp Net Profit LY	Last year's bottom line profit after accounting for returns in comparable stores.
Comp Gross Sales Amt Var LY	Gross sales amount variance compared to last year for comparable stores.
Comp Return Amt Var LY	Return Amount variance compared to last year for comparable stores.
Comp Net Sales Amt Var LY	Net sales amount variance compared to last year for comparable stores.
Comp Net Clr Sales Amt Var LY	Net clearance sales amount variance compared to last year for comparable stores.
Comp Net Pro Sales Amt Var LY	Net promotion sales amount variance compared to last year for comparable stores.
Comp Net Reg Sales Amt Var LY	Net regular sales amount variance compared to last year for comparable stores.
Comp Gross Sales Qty Var LY	Gross sales quantity variance compared to last year for comparable stores.
Comp Return Qty Var LY	Return quantity variance compared to last year for comparable stores.
Comp Net Sales Qty Var LY	Net sales quantity variance compared to last year for comparable stores.
Comp Net Profit Var LY	Net profit variance compared to last year for comparable stores.
Comp Net Clr Profit Var LY	Net clearance profit variance compared to last year for comparable stores.
Comp Net Pro Profit Var LY	Net promotion profit variance compared to last year for comparable stores.
Comp Net Reg Profit Var LY	Net regular profit variance compared to last year for comparable stores.
Comp Net Sales Amt MTD	Month-to-date value of net sales in comparable stores.
Comp Net Clr Sales Amt MTD	Month-to-date value of net clearance sales in comparable stores.
Comp Net Pro Sales Amt MTD	Month-to-date value of net promotion sales in comparable stores.
Comp Net Reg Sales Amt MTD	Month-to-date value of net regular sales in comparable stores.
Comp Net Sales Qty MTD	Month-to-date quantity of net sales in comparable stores.
Comp Net Profit MTD	Month-to-date bottom line profit after accounting for returns in comparable stores.
Comp Net Clr Profit MTD	Month-to-date bottom line profit for clearance items after accounting for returns in comparable stores.
Comp Net Pro Profit MTD	Month-to-date bottom line profit for promotion items after accounting for returns in comparable stores.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Comp Net Reg Profit MTD	Month-to-date bottom line profit for regular items after accounting for returns in comparable stores.
Comp Net Sales Amt LY MTD	Month-to-date value of net sales in comparable stores for last year.
Comp Net Sales Qty LY MTD	Month-to-date quantity of net sales in comparable stores for last year.
Comp Net Profit LY MTD	Month-to-date bottom line profit after accounting for returns in comparable stores for last year.
Comp Net Sales Amt MTD Var LY	Month-to-date net sales amount variance compared to last year for comparable stores.
Comp Net Profit MTD Var LY	Month-to-date net profit variance compared to last year for comparable stores.
Comp Net Sales Amt YTD	Year-to-date value of net sales in comparable stores.
Comp Net Clr Sales Amt YTD	Year-to-date value of net clearance sales in comparable stores.
Comp Net Pro Sales Amt YTD	Year-to-date value of net promotion sales in comparable stores.
Comp Net Reg Sales Amt YTD	Year-to-date value of net regular sales in comparable stores.
Comp Gross Sales Qty YTD	Year-to-date quantity of units sold in comparable stores.
Comp Return Qty YTD	Year-to-date quantity of units returned in comparable stores.
Comp Net Profit YTD	Year-to-date bottom line profit after accounting for returns in comparable stores.
Sales Amt Item Contribution to Department	Sales revenues generated by an item as a fraction of total sales revenue generated by its department. Retailers use this key performance indicator to understand consumers' spending on various items in different product categories.
Sales Amt Contribution to Loc	Sales revenues generated by an item as a fraction of total sales revenue generated by its location. Retailers use this key performance indicator to understand consumers' spending on various items in different geographic areas.
Sales Amt Loc Contribution to Tot	Sales revenues generated by a location as a fraction of sales generated by the company. This key performance indicator helps retailers to determine store expansion opportunities at high-contributing locations.
Sales Amt Department Contribution to Tot	Sales revenues generated by a department as a fraction of total sales revenue generated by the company. Retailers use this key performance indicator to understand consumers' spending on various items in different product categories.
Sales Amt Division Contribution to Tot	Sales revenues generated by a division as a fraction of total sales revenue generated by the company. Retailers use this key performance indicator to understand consumers' spending on various items in different product categories.
Sales Amt Supplier Contribution to Tot	Sales revenues generated by a supplier as a fraction of total sales revenue generated by the company. This key performance indicator helps to identify valuable suppliers.
Sales Amt Division Contribution to Tot LY	Last year's sales revenues generated by a group as a fraction of total sales revenue generated by the company. Retailers use this key performance indicator to understand consumers' spending on various items in different product categories.
Profit Item Contribution to Department	Profit generated by an item as a fraction of total profit generated by its department. It helps to identify high-margin merchandise for purposes of promotions and pricing decisions.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Profit Amt Contribution to Loc	Profit generated by an item as a fraction of total profit generated by its location. It helps to identify high-margin merchandise for purposes of promotions and pricing decisions.
Profit Loc Contribution to Tot	Profit generated by a location as a fraction of profit generated by the company. This key performance indicator helps retailers to determine store expansion opportunities at high-contributing locations.
Profit District Contribution to Tot	Profit generated by a district as a fraction of profit generated by the company. This key performance indicator helps retailers to determine store expansion opportunities at high-contributing locations.
Profit Region Contribution to Tot	Profit generated by a region as a fraction of profit generated by the company. This key performance indicator helps retailers to determine store expansion opportunities at high-contributing locations.
Profit Area Contribution to Tot	Profit generated by an area as a fraction of profit generated by the company. This key performance indicator helps retailers to determine store expansion opportunities at high-contributing locations.
Profit Chain Contribution to Tot	Profit generated by a chain as a fraction of profit generated by the company. This key performance indicator helps retailers to determine store expansion opportunities at high-contributing locations.
Profit State Contribution to Tot	Profit generated by a state as a fraction of profit generated by the company. This key performance indicator helps retailers to determine store expansion opportunities at high-contributing locations.
Profit Country Contribution to Tot	Profit generated by a country as a fraction of profit generated by the company. This key performance indicator helps retailers to determine store expansion opportunities at high-contributing locations.
Profit Subclass Contribution to Tot	Profit generated by a subclass as a fraction of profit generated by the company. This key performance indicator helps retailers to determine store expansion opportunities at high-contributing locations.
Profit Class Contribution to Tot	Profit generated by a class as a fraction of total sales revenue generated by the company. Retailers use this key performance indicator to understand consumers' spending on various items in different product categories.
Profit Department Contribution to Tot	Profit generated by a department as a fraction of total sales revenue generated by the company. Retailers use this key performance indicator to understand consumers' spending on various items in different product categories.
Profit Group Contribution to Tot	Profit generated by a group as a fraction of total sales revenue generated by the company. Retailers use this key performance indicator to understand consumers' spending on various items in different product categories.
Profit Division Contribution to Tot	Profit generated by a division as a fraction of total sales revenue generated by the company. Retailers use this key performance indicator to understand consumers' spending on various items in different product categories.
Profit Subclass Contribution to Tot	Profit generated by a subclass as a fraction of total sales revenue generated by the company. Retailers use this key performance indicator to understand consumers' spending on various items in different product categories.
Profit Item Contribution to Department LY	Last year's profit generated by an item as a fraction of total profit generated by its department. It helps to identify high-margin merchandise for purposes of promotions and pricing decisions.
Profit Amt Contribution to Loc LY	Last year's profit generated by an item as a fraction of total profit generated by its location. It helps to identify high-margin merchandise for purposes of promotions and pricing decisions.
Profit Division Contribution to Tot LY	Last year's profit generated by a group as a fraction of profit generated by the company. Retailers use this key performance indicator to understand consumers' spending on various items in different product categories.

**Table C-5 (Cont.) Sales Metrics**

<b>Metric</b>	<b>Definition</b>
Trx Count	Quantity of transactions.
Week Count	Quantity of business weeks.
Max Trx Amt	Amount of a transaction.
Max Trx Unit Qty	Quantity of units in a transaction.
Unique Item Count	Quantity of unique items in a transaction. If a transaction contains an item with multiple units, the item will be counted only once.
Avg Trx Amt	Average amount of transactions.
Avg Trx Unit Qty	Average quantity of units in a transaction.
Avg Item Count	Average quantity of unique items in a transaction. If a transaction contains an item with multiple units, the item will be counted only once.
Avg Trx Amt LY	Last year's average amount in a transaction.
Avg Trx Unit Qty LY	Last year's average quantity of units in a transaction.
Avg Item Count LY	Last year's average quantity of unique items in a transaction. If a transaction contains an item with multiple units, the item will be counted only once.
Avg Dept Count	Average quantity of unique departments in a transaction. If a transaction contains multiple items or multiple units from a department, the department will be counted only once.
Avg Dept Count LY	Last year's average quantity of unique departments in a transaction. If a transaction contains multiple items or multiple units from a department, the department will be counted only once.

## Sales Pack

**Table C-6 Sales Pack Metrics**

<b>Metric</b>	<b>Definition</b>
Pack Gross Sales Amt	Total value of regular, clearance, and promotion pack sales and pack components before returns. The amount is inclusive of VAT.
Pack Return Amt	Retail value of pack sales and pack component units returned. It indicates lost revenue that is credited back to customers. Retailers should find opportunities to convert this to new sales
Pack Net Sales Amt	Sales amount excluding returns. It indicates the actual money amount received from pack sales and pack component.
Pack Net Clr Sales Amt	Clearance sales amount excluding returns. It indicates the actual money amount received from pack sales and pack component.
Pack Net Pro Sales Amt	Promotion sales amount excluding returns. It indicates the actual money amount received from pack sales and pack component.
Pack Net Reg Sales Amt	Regular sales amount excluding returns. It indicates the actual money amount received from pack sales and pack component.
Pack Gross Sales Qty	Total quantity of regular, clearance, and promotion pack sales and pack component units before returns.
Pack Return Qty	Quantity of units returned for a pack component item. This is the product of the pack item returns quantity times the pack component item quantity.
Pack Net Sales Qty	Difference between pack gross sales quantity and pack returns quantity.

**Table C-6 (Cont.) Sales Pack Metrics**

<b>Metric</b>	<b>Definition</b>
Pack Net Clr Sales Qty	Difference between pack gross clearance sales quantity and pack returns quantity.
Pack Net Pro Sales Qty	Difference between pack gross promotion sales quantity and pack returns quantity.
Pack Net Reg Sales Qty	Difference between pack gross regular sales quantity and pack returns quantity.
Pack Gross Profit	Difference between sales revenue and the cost of units sold for a pack component item. It indicates the retailer's ability to mark up merchandise for sale.
Pack Return Profit	Difference between the pack return amount and the cost of pack units returned. The cost of units returned is the product of return quantity times average cost. It indicates the profit lost because of returns.
Pack Net Profit	Bottom line profit for a pack component item, calculated from money left over after paying all expenses and taxes. This is calculated from the primary supplier's net cost for an item/location.
Pack Net Clr Profit	Difference between pack gross profit and pack returns profit for clearance priced items.
Pack Net Pro Profit	Difference between pack gross profit and pack returns profit for promotion priced items.
Pack Net Reg Profit	Difference between pack gross profit and pack returns profit for regular priced items.
Pack Net Emp Disc	Difference between pack gross employee discount amount and pack returns employee discount amount.
Pack Gross Tax	Tax applied on total sales revenue for a pack component item. Expenses are not deducted when calculating the tax amount.
Pack Return Tax	Taxes that have been accounted on pack returned merchandise.
Pack Net Tax	Taxes payable by a company at the end of fiscal year for a pack component item. It is gross tax less returns tax.
Pack Gross Profit to Sales Amt	Ratio of pack profit achieved on total pack sales. The ratio reflects a company's ability to balance its costs with sales. It is a key performance indicator of a company's efficiency and performance.
Pack Net Profit to Sales Amt	Ratio of pack net profit to pack net sales. It indicates the bottom-line profit a company keeps from money generated by sales. This is a key performance indicator of a company's profitability for investors.
Pack Avg Net Retail	Average retail price of sold pack items. This is calculated by deducting any taxes or expenses.
Pack Gross Sales Amt LY	Last year's value of pack units sold.
Pack Return Amt LY	Last year's value of pack units returned.
Pack Net Sales Amt LY	Last year's value of pack net sales.
Pack Net Clr Sales Amt LY	Last year's value of pack net clearance sales.
Pack Net Pro Sales Amt LY	Last year's value of pack net promotion sales.
Pack Net Reg Sales Amt LY	Last year's value of pack net regular sales.
Pack Gross Sales Qty LY	Last year's quantity of pack units sold.
Pack Return Qty LY	Last year's quantity of pack units returned.
Pack Net Sales Qty LY	Last year's quantity of pack net sales.
Pack Net Clr Sales Qty LY	Last year's quantity of pack net clearance sales.
Pack Net Pro Sales Qty LY	Last year's quantity of pack net promotion sales.

**Table C-6 (Cont.) Sales Pack Metrics**

<b>Metric</b>	<b>Definition</b>
Pack Net Reg Sales Qty LY	Last year's quantity of pack net regular sales.
Pack Gross Profit LY	Last year's difference between pack sales revenue and the cost of pack units sold.
Pack Return Profit LY	Last year's difference between the retail value of pack returns and the cost of pack units returned.
Pack Net Profit LY	Last year's bottom line pack profit after accounting for returns.
Pack Net Clr Profit LY	Last year's bottom line pack profit for clearance items after accounting for returns.
Pack Net Pro Profit LY	Last year's bottom line pack profit for promotion items after accounting for returns.
Pack Net Reg Profit LY	Last year's bottom line pack profit for regular items after accounting for returns.
Pack Net Emp Disc LY	Last year's employee discount amount applied to pack sales after accounting for returns.
Pack Gross Tax LY	Last year's tax applied on total pack sales revenue.
Pack Return Tax LY	Last year's tax applied on total pack return value.
Pack Net Tax LY	Last year's total taxes applied on pack sales revenue after accounting for returns.
Pack Gross Profit to Sales Amt LY	Last year's ratio of profit achieved on total pack sales.
Pack Net Profit to Sales Amt LY	Last year's ratio of pack net profit to net pack sales.
Pack Avg Net Retail LY	Last year's average retail price of sold pack items.
Pack Gross Sales Amt Var LY	Pack gross sales amount variance compared to last year.
Pack Return Amt Var LY	Pack return amount variance compared to last year.
Pack Net Sales Amt Var LY	Pack net sales amount variance compared to last year.
Pack Net Clr Sales Amt Var LY	Pack net clearance sales amount variance compared to last year.
Pack Net Pro Sales Amt Var LY	Pack net promotion sales amount variance compared to last year.
Pack Net Reg Sales Amt Var LY	Pack net regular sales amount variance compared to last year.
Pack Gross Sales Qty Var LY	Pack gross sales quantity variance compared to last year.
Pack Return Qty Var LY	Pack return quantity variance compared to last year.
Pack Net Sales Qty Var LY	Pack net sales quantity variance compared to last year.
Pack Net Clr Sales Qty Var LY	Pack net clearance sales quantity variance compared to last year.
Pack Net Pro Sales Qty Var LY	Pack net promotion sales quantity variance compared to last year.
Pack Net Reg Sales Qty Var LY	Pack net regular sales quantity variance compared to last year.
Pack Gross Profit Var LY	Pack gross profit variance compared to last year.
Pack Return Profit Var LY	Pack return profit variance compared to last year.
Pack Net Profit Var LY	Pack net profit variance compared to last year.

**Table C-6 (Cont.) Sales Pack Metrics**

<b>Metric</b>	<b>Definition</b>
Pack Net Clr Profit Var LY	Pack net clearance profit variance compared to last year.
Pack Net Pro Profit Var LY	Pack net promotion profit variance compared to last year.
Pack Net Reg Profit Var LY	Pack net regular profit variance compared to last year.
Pack Net Emp Disc Var LY	Pack net employee discount variance compared to last year.
Pack Gross Tax Var LY	Pack gross tax variance compared to last year.
Pack Return Tax Var LY	Pack return tax variance compared to last year.
Pack Net Tax Var LY	Pack net tax variance compared to last year.
Pack Liability Amt	The retail value of sales pack tied in liability in lieu of unfulfilled order that a retailer is legally bounded to deliver to a customer. For these units, retailer has received payment for but has not delivered goods to the customer.
Pack Liability Canceled Amt	The retail value of sales pack that were canceled for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign .
Pack Liability Qty	The sales pack quantity tied in liability in lieu of unfulfilled order that a retailer is legally bounded to deliver to a customer. For these units, retailer has received payment for but has not delivered goods to the customer.
Pack Liability Canceled Qty	The number of sales pack units that were canceled for which a retailer initially had a liability on, at the time of ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Pack Profit Liability Amt	The profit value of sales packs that are ordered as liability for which a retailer is legally bound or obligated.
Pack Profit Liability Canceled Amt	The loss on profit amount occurred due to cancelation of goods/ units that were ordered as liability for which a retailer was legally bound or obligated. These values will be positive.

## Supplier Invoice

**Table C-7 Supplier Invoice Metrics**

<b>Metric</b>	<b>Definition</b>
Invoice Qty	Number of units for which a supplier is requesting payment.
PO Unit Cost	Unit cost when an order was placed for an item.
Invoice Unit Cost	Unit cost charged by the supplier to the retailer for an item.
Tot PO Unit Cost	Total cost of the order quantity when applying the purchase order unit cost.
Tot Invoice Unit Cost	Total cost of the order quantity when applying the invoice unit cost.
Tot PO to Invoice Cost Diff	Difference in total cost of the order quantity between the purchase order and invoice costs.

## Supplier Compliance

**Table C-8 Supplier Compliance Metrics**

<b>Metric</b>	<b>Definition</b>
Unfulfilled ASN Count	Number of advance shipping notices (ASN) for which the associated shipment delivery has not yet been received.
Unfulfilled PO Count	Number of purchase orders for which the total number of ordered units has not yet been received.
PO Met Count	Number of purchase orders for which ordered quantity is equal to received quantity.
PO Under Count	Number of purchase orders for which ordered quantity is greater than received quantity.
PO Over Count	Number of purchase orders for which ordered quantity is less than received quantity.
PO Absent Count	Number of shipment deliveries that were received without corresponding purchase orders.
Ship Late Count	Number of shipment deliveries that arrived after the date specified on the purchase order as the last date that delivery of the order would be accepted.
Ship Early Count	Number of shipment deliveries that arrived before the date specified on the purchase order as the first date that delivery of the order would be accepted.
Ship On Time Count	Number of shipment deliveries that arrived within the timeframe specified on the purchase order that delivery of the order would be accepted.
Days Early Ship	Number of days that a shipment delivery arrived before the date specified on the purchase order as the first date that delivery of the order would be accepted.
Days Late Ship	Number of days that a shipment delivery arrived after the date specified on the purchase order as the last date that delivery of the order would be accepted.
ASN Met Count	Number of advance shipping notices (ASN) for which expected shipment deliveries equal received shipments.
ASN Under Count	Number of advance shipping notices (ASN) for which expected shipment deliveries are greater than received shipments.
ASN Over Count	Number of advance shipping notices (ASN) for which expected shipment deliveries are less than received shipments.
ASN Expected Qty	Quantity of units expected to be received based on the associated order number or on the supplier's advance shipping notices (ASN).
Ordered Qty	Quantity of units ordered in a purchase order.
Received Qty	Quantity of units received in a shipment delivery.
Shipment Count	Total number of shipment deliveries that were received by the retailer.

## Inventory Position

**Table C-9 Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
BOH Qty	Quantity of owned inventory units at the beginning of the reporting period. This includes inventory held as components within pack items.
BOH Retail	Retail value of owned inventory units at the beginning of the reporting period. This includes inventory held as components within pack items.
BOH Cost	Cost value of owned inventory units at the beginning of the reporting period. This includes inventory for pack component items.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
EOH Qty	Quantity of owned inventory units at the end of the reporting period. This includes inventory held as components within pack items.
EOH Retail	Retail value of owned inventory units at the end of the reporting period. This includes inventory for pack component items.
EOH Cost	Cost value of owned inventory units at the end of the reporting period. This includes inventory for pack component items.
In Transit Qty	Quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period. This includes inventory for pack component items.
In Transit Retail	Retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period. This includes inventory for pack component items.
In Transit Cost	Cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period. This includes inventory for pack component items.
On Order Qty	Quantity of ordered inventory units that have not yet been received at the end of the reporting period. This includes inventory for pack component items.
On Order Retail	Retail value of ordered inventory units that have not yet been received at the end of the reporting period. This includes inventory for pack component items.
On Order Cost	Cost value of ordered inventory units that have not yet been received at the end of the reporting period. This includes inventory for pack component items.
Inv Unit Retail	Retail value for an item when it is sold in a singular quantity of the standard unit of measure.
Inv Unit Cost	Purchase order estimated landed cost each time this item is received at this location, or the primary supplier cost, depending on the merchandising system options.
Inv Avg Cost	Weighted average cost of an item at a location, based on the purchase order estimated landed cost. This is adjusted each time inventory is received at this location. Stock of a pack item is valued at the component level, and therefore an average cost is not applicable for pack items.
BOH Qty LW	Last week's quantity of owned inventory units at the beginning of the reporting period.
BOH Retail LW	Last week's retail value of owned inventory units at the beginning of the reporting period. This includes inventory held as components within pack items.
BOH Cost LW	Last week's cost value of owned inventory units at the beginning of the reporting period.
EOH Qty LW	Last week's quantity of owned inventory units at the end of the reporting period.
EOH Retail LW	Last week's retail value of owned inventory units at the end of the reporting period.
EOH Cost LW	Last week's cost value of owned inventory units at the end of the reporting period.
In Transit Qty LW	Last week's quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
In Transit Retail LW	Last week's retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
In Transit Cost LW	Last week's cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
On Order Qty LW	Last week's quantity of ordered inventory units that have not yet been received at the end of the reporting period.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
On Order Retail LW	Last week's retail value of ordered inventory units that have not yet been received at the end of the reporting period.
On Order Cost LW	Last week's cost value of ordered inventory units that have not yet been received at the end of the reporting period.
Inv Unit Retail LW	Last week's retail value for an item when it is sold in a singular quantity of the standard unit of measure.
Inv Unit Cost LW	Last week's purchase order estimated landed cost each time this item is received at this location, or the primary supplier cost, depending on the merchandising system options.
Inv Avg Cost LW	Last week's weighted average cost of an item at a location, based on the purchase order estimated landed cost. This is adjusted each time inventory is received at this location. Stock of a pack item is valued at the component level, and therefore an average cost is not applicable for pack items.
BOH Qty LY	Last year's quantity of owned inventory units at the beginning of the reporting period.
BOH Retail LY	Last year's retail value of owned inventory units at the beginning of the reporting period.
BOH Cost LY	Last year's cost value of owned inventory units at the beginning of the reporting period.
EOH Qty LY	Last year's quantity of owned inventory units at the end of the reporting period.
EOH Retail LY	Last year's retail value of owned inventory units at the end of the reporting period.
EOH Cost LY	Last year's cost value of owned inventory units at the end of the reporting period.
In Transit Qty LY	Last year's quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
In Transit Retail LY	Last year's retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
In Transit Cost LY	Last year's cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
On Order Qty LY	Last year's quantity of ordered inventory units that have not yet been received at the end of the reporting period.
On Order Retail LY	Last year's retail value of ordered inventory units that have not yet been received at the end of the reporting period.
On Order Cost LY	Last year's cost value of ordered inventory units that have not yet been received at the end of the reporting period.
Inv Unit Retail LY	Last year's retail value for an item when it is sold in a singular quantity of the standard unit of measure.
Inv Unit Cost LY	Last year's purchase order estimated landed cost each time this item is received at this location, or the primary supplier cost, depending on the merchandising system options.
Inv Avg Cost LY	Last year's weighted average cost of an item at a location, based on the purchase order estimated landed cost.
Current BOH Qty	Quantity of owned inventory units at the beginning of current week. This includes inventory held as components within pack items.
Current BOH Retail	Retail value of owned inventory units at the beginning of current week. This includes inventory held as components within pack items.
Current BOH Cost	Cost value of owned inventory units at the beginning of current week. This includes inventory for pack component items.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
Current EOH Qty	Quantity of owned inventory units at the end of current day. This includes inventory held as components within pack items.
Current EOH Retail	Retail value of owned inventory units at the end of the current day. This includes inventory for pack component items.
Current EOH Cost	Cost value of owned inventory units at the end of the current day. This includes inventory for pack component items.
Current In Transit Qty	Quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the current day. This includes inventory for pack component items.
Current In Transit Retail	Retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the current day. This includes inventory for pack component items.
Current In Transit Cost	Cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of current day. This includes inventory for pack component items.
Current On Order Qty	Quantity of ordered inventory units that have not yet been received at the end of current day. This includes inventory for pack component items.
Current On Order Retail	Retail value of ordered inventory units that have not yet been received at the end of current day. This includes inventory for pack component items.
Current On Order Cost	Cost value of ordered inventory units that have not yet been received at the end of current day. This includes inventory for pack component items.
Current Inv Unit Retail	Retail value for an item when it is sold in a singular quantity of the standard unit of measure at the end of the current day.
Current Inv Unit Cost	Purchase order estimated landed cost each time this item is received at this location, or the primary supplier cost, depending on the merchandising system options.
Current Inv Avg Cost	Weighted average cost of an item at a location, based on the purchase order estimated landed cost at the end of the current day. This is adjusted each time inventory is received at this location. Stock of a pack item is valued at the component level, and therefore an average cost is not applicable for pack items.
Min BOH Qty	Minimum quantity of owned inventory units at the beginning of the reporting period.
Min BOH Retail	Minimum retail value of owned inventory units at the beginning of the reporting period.
Min BOH Cost	Minimum cost value of owned inventory units at the beginning of the reporting period.
Min EOH Qty	Minimum quantity of owned inventory units at the end of the reporting period.
Min EOH Retail	Minimum retail value of owned inventory units at the end of the reporting period.
Min EOH Cost	Minimum cost value of owned inventory units at the end of the reporting period.
Min In Transit Qty	Minimum quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
Min In Transit Retail	Minimum retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
Min In Transit Cost	Minimum cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
Min On Order Qty	Minimum quantity of ordered inventory units that have not yet been received at the end of the reporting period.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
Min On Order Retail	Minimum retail value of ordered inventory units that have not yet been received at the end of the reporting period.
Min On Order Cost	Minimum cost value of ordered inventory units that have not yet been received at the end of the reporting period.
Min Inv Unit Retail	Minimum retail value for an item when it is sold in a singular quantity of the standard unit of measure.
Min Inv Unit Cost	Minimum purchase order estimated landed cost each time this item is received at this location, or the primary supplier cost, depending on the merchandising system options.
Min Inv Avg Cost	Minimum weighted average cost of an item at a location, based on the purchase order estimated landed cost.
Max BOH Qty	Maximum quantity of owned inventory units at the beginning of the reporting period.
Max BOH Retail	Maximum retail value of owned inventory units at the beginning of the reporting period.
Max BOH Cost	Maximum cost value of owned inventory units at the beginning of the reporting period.
Max EOH Qty	Maximum quantity of owned inventory units at the end of the reporting period.
Max EOH Retail	Maximum retail value of owned inventory units at the end of the reporting period.
Max EOH Cost	Maximum cost value of owned inventory units at the end of the reporting period.
Max In Transit Qty	Maximum quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
Max In Transit Retail	Maximum retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
Max In Transit Cost	Maximum cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period.
Max On Order Qty	Maximum quantity of ordered inventory units that have not yet been received at the end of the reporting period.
Max On Order Retail	Maximum retail value of ordered inventory units that have not yet been received at the end of the reporting period.
Max On Order Cost	Maximum cost value of ordered inventory units that have not yet been received at the end of the reporting period.
Max Inv Unit Retail	Maximum retail value for an item when it is sold in a singular quantity of the standard unit of measure.
Max Inv Unit Cost	Maximum purchase order estimated landed cost each time this item is received at this location, or the primary supplier cost, depending on the merchandising system options.
Max Inv Avg Cost	Maximum weighted average cost of an item at a location, based on the purchase order estimated landed cost.
BOH Qty Current Week LY	Quantity of owned inventory units at the beginning of the week, corresponding to the current week, for last year.
BOH Retail Current Week LY	Retail value of owned inventory units at the beginning of the week, corresponding to the current week, for last year.
BOH Cost Current Week LY	Cost value of owned inventory units at the beginning of the week, corresponding to the current week, for last year.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
EOH Qty Today Current Day LY	Quantity of owned inventory units at the end of day, corresponding to current day, for last year.
EOH Retail Current Day LY	Retail value of owned inventory units at the end of day, corresponding to current day, for last year.
EOH Cost Current Day LY	Cost value of owned inventory units at the end of day, corresponding to current day, for last year.
In Transit Qty Current Day LY	Quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of day, corresponding to current day, for last year.
In Transit Retail Current Day LY	Retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of day, corresponding to current day, for last year.
In Transit Cost Current Day LY	Cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of day, corresponding to current day, for last year.
On Order Qty Current Day LY	Quantity of ordered inventory units that have not yet been received at the end of the day, corresponding to the current day, for last year.
On Order Retail Current Day LY	Retail value of ordered inventory units that have not yet been received at the end of the day, corresponding to the current day, for last year.
On Order Cost Current Day LY	Cost value of ordered inventory units that have not yet been received at the end of the day, corresponding to the current day, for last year.
Inv Unit Retail Current Day LY	Retail value for an item when it is sold in a singular quantity of the standard unit of measure for the end of the day, corresponding to the current day last year.
Inv Unit Cost Current Day LY	Purchase order estimated landed cost each time this item is received at this location, or the primary supplier cost, depending on the merchandising system options, for the end of the day, corresponding to the current day last year.
Inv Avg Cost Current Day LY	Weighted average cost of an item at a location, based on the purchase order estimated landed cost for the end of the day, corresponding to the current day last year.
Min BOH Qty LY	Minimum quantity of owned inventory units at the beginning of the reporting period for last year.
Min BOH Retail LY	Minimum retail value of owned inventory units at the beginning of the reporting period for last year.
Min BOH Cost LY	Minimum cost value of owned inventory units at the beginning of the reporting period for last year.
Min EOH Qty LY	Minimum quantity of owned inventory units at the end of the reporting period for last year.
Min EOH Retail LY	Minimum retail value of owned inventory units at the end of the reporting period for last year.
Min EOH Cost LY	Minimum cost value of owned inventory units at the end of the reporting period for last year.
Min In Transit Qty LY	Minimum quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period for last year.
Min In Transit Retail LY	Minimum retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period for last year.
Min In Transit Cost LY	Minimum cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period for last year.
Min On Order Qty LY	Minimum quantity of ordered inventory units that have not yet been received at the end of the reporting period for last year.
Min On Order Retail LY	Minimum retail value of ordered inventory units that have not yet been received at the end of the reporting period for last year.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
Min On Order Cost LY	Minimum cost value of ordered inventory units that have not yet been received at the end of the reporting period for last year.
Min Inv Unit Retail LY	Minimum retail value for an item when it is sold in a singular quantity of the standard unit of measure for last year.
Min Inv Unit Cost LY	Minimum purchase order estimated landed cost each time this item is received at this location, or the primary supplier cost, depending on the merchandising system options, for last year.
Min Inv Avg Cost LY	Minimum weighted average cost of an item at a location, based on the purchase order estimated landed cost, for last year.
Max BOH Qty LY	Maximum quantity of owned inventory units at the beginning of the reporting period for last year.
Max BOH Retail LY	Maximum retail value of owned inventory units at the beginning of the reporting period for last year.
Max BOH Cost LY	Maximum cost value of owned inventory units at the beginning of the reporting period for last year.
Max EOH Qty LY	Maximum quantity of owned inventory units at the end of the reporting period for last year.
Max EOH Retail LY	Maximum retail value of owned inventory units at the end of the reporting period for last year.
Max EOH Cost LY	Maximum cost value of owned inventory units at the end of the reporting period for last year.
Max In Transit Qty LY	Maximum quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period for last year.
Max In Transit Retail LY	Maximum retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period for last year.
Max In Transit Cost LY	Maximum cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period for last year.
Max On Order Qty LY	Maximum quantity of ordered inventory units that have not yet been received at the end of the reporting period for last year.
Max On Order Retail LY	Maximum retail value of ordered inventory units that have not yet been received at the end of the reporting period for last year.
Max On Order Cost LY	Maximum cost value of ordered inventory units that have not yet been received at the end of the reporting period for last year.
Max Inv Unit Retail LY	Maximum retail value for an item when it is sold in a singular quantity of the standard unit of measure for last year.
Max Inv Unit Cost LY	Maximum purchase order estimated landed cost each time this item is received at this location, or the primary supplier cost, depending on the merchandising system options, for last year.
Max Inv Avg Cost LY	Maximum weighted average cost of an item at a location, based on the purchase order estimated landed cost, for last year.
BOH Qty Var LW	Beginning of period owned inventory units variance compared to last week.
BOH Retail Var LW	Beginning of period owned inventory retail value variance compared to last week.
BOH Cost Var LW	Beginning of period owned inventory cost value variance compared to last week.
EOH Qty Var LW	End of period owned inventory units variance compared to last week.
EOH Retail Var LW	End of period owned inventory retail value variance compared to last week.
EOH Cost Var LW	End of period owned inventory cost value variance compared to last week.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
In Transit Qty Var LW	End of period in transit inventory units variance compared to last week.
In Transit Retail Var LW	End of period in transit inventory retail value variance compared to last week.
In Transit Cost Var LW	End of period in transit inventory cost value variance compared to last week.
On Order Qty Var LW	End of period on order inventory units variance compared to last week.
On Order Retail Var LW	End of period on order inventory retail value variance compared to last week.
On Order Cost Var LW	End of period on order inventory cost value variance compared to last week.
BOH Qty Var LY	Beginning of period owned inventory units variance compared to last year.
BOH Retail Var LY	Beginning of period owned inventory retail value variance compared to last year.
BOH Cost Var LY	Beginning of period owned inventory cost value variance compared to last year.
EOH Qty Var LY	End of period owned inventory units variance compared to last year.
EOH Retail Var LY	End of period owned inventory retail value variance compared to last year.
EOH Cost Var LY	End of period owned inventory cost value variance compared to last year.
In Transit Qty Var LY	End of period in transit inventory units variance compared to last year.
In Transit Retail Var LY	End of period in transit inventory retail value variance compared to last year.
In Transit Cost Var LY	End of period in transit inventory cost value variance compared to last year.
On Order Qty Var LY	End of period on order inventory units variance compared to last year.
On Order Retail Var LY	End of period on order inventory retail value variance compared to last year.
On Order Cost Var LY	End of period on order inventory cost value variance compared to last year.
Min BOH Qty Var LY	Minimum beginning of period owned inventory units variance compared to last year.
Min BOH Retail Var LY	Minimum beginning of period owned inventory retail value variance compared to last year.
Min BOH Cost Var LY	Minimum beginning of period owned inventory cost value variance compared to last year.
Min EOH Qty Var LY	Minimum end of period owned inventory units variance compared to last year.
Min EOH Retail Var LY	Minimum end of period owned inventory retail value variance compared to last year.
Min EOH Cost Var LY	Minimum end of period owned inventory cost value variance compared to last year.
Min In Transit Qty Var LY	Minimum end of period in transit inventory units variance compared to last year.
Min In Transit Retail Var LY	Minimum end of period in transit inventory retail value variance compared to last year.
Min In Transit Cost Var LY	Minimum end of period in transit inventory cost value variance compared to last year.
Min On Order Qty Var LY	Minimum end of period on order inventory units variance compared to last year.
Min On Order Retail Var LY	Minimum end of period on order inventory retail value variance compared to last year.
Min On Order Cost Var LY	Minimum end of period on order inventory cost value variance compared to last year.
Max BOH Qty Var LY	Maximum beginning of period owned inventory units variance compared to last year.
Max BOH Retail Var LY	Maximum beginning of period owned inventory retail value variance compared to last year.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
Max BOH Cost Var LY	Maximum beginning of period owned inventory cost value variance compared to last year.
Max EOH Qty Var LY	Maximum end of period owned inventory units variance compared to last year.
Max EOH Retail Var LY	Maximum end of period owned inventory retail value variance compared to last year.
Max EOH Cost Var LY	Maximum end of period owned inventory cost value variance compared to last year.
Max In Transit Qty Var LY	Maximum end of period in transit inventory units variance compared to last year.
Max In Transit Retail Var LY	Maximum end of period in transit inventory retail value variance compared to last year.
Max In Transit Cost Var LY	Maximum end of period in transit inventory cost value variance compared to last year.
Max On Order Qty Var LY	Maximum end of period on order inventory units variance compared to last year.
Max On Order Retail Var LY	Maximum end of period on order inventory retail value variance compared to last year.
Max On Order Cost Var LY	Maximum end of period on order inventory cost value variance compared to last year.
Comp BOH Qty	Quantity of owned inventory units at the beginning of the reporting period in comparable stores.
Comp BOH Retail	Retail value of owned inventory units at the beginning of the reporting period in comparable stores.
Comp BOH Cost	Cost value of owned inventory units at the beginning of the reporting period in comparable stores.
Comp EOH Qty	Quantity of owned inventory units at the end of the reporting period in comparable stores.
Comp EOH Retail	Retail value of owned inventory units at the end of the reporting period in comparable stores.
Comp EOH Cost	Cost value of owned inventory units at the end of the reporting period in comparable stores.
Comp In Transit Qty	Quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp In Transit Retail	Retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp In Transit Cost	Cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp On Order Qty	Quantity of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.
Comp On Order Retail	Retail value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.
Comp On Order Cost	Cost value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.
Comp BOH Qty LY	Last year's quantity of owned inventory units at the beginning of the reporting period in comparable stores.
Comp BOH Retail LY	Last year's retail value of owned inventory units at the beginning of the reporting period in comparable stores.
Comp BOH Cost LY	Last year's cost value of owned inventory units at the beginning of the reporting period in comparable stores.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
Comp EOH Qty LY	Last year's quantity of owned inventory units at the end of the reporting period in comparable stores.
Comp EOH Retail LY	Last year's retail value of owned inventory units at the end of the reporting period in comparable stores.
Comp EOH Cost LY	Last year's cost value of owned inventory units at the end of the reporting period in comparable stores.
Comp In Transit Qty LY	Last year's quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp In Transit Retail LY	Last year's retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp In Transit Cost LY	Last year's cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp On Order Qty LY	Last year's quantity of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.
Comp On Order Retail LY	Last year's retail value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.
Comp On Order Cost LY	Last year's cost value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.
Comp BOH Qty Var LY	Beginning of period owned inventory units variance compared to last year in comparable stores.
Comp BOH Retail Var LY	Beginning of period owned inventory retail value variance compared to last year in comparable stores.
Comp BOH Cost Var LY	Beginning of period owned inventory cost value variance compared to last year in comparable stores.
Comp EOH Qty Var LY	End of period owned inventory units variance compared to last year in comparable stores.
Comp EOH Retail Var LY	End of period owned inventory retail value variance compared to last year in comparable stores.
Comp EOH Cost Var LY	End of period owned inventory cost value variance compared to last year in comparable stores.
Comp In Transit Qty Var LY	End of period in transit inventory units variance compared to last year in comparable stores.
Comp In Transit Retail Var LY	End of period in transit inventory retail value variance compared to last year in comparable stores.
Comp In Transit Cost Var LY	End of period in transit inventory cost value variance compared to last year in comparable stores.
Comp On Order Qty Var LY	End of period on order inventory units variance compared to last year in comparable stores.
Comp On Order Retail Var LY	End of period on order inventory retail value variance compared to last year in comparable stores.
Comp On Order Cost Var LY	End of period on order inventory cost value variance compared to last year in comparable stores.
Comp Min BOH Qty	Minimum quantity of owned inventory units at the beginning of the reporting period in comparable stores.
Comp Min BOH Retail	Minimum retail value of owned inventory units at the beginning of the reporting period in comparable stores.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
Comp Min BOH Cost	Minimum cost value of owned inventory units at the beginning of the reporting period in comparable stores.
Comp Min EOH Qty	Minimum quantity of owned inventory units at the end of the reporting period in comparable stores.
Comp Min EOH Retail	Minimum retail value of owned inventory units at the end of the reporting period in comparable stores.
Comp Min EOH Cost	Minimum cost value of owned inventory units at the end of the reporting period in comparable stores.
Comp Min In Transit Qty	Minimum quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp Min In Transit Retail	Minimum retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp Min In Transit Cost	Minimum cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp Min On Order Qty	Minimum quantity of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.
Comp Min On Order Retail	Minimum retail value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.
Comp Min On Order Cost	Minimum cost value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.
Comp Min BOH Qty LY	Minimum quantity of owned inventory units at the beginning of the reporting period in comparable stores for last year.
Comp Min BOH Retail LY	Minimum retail value of owned inventory units at the beginning of the reporting period in comparable stores for last year.
Comp Min BOH Cost LY	Minimum cost value of owned inventory units at the beginning of the reporting period in comparable stores for last year.
Comp Min EOH Qty LY	Minimum quantity of owned inventory units at the end of the reporting period in comparable stores for last year.
Comp Min EOH Retail LY	Minimum retail value of owned inventory units at the end of the reporting period in comparable stores for last year.
Comp Min EOH Cost LY	Minimum cost value of owned inventory units at the end of the reporting period in comparable stores for last year.
Comp Min In Transit Qty LY	Minimum quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores for last year.
Comp Min In Transit Retail LY	Minimum retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores for last year.
Comp Min In Transit Cost LY	Minimum cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores for last year.
Comp Min On Order Qty LY	Minimum quantity of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores for last year.
Comp Min On Order Retail LY	Minimum retail value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores for last year.
Comp Min On Order Cost LY	Minimum cost value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores for last year.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
Comp Min BOH Qty Var LY	Minimum beginning of period owned inventory units variance compared to last year in comparable stores.
Comp Min BOH Retail Var LY	Minimum beginning of period owned inventory retail value variance compared to last year in comparable stores.
Comp Min BOH Cost Var LY	Minimum beginning of period owned inventory cost value variance compared to last year in comparable stores.
Comp Min EOH Qty Var LY	Minimum end of period owned inventory units variance compared to last year in comparable stores.
Comp Min EOH Retail Var LY	Minimum end of period owned inventory retail value variance compared to last year in comparable stores.
Comp Min EOH Cost Var LY	Minimum end of period owned inventory cost value variance compared to last year in comparable stores.
Comp Min In Transit Qty Var LY	Minimum end of period in transit inventory units variance compared to last year in comparable stores.
Comp Min In Transit Retail Var LY	Minimum end of period in transit inventory retail value variance compared to last year in comparable stores.
Comp Min In Transit Cost Var LY	Minimum end of period in transit inventory cost value variance compared to last year in comparable stores.
Comp Min On Order Qty Var LY	Minimum end of period on order inventory units variance compared to last year in comparable stores.
Comp Min On Order Retail Var LY	Minimum end of period on order inventory retail value variance compared to last year in comparable stores.
Comp Min On Order Cost Var LY	Minimum end of period on order inventory cost value variance compared to last year in comparable stores.
Comp Max BOH Qty	Maximum quantity of owned inventory units at the beginning of the reporting period in comparable stores.
Comp Max BOH Retail	Maximum retail value of owned inventory units at the beginning of the reporting period in comparable stores.
Comp Max BOH Cost	Maximum cost value of owned inventory units at the beginning of the reporting period in comparable stores.
Comp Max EOH Qty	Maximum quantity of owned inventory units at the end of the reporting period in comparable stores.
Comp Max EOH Retail	Maximum retail value of owned inventory units at the end of the reporting period in comparable stores.
Comp Max EOH Cost	Maximum cost value of owned inventory units at the end of the reporting period in comparable stores.
Comp Max In Transit Qty	Maximum quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp Max In Transit Retail	Maximum retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp Max In Transit Cost	Maximum cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores.
Comp Max On Order Qty	Maximum quantity of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.
Comp Max On Order Retail	Maximum retail value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
Comp Max On Order Cost	Maximum cost value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores.
Comp Max BOH Qty LY	Maximum quantity of owned inventory units at the beginning of the reporting period in comparable stores for last year.
Comp Max BOH Retail LY	Maximum retail value of owned inventory units at the beginning of the reporting period in comparable stores for last year.
Comp Max BOH Cost LY	Maximum cost value of owned inventory units at the beginning of the reporting period in comparable stores for last year.
Comp Max EOH Qty LY	Maximum quantity of owned inventory units at the end of the reporting period in comparable stores for last year.
Comp Max EOH Retail LY	Maximum retail value of owned inventory units at the end of the reporting period in comparable stores for last year.
Comp Max EOH Cost LY	Maximum cost value of owned inventory units at the end of the reporting period in comparable stores for last year.
Comp Max In Transit Qty LY	Maximum quantity of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores for last year.
Comp Max In Transit Retail LY	Maximum retail value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores for last year.
Comp Max In Transit Cost LY	Maximum cost value of transfer and allocation inventory units that have been shipped but not yet received at the end of the reporting period in comparable stores for last year.
Comp Max On Order Qty LY	Maximum quantity of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores for last year.
Comp Max On Order Retail LY	Maximum retail value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores for last year.
Comp Max On Order Cost LY	Maximum cost value of ordered inventory units that have not yet been received at the end of the reporting period in comparable stores for last year.
Comp Max BOH Qty Var LY	Maximum beginning of period owned inventory units variance compared to last year in comparable stores.
Comp Max BOH Retail Var LY	Maximum beginning of period owned inventory retail value variance compared to last year in comparable stores.
Comp Max BOH Cost Var LY	Maximum beginning of period owned inventory cost value variance compared to last year in comparable stores.
Comp Max EOH Qty Var LY	Maximum end of period owned inventory units variance compared to last year in comparable stores.
Comp Max EOH Retail Var LY	Maximum end of period owned inventory retail value variance compared to last year in comparable stores.
Comp Max EOH Cost Var LY	Maximum end of period owned inventory cost value variance compared to last year in comparable stores.
Comp Max In Transit Qty Var LY	Maximum end of period in transit inventory units variance compared to last year in comparable stores.
Comp Max In Transit Retail Var LY	Maximum end of period in transit inventory retail value variance compared to last year in comparable stores.
Comp Max In Transit Cost Var LY	Maximum end of period in transit inventory cost value variance compared to last year in comparable stores.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
Comp Max On Order Qty Var LY	Maximum end of period on order inventory units variance compared to last year in comparable stores.
Comp Max On Order Retail Var LY	Maximum end of period on order inventory retail value variance compared to last year in comparable stores.
Comp Max On Order Cost Var LY	Maximum end of period on order inventory cost value variance compared to last year in comparable stores.
Stock Turnover	Number of times the inventory stock has been turned over during the period. It is calculated by dividing the cost of goods sold by the amount of average stock at cost.
Stock to Sales	Ratio of the number of times owned inventory can fulfill sales for a given time period.
Weeks of Supply	Number of weeks that current inventory can fulfill sales. This measure helps to avoid inventory stock-outs and lost sales.
GMROI	An assessment of the money earned or lost to the amount of money invested. It indicates a retailer's ability to turn inventory into liquid cash above the cost of the inventory.
Tot Inv Qty	Projected owned inventory quantity.
Tot Inv Retail	Projected owned inventory retail amount.
Sell Through Qty	Ratio of the quantity of goods sold by a retailer to the quantity originally delivered during a period. Promotions or special advertising can help to increase the sell-through quantity.
Sell Through Retail	Ratio of the gross sales amount as a fraction of owned inventory for a given time period.
Clr Out of Stock %	Percentage of unique items on clearance that were out of stock.
Reg Out of Stock %	Percentage of regularly priced unique items that were out of stock as of the last batch run.
Tot Out of Stock %	Percentage of regularly priced and promotion unique items that were out of stock as of the last batch run.
Weeks of Supply last 30 Days	Number of weeks that current inventory can fulfill sales based on the last thirty days of inventory. This measure helps to avoid inventory stock-outs and lost sales.
Customer Order Reserved Units	Customer Order Reserved Units
Customer Back Order Reserved Units	Customer Back Order Reserved Units
EOH Customer Order Reserved Units	Ending on hand Customer Order Reserved Units
EOH Customer Back Order Reserved Units	Ending on hand Customer Back Order Reserved Units
Wholesale Inventory/Sales Ratio	Ratio of the number of times owned inventory can fulfill Wholesale sales for a given time period.
Wholesale Inventory Turns	Number of times the inventory stock has been turned over during the period. It is calculated by dividing the cost of goods sold by the amount of average Wholesale stock at cost.
Period Avg Inv Rtl Non-Mean	Average Inventory retail is used to estimate the retail amount of inventory that retailer has on hand over a period of time. This calculation is based on beginning and ending inventory balances for each week of the period.

**Table C-9 (Cont.) Inventory Position Metrics**

<b>Metric</b>	<b>Definition</b>
Quarter Avg Inv Rtl Non-Mean	Average Quarterly Inventory retail is used to estimate the retail amount of inventory that retailer has on hand for a Quarter. This calculation is based on beginning and ending inventory balances for each period of the quarter.
Period Avg Inv Cost Non-Mean	Average Inventory Cost is used to estimate the cost of inventory that retailer has on hand over a period of time. This calculation is based on beginning and ending inventory balances for each week of the period.
Quarter Avg Inv Cost Non-Mean	Average Quarterly Inventory Cost is used to estimate the cost of inventory that retailer has on hand for a Quarter. This calculation is based on beginning and ending inventory balances for each period of the quarter.
Weekly Avg Inv Rtl Non-Mean	Average Inventory retail is used to estimate the retail amount of inventory that retailer has on hand for a week. This calculation is based on beginning inventory balances for the period divided by numbers of weeks of the period.
Weekly Avg Inv Cost Non-Mean	Average Inventory cost is used to estimate the cost of inventory that retailer has on hand for a week. This calculation is based on beginning inventory balances for the period divided by numbers of weeks of the period.
Fiscal Sell Through	Defined as the quantity of goods that are planned to be sold. This can be derived from total quantity of received goods deducting net sales and adjustments.
Tot Inv Retail LY	Projected owned inventory retail amount.

## Retailer To Franchise

**Table C-10 Retailer to Franchise Metrics**

<b>Metric</b>	<b>Definition</b>
Tot Gross Sales Amt	Retail value of units sold to owned and wholesale/franchise locations. It can be tax inclusive or exclusive, depending on the RMS system option, but is exclusive of discounts.
Tot Return Amt	Retail value of units returned from owned and wholesale/franchise locations. It can be tax inclusive or exclusive, depending on the RMS system option, but is exclusive of discounts.
Tot Net Sales Amt	Difference of gross sales amount minus return amount for owned and wholesale/franchise locations.
Tot Gross Sales Qty	Quantity of units sold to owned and wholesale/franchise locations.
Tot Return Qty	Quantity of units returned from owned and wholesale/franchise locations.
Tot Net Sales Qty	Difference of gross sales quantity minus return quantity for owned and wholesale/franchise locations.
Tot Gross Tax	Tax incurred due to the sales amount for owned and wholesale/franchise locations.
Tot Return Tax	Tax incurred due to the return amount for owned and wholesale/franchise locations.
Tot Net Tax	Difference of gross tax amount minus return tax amount for owned and wholesale/franchise locations.
Tot Mkdn Qty	Markdown units sold at owned and wholesale/franchise locations.
Tot Mkup Qty	Marked up units sold at owned and wholesale/franchise locations.
Tot Gross Sales Amt LY	Last year's retail value of units sold to owned and wholesale/franchise locations. It can be tax inclusive or exclusive depending on the ORMS system option but is exclusive of discounts.

**Table C-10 (Cont.) Retailer to Franchise Metrics**

<b>Metric</b>	<b>Definition</b>
Tot Return Amt LY	Last year's quantity of units returned from owned and wholesale/franchise locations. It can be tax inclusive or exclusive depending on the RMS system option but is exclusive of discounts.
Tot Net Sales Amt LY	Last year's difference of gross sales amount minus return amount for owned and wholesale/franchise locations.
Tot Gross Sales Qty LY	Last year's quantity of units sold to owned and wholesale/franchise locations.
Tot Return Qty LY	Last year's quantity of units returned from owned and wholesale/franchise locations.
Tot Net Sales Qty LY	Last year's difference of gross sales quantity minus return quantity for owned and wholesale/franchise locations.
Tot Gross Tax LY	Last year's tax incurred due to the sales amount for owned and wholesale/franchise locations.
Tot Return Tax LY	Last year's tax incurred due to the return amount for owned and wholesale/franchise locations.
Tot Net Tax LY	Last year's difference of gross tax amount minus return tax amount for owned and wholesale/franchise locations.
Tot Mkdn Qty LY	Last year's markdown units sold at owned and wholesale/franchise locations.
Tot Mkup Qty LY	Last year's marked up units sold at owned and wholesale/franchise locations.
Tot Gross Sales Amt Var LY	Gross sales amount variance to last year for owned and wholesale/franchise locations.
Tot Return Amt Var LY	Return amount variance to last year for owned and wholesale/franchise locations.
Tot Net Sales Amt Var LY	Net sales amount variance to last year for owned and wholesale/franchise locations.
Tot Gross Sales Qty Var LY	Gross sales quantity variance to last year for owned and wholesale/franchise locations.
Tot Return Qty Var LY	Return quantity variance to last year for owned and wholesale/franchise locations.
Tot Net Sales Qty Var LY	Net sales quantity variance to last year for owned and wholesale/franchise locations.
Tot Gross Tax Var LY	Gross tax variance to last year for owned and wholesale/franchise locations.
Tot Return Tax Var LY	Return tax variance to last year for owned and wholesale/franchise locations.
Tot Net Tax Var LY	Net tax variance to last year for owned and wholesale/franchise locations.
Stockholding Franchise Gross Sales Amt	This is the retail value of units sold from stockholding franchise locations. It can be tax inclusive or exclusive depending on the ORMS system option but is exclusive of discounts.
Stockholding Franchise Return Amt	This is the quantity of units returned from stockholding franchise locations. It can be tax inclusive or exclusive depending on the ORMS system option but is exclusive of discounts.
Stockholding Franchise Net Sales Amt	This is the difference of gross sales amount minus return amount for stockholding franchise locations.
Stockholding Franchise Gross Sales Qty	This is the quantity of units sold for stockholding franchise locations.
Stockholding Franchise Return Qty	This is the quantity of units returned to stockholding franchise locations.
Stockholding Franchise Gross Sales Amt LY	This is the retail value of units sold from stockholding franchise locations for the last year. It can be tax inclusive or exclusive depending on the ORMS system option but is exclusive of discounts.

**Table C-10 (Cont.) Retailer to Franchise Metrics**

<b>Metric</b>	<b>Definition</b>
Stockholding Franchise Return Amt LY	This is the retail value of units returned from stockholding franchise locations for the last year. It can be tax inclusive or exclusive depending on the ORMS system option but is exclusive of discounts.
Stockholding Franchise Net Sales Amt LY	This is the retail value of units returned from stockholding franchise locations for the last year. It can be tax inclusive or exclusive depending on the ORMS system option but is exclusive of discounts.
Stockholding Franchise Gross Sales Qty LY	This is the quantity of units sold for stockholding franchise locations for the last year.
Stockholding Franchise Return Qty LY	This is the quantity of units returned to stockholding franchise locations for the last year.
NSF Avg Net Retail	Average retail price of sold items.
NSF Gross Sales Amt	This metric is the retail value of units sold by non-stockholding franchise locations, calculated by adding sale invoices. It includes VAT but excludes discounts.
NSF Return Amt	This metric is the retail value of units returned to non-stockholding franchise locations. It Indicates lost revenue that is credited back to customers. Retailers should find opportunities to convert this to new sales.
NSF Net Sales Amt	The sales amount excluding returns for non-stockholding franchise locations. It indicates the actual money amount received from sales.
NSF Gross Sales Qty	This metric is the total units of merchandise sold.
NSF Return Qty	This metric is the number of units returned to non-stockholding franchise locations.
NSF Net Sales Qty	This metric is the difference between gross sales quantity and returns quantity for non-stockholding franchise locations.
NSF Gross Tax	Tax applied on total sales revenue. Expenses are not deducted when calculating the tax amount.
NSF Return Tax	Taxes that have been accounted on returned merchandise.
NSF Net Tax	Taxes payable by a company at the end of fiscal year. It is gross tax less returns tax.
NSF Restock Fee	Value of the fee that is charged to wholesale/franchise customers by a retailer for the return of an item. A restock fee can be a flat fee or based on a percentage of the sale.
NSF Gross Acq Cost	Weighted average cost at the location that the inventory is being shipped from to wholesale/franchise customers.
NSF Return Acq Cost	Weighted average cost at the location that the inventory was being shipped from to wholesale/franchise customers for returned inventory.
NSF Net Acq Cost	Difference of gross acquisition cost amount minus return acquisition cost amount for shipped inventory to wholesale/franchise locations.
NSF Avg Net Retail LY	Last year's average retail price of sold items. This is calculated by deducting any taxes or expenses.
NSF Gross Sales Amt LY	Last year's retail value of units sold, calculated by adding sale invoices.
NSF Return Amt LY	This metric is the retail value of units returned to non-stockholding franchise locations. It Indicates lost revenue that is credited back to customers. Retailers should find opportunities to convert this to new sales.
NSF Net Sales Amt LY	Last year's sales amount excluding returns.
NSF Gross Sales Qty LY	Last year's retail value of units sold, calculated by adding sale invoices.
NSF Return Qty LY	This metric is the number of units returned to non-stockholding franchise locations.
NSF Net Sales Qty LY	Last year's difference between gross sales quantity and returns quantity.
NSF Gross Tax LY	Last year's tax applied on total sales revenue.

**Table C-10 (Cont.) Retailer to Franchise Metrics**

<b>Metric</b>	<b>Definition</b>
NSF Return Tax LY	Last year's taxes that have been accounted on returned merchandise.
NSF Net Tax LY	Last year's taxes payable by a company at the end of fiscal year.
NSF Restock Fee LY	Value of the fee that is charged to wholesale/franchise customers by a retailer for the return of an item. A restock fee can be a flat fee or based on a percentage of the sale.
NSF Gross Acq Cost LY	Last year's weighted average cost at the location that the inventory is being shipped from to wholesale/franchise customers.
NSF Return Acq Cost LY	Weighted average cost at the location that the inventory was being shipped from to wholesale/franchise customers for returned inventory.
NSF Net Acq Cost LY	Last year's difference of gross acquisition cost amount minus return acquisition cost amount for shipped inventory to wholesale/franchise locations.
NSF Gross Sales Amt Var LY	Gross sales amount variance compared to last year for wholesale/franchise locations.
NSF Return Amt Var LY	Return amount variance compared to last year for wholesale/franchise locations.
NSF Net Sales Amt Var LY	Net sales amount variance compared to last year for wholesale/franchise locations.
NSF Gross Sales Qty Var LY	Gross sales quantity variance compared to last year for wholesale/franchise locations.
NSF Return Qty Var LY	Return quantity variance compared to last year for wholesale/franchise locations.
NSF Net Sales Qty Var LY	Net sales quantity variance compared to last year for wholesale/franchise locations.
NSF Gross Tax Var LY	Gross tax variance compared to last year for wholesale/franchise locations.
NSF Return Tax Var LY	Return tax variance compared to last year for wholesale/franchise locations.
NSF Net Tax Var LY	Net tax variance compared to last year for wholesale/franchise locations.
Franchise Gross Mkdn Amt	This is the difference of original retail minus selling price for units sold that were on markdown and were booked at the time of sale to non-stockholding and stockholding franchise locations.
Franchise Return Mkdn Amt	This is the difference of original retail minus selling price for units returned that were on markdown and were booked at the time of sale to non-stockholding and stockholding franchise locations.
Franchise Net Mkdn Amt	This is the difference of gross markdown amount minus return markdown amount for non-stockholding franchise and stockholding franchise locations.
Franchise Gross Mkup Amt	This is the difference of selling price minus original retail for units sold that were on markup and were booked at the time of sale to non-stockholding franchise and stockholding franchise locations.
Franchise Return Mkup Amt	This is the difference of selling price minus original retail for units returned that were on markup and were booked at the time of sale to non-stockholding franchise and stockholding franchise locations.
Franchise Net Mkup Amt	This is the difference of gross markup amount minus return markup amount for non-stockholding franchise and stockholding franchise locations.
Franchise Mkdn Qty	Markdown units sold at a wholesale/franchise location. This includes units on clearance, promotion, and permanent markdown.
Franchise Mkup Qty	Marked up units sold at a wholesale/franchise location.
Franchise Return Mkdn Qty	Markdowns units returned at the wholesale/franchise location.
Franchise Return Mkup Qty	Marked up units returned at the wholesale/franchise location.

**Table C-10 (Cont.) Retailer to Franchise Metrics**

<b>Metric</b>	<b>Definition</b>
Franchise Gross Mkdn Amt LY	Last year's difference of original retail minus selling price for units sold that were on markdown and were booked at the time of sale to wholesale/franchise locations.
Franchise Return Mkdn Amt LY	Last year's difference of original retail minus selling price for units returned that were on markdown and were booked at the time of sale to wholesale/franchise locations.
Franchise Net Mkdn Amt LY	Last year's difference of gross markdown amount minus return markdown amount for wholesale/franchise locations.
Franchise Gross Mkup Amt LY	Last year's difference of selling price minus original retail for units sold that were on markup and were booked at the time of sale to wholesale/franchise locations.
Franchise Return Mkup Amt LY	Last year's difference of selling price minus original retail for units returned that were on markup and were booked at the time of sale to wholesale/franchise locations.
Franchise Net Mkup Amt LY	Last year's difference of gross markup amount minus return markup amount for wholesale/franchise locations.
Franchise Mkdn Qty LY	Last year's markdown units sold at a wholesale/franchise location. This includes units on clearance, promotion, and permanent markdown.
Franchise Mkup Qty LY	Last year's marked up units sold at a wholesale/franchise location.
Franchise Return Mkdn Qty LY	Last year's markdowns units returned at the wholesale/franchise location.
Franchise Return Mkup Qty LY	Last year's marked up units returned at the wholesale/franchise location.
Franchise Gross Mkdn Amt Var LY	Gross markdown amount variance compared to last year for wholesale/franchise locations.
Franchise Return Mkdn Amt Var LY	Return markdown amount variance compared to last year for wholesale/franchise locations.
Franchise Net Mkdn Amt Var LY	Net markdown amount variance compared to last year for wholesale/franchise locations.
Franchise Gross Mkup Amt Var LY	Gross markup amount variance compared to last year for wholesale/franchise locations.
Franchise Return Mkup Amt Var LY	Return markup amount variance compared to last year for wholesale/franchise locations.
Franchise Net Mkup Amt Var LY	Net markup amount variance compared to last year for wholesale/franchise locations.
Franchise Mkdn Qty Var LY	Markdown quantity variance compared to last year for wholesale/franchise locations. Retailers can use this KPI to align overall sales and profitability objectives for wholesale and franchisee locations.
Franchise Mkup Qty Var LY	Marked up quantity variance compared to last year for wholesale/franchise locations. Retailers can use this KPI to align overall sales and profitability objectives for wholesale and franchisee locations.
Franchise Return Mkdn Qty Var LY	Return markdown quantity variance compared to last year. Retailers can use this KPI to test the alignment of overall quality and return objectives for wholesale and franchisee locations.
Franchise Return Mkup Qty Var LY	Return marked up quantity variance compared to last year. Retailers can use this KPI to test the alignment of overall quality and return objectives for wholesale and franchisee locations.

## Price

**Table C-11 Price Metrics**

<b>Metric</b>	<b>Definition</b>
Price	Retail value for an item when it is sold in a singular quantity of the selling unit of measure. This metric is aggregated by the AVERAGE function.
Price LY	Last year's retail value for an item when it is sold in a singular quantity of the selling unit of measure. This metric is aggregated by the AVERAGE function.
Price Diff LY	Difference of this year's price minus last year's price.
Multi Unit Price	Retail value for an item when a multiple quantity is sold as a single unit. This metric is aggregated by the AVERAGE function.
Multi Unit Price LY	Last year's retail value for an item when a multiple quantity is sold as a single unit. This metric is aggregated by the AVERAGE function.
Multi Unit Price Diff LY	Difference of this year's multi-unit price minus last year's multi-unit price.
Std UOM Price	Retail value for an item when it is sold in a single quantity of the standard unit of measure.
Base Cost (Price)	Primary supplier's initial base cost prior to any deals or discounts for an item/location. This metric is aggregated by the AVERAGE function.
Base Cost (Price) LY	Last year's primary supplier's initial base cost prior to any deals or discounts for an item/location. This metric is aggregated by the AVERAGE function.

## Plan

**Table C-12 Plan Metrics**

<b>Metric</b>	<b>Definition</b>
OPC Sales Qty	Quantity of original merchandise financial plan sales.
OPC Sales Retail Amt	Retail value of original merchandise financial plan sales. This is tax inclusive. This is in primary currency.
OPC Sales Cost Amt	The cost value of original merchandise financial plan sales. This is tax inclusive. This is in primary currency.
OPC Tax Retail Amt	Retail value of original merchandise financial plan tax. This is in primary currency.
OPC Sales Tax Excluded Retail Amt	Retail value of original merchandise financial plan sales. This is tax exclusive. This is in primary currency.
OPC Profit Cost Amt	Value of original merchandise financial plan gross profit. Gross profit is calculated by the cost accounting method and is the difference of the retail value of sales minus the cost value of sales. This is in primary currency.
OPC BOH Cost Amt	The cost value of original merchandise financial plan owned inventory at the beginning of a time period. This is in primary currency.
OPC BOH Qty	Quantity of original merchandise financial plan owned inventory at the beginning of a time period.
OPC EOH Cost Amt	The cost value of original merchandise financial plan owned inventory at the end of a time period.
OPC EOH Qty	Quantity of original merchandise financial plan owned inventory at the end of a time period.
OPC Receipts Cost Amt	The cost value of original merchandise financial plan inventory received. This is in primary currency.
OPC Receipts Qty Amt	Quantity of original merchandise financial plan inventory received.

**Table C-12 (Cont.) Plan Metrics**

<b>Metric</b>	<b>Definition</b>
OPC Shrink Cost Amt	The cost value of original merchandise financial plan shrinkage. Shrinkage is an inventory event that reduces end of period inventory and may include events such as theft or cycle count adjustments. This is in primary currency.
OPC Shrink Qty	Quantity of original merchandise financial plan shrinkage. Shrinkage is an inventory event that reduces end of period inventory and may include events such as theft or cycle count adjustments.
OPC Misc Out Cost Amt	The cost value of original merchandise financial plan miscellaneous out. Miscellaneous out is an inventory event that reduces end of period inventory and may include events such as return to vendor (RTV). This is in primary currency.
OPC Misc Out Qty	Quantity of original merchandise financial plan miscellaneous out. Miscellaneous out is an inventory event that reduces end of period inventory and may include events such as return to vendor (RTV).
OPC Misc In Cost Amt	The cost value of original merchandise financial plan miscellaneous in. Miscellaneous in is an inventory event that increases end of period inventory and may include events such as store transfers. This is in primary currency.
OPC Misc In Cost Qty	Quantity of original merchandise financial plan miscellaneous in. Miscellaneous in is an inventory event that increases end of period inventory and may include events such as store transfers.
OPC Devaluation Cost Amt	The cost value of original merchandise financial plan devaluation. Devaluation is an adjustment in cost accounting that decreases inventory cost.
CPC Sales Qty	Quantity of current merchandise financial plan sales.
CPC Sales Retail Amt	Retail value of current merchandise financial plan sales. This is tax inclusive. This is in primary currency.
CPC Sales Cost Amt	The cost value of current merchandise financial plan sales. This is tax inclusive. This is in primary currency.
CPC Tax Retail Amt	Retail value of current merchandise financial plan tax. This is in primary currency.
CPC Sales Tax Excluded Retail Amt	Retail value of current merchandise financial plan sales. This is tax exclusive. This is in primary currency.
CPC Profit Cost Amt	Value of current merchandise financial plan gross profit. Gross profit is calculated by the cost accounting method and is the difference of the retail value of sales minus the cost value of sales. This is in primary currency.
CPC BOH Cost Amt	The cost value of current merchandise financial plan owned inventory at the beginning of a time period. This is in primary currency.
CPC BOH Qty	Quantity of current merchandise financial plan owned inventory at the beginning of a time period.
CPC EOH Cost Amt	The cost value of current merchandise financial plan owned inventory at the end of a time period.
CPC EOH Qty	Quantity of current merchandise financial plan owned inventory at the end of a time period.
CPC Receipts Cost Amt	The cost value of current merchandise financial plan inventory received. This is in primary currency.
CPC Receipts Qty Amt	Quantity of current merchandise financial plan inventory received.
CPC Shrink Cost Amt	The cost value of current merchandise financial plan shrinkage. Shrinkage is an inventory event that reduces end of period inventory and may include events such as theft or cycle count adjustments. This is in primary currency.
CPC Shrink Qty	Quantity of current merchandise financial plan shrinkage. Shrinkage is an inventory event that reduces end of period inventory and may include events such as theft or cycle count adjustments.

**Table C-12 (Cont.) Plan Metrics**

<b>Metric</b>	<b>Definition</b>
CPC Misc Out Cost Amt	The cost value of current merchandise financial plan miscellaneous out. Miscellaneous out is an inventory event that reduces end of period inventory and may include events such as return to vendor (RTV). This is in primary currency.
CPC Misc Out Qty	Quantity of current merchandise financial plan miscellaneous out. Miscellaneous out is an inventory event that reduces end of period inventory and may include events such as return to vendor (RTV).
CPC Misc In Cost Amt	The cost value of current merchandise financial plan miscellaneous in. Miscellaneous in is an inventory event that increases end of period inventory and may include events such as store transfers. This is in primary currency.
CPC Misc In Cost Qty	Quantity of current merchandise financial plan miscellaneous in. Miscellaneous in is an inventory event that increases end of period inventory and may include events such as store transfers.
CPC Devaluation Cost Amt	The cost value of current merchandise financial plan devaluation. Devaluation is an adjustment in cost accounting that decreases inventory cost.
OPR Reg Sales Retail Amt	Retail value of original merchandise financial plan regular sales. This is tax inclusive. This is in primary currency.
OPR Pro Sales Retail Amt	Retail value of original merchandise financial plan promotion sales. This is tax inclusive. This is in primary currency.
OPR Clr Sales Retail Amt	Retail value of original merchandise financial plan clearance sales. This is tax inclusive. This is in primary currency.
OPR Reg Sales Qty	Quantity of original merchandise financial plan regular sales.
OPR Pro Sales Qty	Quantity of original merchandise financial plan promotion sales.
OPR Clr Sales Qty	Quantity of original merchandise financial plan clearance sales.
OPR Tax Retail Amt	Retail value of original merchandise financial plan tax. This is in primary currency.
OPR Sales Tax Excluded Retail Amt	Retail value of original merchandise financial plan sales. This is tax exclusive. This is in primary currency.
OPR Margin Retail Amt	Value of original merchandise financial plan gross margin. Gross margin is calculated by the retail accounting method and is the difference of the retail value of sales excluding taxes minus the cost of goods sold. This is in primary currency.
OPR COGS Cost Amt	Value of original merchandise financial plan cost of goods sold. This is in primary currency.
OPR Pmt Mkdn Retail Amt	Retail value of original merchandise financial plan permanent markdown. Permanent markdown is due to an irrevocable price change that is booked immediately at the corporate level. It is the difference of the original retail minus the selling price. This is in primary currency.
OPR Pro Mkdn Retail Amt	Retail value of original merchandise financial plan promotion markdown. Promotion markdown is due to a temporary price change at a location and is booked at the time of the sale. It is the difference of the original retail minus the selling price. This is in primary currency.
OPR Clr Mkdn Retail Amt	Retail value of original merchandise financial plan clearance markdown. Clearance markdown is due to a permanent price change that occurs to close out inventory and is booked immediately at the corporate level. It is the difference of the original retail and the selling price. This is in primary currency.
OPR Mkup Retail Amt	Retail value of original merchandise financial plan markup. Markup is the difference of the selling price minus the original retail. This is in primary currency.
OPR BOH Cost Amt	The cost value of original merchandise financial plan owned inventory at the beginning of a time period. This is in primary currency.
OPR BOH Retail Amt	Retail value of original merchandise financial plan owned inventory at the beginning of a time period. This is in primary currency.

**Table C-12 (Cont.) Plan Metrics**

<b>Metric</b>	<b>Definition</b>
OPR BOH Qty	Quantity of original merchandise financial plan owned inventory at the beginning of a time period.
OPR EOH Cost Amt	The cost value of original merchandise financial plan owned inventory at the end of a time period.
OPR EOH Retail Amt	Retail value of original merchandise financial plan owned inventory at the end of a time period. This is in primary currency.
OPR EOH Qty	Quantity of original merchandise financial plan owned inventory at the end of a time period.
OPR Receipts Cost Amt	The cost value of original merchandise financial plan inventory received. This is in primary currency.
OPR Receipts Retail Amt	Retail value of original merchandise financial plan inventory received. This is in primary currency.
OPR Receipts Qty	Quantity of original merchandise financial plan inventory received.
OPR Shrink Retail Amt	Retail value of original merchandise financial plan shrinkage. Shrinkage is an inventory event that reduces end of period inventory and may include events such as theft or cycle count adjustments. This is in primary currency.
OPR Shrink Qty	Quantity of original merchandise financial plan shrinkage. Shrinkage is an inventory event that reduces end of period inventory and may include events such as theft or cycle count adjustments.
OPR Misc Out Retail Amt	Retail value of original merchandise financial plan miscellaneous out. Miscellaneous out is an inventory event that reduces end of period inventory and may include events such as return to vendor (RTV). This is in primary currency.
OPR Misc Out Qty	Quantity of original merchandise financial plan miscellaneous out. Miscellaneous out is an inventory event that reduces end of period inventory and may include events such as return to vendor (RTV).
OPR Misc In Retail Amt	Retail value of original merchandise financial plan miscellaneous in. Miscellaneous in is an inventory event that increases end of period inventory and may include events such as store transfers. This is in primary currency.
OPR Misc In Qty	Quantity of original merchandise financial plan miscellaneous in. Miscellaneous in is an inventory event that increases end of period inventory and may include events such as store transfers.
CPR Reg Sales Retail Amt	Retail value of current merchandise financial plan regular sales. This is tax inclusive. This is in primary currency.
CPR Pro Sales Retail Amt	Retail value of current merchandise financial plan promotion sales. This is tax inclusive. This is in primary currency.
CPR Clr Sales Retail Amt	Retail value of current merchandise financial plan clearance sales. This is tax inclusive. This is in primary currency.
CPR Reg Sales Qty	Quantity of current merchandise financial plan regular sales.
CPR Pro Sales Qty	Quantity of current merchandise financial plan promotion sales.
CPR Clr Sales Qty	Quantity of current merchandise financial plan clearance sales.
CPR Tax Retail Amt	Retail value of current merchandise financial plan tax. This is in primary currency.
CPR Sales Tax Excluded Retail Amt	Retail value of current merchandise financial plan sales. This is tax exclusive. This is in primary currency.
CPR Margin Retail Amt	Value of current merchandise financial plan gross margin. Gross margin is calculated by the retail accounting method and is the difference of the retail value of sales excluding taxes minus the cost of goods sold. This is in primary currency.

**Table C-12 (Cont.) Plan Metrics**

<b>Metric</b>	<b>Definition</b>
CPR COGS Cost Amt	Value of current merchandise financial plan cost of goods sold. This is in primary currency.
CPR Pmt Mkdn Retail Amt	Retail value of current merchandise financial plan permanent markdown. Permanent markdown is due to an irrevocable price change that is booked immediately at the corporate level. It is the difference of the original retail minus the selling price. This is in primary currency.
CPR Pro Mkdn Retail Amt	Retail value of current merchandise financial plan promotion markdown. Promotion markdown is due to a temporary price change at a location and is booked at the time of the sale. It is the difference of the original retail minus the selling price. This is in primary currency.
CPR Clr Mkdn Retail Amt	Retail value of current merchandise financial plan clearance markdown. Clearance markdown is due to a permanent price change that occurs to close out inventory and is booked immediately at the corporate level. It is the difference of the original retail minus the selling price. This is in primary currency.
CPR Mkup Retail Amt	Retail value of current merchandise financial plan markup. Markup is the difference of the selling price minus the original retail. This is in primary currency.
CPR BOH Cost Amt	The cost value of current merchandise financial plan owned inventory at the beginning of a time period. This is in primary currency.
CPR BOH Retail Amt	Retail value of current merchandise financial plan owned inventory at the beginning of a time period. This is in primary currency.
CPR BOH Qty	Quantity of current merchandise financial plan owned inventory at the beginning of a time period.
CPR EOH Cost Amt	The cost value of current merchandise financial plan owned inventory at the end of a time period.
CPR EOH Retail Amt	Retail value of current merchandise financial plan owned inventory at the end of a time period. This is in primary currency.
CPR EOH Qty	Quantity of current merchandise financial plan owned inventory at the end of a time period.
CPR Receipts Cost Amt	The cost value of current merchandise financial plan inventory received. This is in primary currency.
CPR Receipts Retail Amt	Retail value of current merchandise financial plan inventory received. This is in primary currency.
CPR Receipts Qty	Quantity of current merchandise financial plan inventory received.
CPR Shrink Retail Amt	Retail value of current merchandise financial plan shrinkage. Shrinkage is an inventory event that reduces end of period inventory and may include events such as theft or cycle count adjustments. This is in primary currency.
CPR Shrink Qty	Quantity of current merchandise financial plan shrinkage. Shrinkage is an inventory event that reduces end of period inventory and may include events such as theft or cycle count adjustments.
CPR Misc Out Retail Amt	Retail value of current merchandise financial plan miscellaneous out. Miscellaneous out is an inventory event that reduces end of period inventory and may include events such as return to vendor (RTV). This is in primary currency.
CPR Misc Out Qty	Quantity of current merchandise financial plan miscellaneous out. Miscellaneous out is an inventory event that reduces end of period inventory and may include events such as return to vendor (RTV).
CPR Misc In Retail Amt	Retail value of current merchandise financial plan miscellaneous in. Miscellaneous in is an inventory event that increases end of period inventory and may include events such as store transfers. This is in primary currency.

**Table C-12 (Cont.) Plan Metrics**

<b>Metric</b>	<b>Definition</b>
CPR Misc In Qty	Quantity of current merchandise financial plan miscellaneous in. Miscellaneous in is an inventory event that increases end of period inventory and may include events such as store transfers.
Tot Pmt Mkdn Amt Var CPR%	Variance of permanent Markdown value of inventory to Current Plan Markdown Retail Amt.
Tot Pro Mkdn Amt Var CPR%	Variance of promotional Markdown value of inventory to Current Plan Promotional Markdown Retail Amt.
Tot Clr Mkdn Amt Var CPR%	Variance of actual Clearance Markdown value of inventory to Current Plan Clearance Markdown Retail Amt.
Tot Reg Sales Amt Var CPR%	Variance of regular Sales Amount to Current Plan Regular Sales Amt.
Tot Profit Var CP%	Variance of gross Profit to Current Plan Current Plan Profit Amt.
Tot Sales Cost Amt Var CP%	Variance of sales Cost Amt it to Current Plan Sales Cost Amt.
Tot Sales Qty Var CP%	Variance of gross Sales Qty it to Current Plan Sales Qty
Tot Receipts Retail Amt Var CP%	Variance of receipt Retail Amount it to Current Plan Receipts Retail Amt.
Tot EOH Inv Retail Amt Var CPR%	Variance of EOH inventory retail to Current Plan to EOH Retail Amt.
Tot EOH Inv Cost Amt Var CPR%	Variance of EOH inventory cost to Current Plan to EOH Cost Amt.
Planned Monthly Forward Cover	Planned Monthly Forward Cover is calculated as of BOH Retail for the planned period divided by the average planned promotion, clearance and regular sales amount for weeks of next period.
Planned Quarterly Forward Cover	Planned Quarterly Forward cover is calculated as of BOH Retail for a quarter divided by the average of Promotion, Clearance and Regular sales amount for next quarter.
Monthly Forward Cover LY	Last Year Monthly Forward Cover is calculated as of last year's BOH Retail for the planned period divided by the average planned promotion, clearance and regular sales amount for weeks of last year next period.
Quarterly Forward Cover LY	Last Year Quarterly Forward cover is calculated as BOH Retail LY for a quarter divided by the average of Promotion, Clearance and Regular sales amount for the next quarter.

## Stock Ledger

**Table C-13 Stock Ledger Metrics**

<b>Metric</b>	<b>Definition</b>
SL Franchise Mkup Retail	Extra amount a retailer charges a franchise customer for an item, over and above what the retailer paid the supplier. This is the difference between the selling price and original retail.
SL Adjusted COGS Cost	Cost value of the adjustment made to the cost of goods sold (COGS) due to differences in book stock and the physical count of inventory.
SL Adjusted COGS Retail	Retail value of the adjustment made to the cost of goods sold (COGS) due to differences in book stock and the physical count of inventory.
SL BOH Cost	Cost value of owned inventory units at the beginning of the reporting period. This includes inventory for pack component items.

**Table C-13 (Cont.) Stock Ledger Metrics**

<b>Metric</b>	<b>Definition</b>
SL BOH Retail	Retail value of owned inventory units at the beginning of the reporting period. This includes inventory for pack component items.
SL Cash Disc	Discount credited by vendors. This will increase gross margin.
SL Clr Mkdn Amt	Amount of reduction to the original selling price for reasons such as decline in overall prices of goods, excessive competition, special sale, damaged merchandise, or excess supply.
SL Cost Var Amt	Used in the cost method of accounting to record the standard cost change as well as the cost difference between standard cost and transaction cost for transactions such as receiving, RTV and transfers.
SL Deal Income Purchase Amt	Amount billed back to a supplier from a deal. This is invoiced at the time inventory is purchased.
SL Deal Income Sales Amt	Amount billed back to a supplier from a deal. This is invoiced at the time inventory is sold.
SL Emp Disc	Retail value of the employee discount incurred due to a sale. This amount is subtracted from the sales amount sub-total to obtain the final sales value.
SL EOH Cost	Cost value of owned inventory units at the end of the reporting period. This includes inventory for pack component items.
SL EOH Retail	Retail value of owned inventory units at the end of the reporting period. This includes inventory for pack component items.
SL Freight Cost	Cost of moving goods from one location to another and may include charges for packing, documenting, loading, unloading, transportation, insurance and other costs.
SL Freight Claim Cost	Cost value of lost or damaged freight inventory that is being submitted as a claim to recoup the monetary amount lost.
SL Freight Claim Retail	Retail value of lost or damaged freight inventory that is being submitted as a claim to recoup the monetary amount lost.
SL GAFS Cost	Cost value of goods available for sale. This is used in the retail method of accounting.
SL GAFS Retail	Retail value of goods available for sale.
SL Gross Profit	Difference between sales revenue and the cost of units sold. It indicates the retailer's ability to mark up merchandise for sale.
SL IC Profit	Change in margin/profit due to an intercompany transfer. This is a result of the price variance between the shipping location and receiving location.
SL IC Tsf In Cost	Cost value of merchandise that has been intercompany transferred into a subclass/location.
SL IC Tsf In Retail	Retail value of merchandise that has been intercompany transferred into a subclass/location.
SL IC Tsf Out Cost	Cost value of merchandise that has been intercompany transferred out of a subclass/location.
SL IC Tsf Out Retail	Retail value of merchandise that has been intercompany transferred out of a subclass/location.
SL Margin Costs Var Amt	New cost variance using cost method of accounting.
SL Mkdn Cancelled Amt	Value of a clearance markdown amount that has been cancelled.
SL Mkup Amt	Extra amount a retailer charges a customer for an item, over and above what the retailer paid the supplier. This is the difference between the selling price and original retail.
SL Mkup Cancelled Amt	Value of the total markup amount that has been cancelled. A markup cancellation is used to correct an unintentional error in a previous markup.

**Table C-13 (Cont.) Stock Ledger Metrics**

<b>Metric</b>	<b>Definition</b>
SL Pmt Mkdn Amt	Amount of permanent reduction to the selling price of inventory. This type of markdown is used to remove slow-selling merchandise or replace out-of-date merchandise.
SL Pro Mkdn Amt	Amount of temporary reduction to a selling price to boost sales. This markdown is normally for a specified period of time, at the end of which the product price is raised back to the normal selling price.
SL Receipts Cost	Cost value of inventory units received.
SL Receipts Retail	Retail value of inventory units received.
SL Reclass In Cost	Cost value of merchandise that has been reclassified into a subclass/location.
SL Reclass In Retail	Retail value of merchandise that has been reclassified into a subclass/location.
SL Reclass Out Cost	Cost value of merchandise that has been reclassified out of a subclass/location.
SL Reclass Out Retail	Retail value of merchandise that has been reclassified out of a subclass/location.
SL Restock Fee	Fee that is charged to a customer for the return of an item. A restock fee can be a flat fee or based on a percentage of the sale.
SL Return Cost	Cost value of units returned. It Indicates lost revenue that is credited back to customers. Retailers should find opportunities to convert this to new sales.
SL Return Retail	Retail value of units returned. It Indicates lost revenue that is credited back to customers. Retailers should find opportunities to convert this to new sales.
SL RTV Cost	Cost value of inventory units that have been returned to the vendor.
SL RTV Retail	Retail value of inventory units that have been returned to the vendor.
SL Sales Cost	Cost value of units sold, calculated by adding sale invoices. It includes VAT but excludes discounts.
SL Sales Retail	Retail value of units sold, calculated by adding sale invoices. It includes VAT but excludes discounts.
SL Sales VAT Exclusive Retail	Retail value of units sold, calculated by adding sale invoices. It excludes VAT and discounts.
SL Shrink Cost	Cost value of inventory lost through means other than a sale. This is the difference between actual physical inventory counts and the amount of inventory reflected in the stock ledger.
SL Shrink Retail	Retail value of inventory lost through means other than a sale. This is the difference between actual physical inventory counts and the amount of inventory reflected in the stock ledger.
SL SOH Adjusted Retail	Retail value of an adjustment to stock on hand due to differences in book stock and the physical count of inventory.
SL Tsf In Cost	Cost value of merchandise that has been transferred into a subclass/location.
SL Tsf In Retail	Retail value of merchandise that has been transferred into a subclass/location.
SL Tsf Out Cost	Cost value of merchandise that has been transferred out of a subclass/location.
SL Tsf Out Retail	Retail value of merchandise that has been transferred out of a subclass/location.
SL Upcharge Expense	Cost incurred by the origin location to transfer merchandise to another location.
SL Upcharge Profit	Profit gained from an up charge due to an intercompany transfer.
SL WO Post Fin Cost	Cost value of merchandise required work order activity - post to financial for intercompany transfers.
SL WO Update Inv Cost	Cost value of merchandise required work order activity - update inventory for intercompany transfers.

**Table C-13 (Cont.) Stock Ledger Metrics**

<b>Metric</b>	<b>Definition</b>
SL Workroom Cost	Cost of value added services to make merchandise available for sale.
SL Franchise Mkdn Retail	Amount of reduction to the selling price of inventory for a franchise customer.
SL Franchise Restock Fee	Fee that is charged to franchise/franchise customers by a retailer for the return of an item. A restock fee can be a flat fee or based on a percentage of the sale.
SL Franchise Return Cost	Cost value of units returned from a franchise location. It Indicates lost revenue that is credited back to customers. Retailers should find opportunities to convert this to new sales.
SL Franchise Return Retail	Retail value of units returned from a franchise location. It Indicates lost revenue that is credited back to customers. Retailers should find opportunities to convert this to new sales.
SL Franchise Sales Cost	Cost value of units sold to franchise locations, calculated by adding sale invoices. It includes VAT but excludes discounts.
SL Franchise Sales Retail	Retail value of units sold to franchise locations, calculated by adding sale invoices. It includes VAT but excludes discounts.
SL IC Mkdn Amt	Reduction in price due to an intercompany transfer. This occurs when the shipping location price is greater than the receiving location price.
SL IC Mkup Amt	Increase in price due to an intercompany transfer. This occurs when the shipping location price is lesser than the receiving location price.
SL Tsf In Book Cost	Cost value of merchandise that has been book transferred into a subclass/location.
SL Tsf In Book Retail	Retail value of merchandise that has been book transferred into a subclass/location.
SL Tsf Out Book Cost	Cost value of merchandise that has been book transferred out of a subclass/location.
SL Tsf Out Book Retail	Retail value of merchandise that has been book transferred out of a subclass/location.
SL VAT In	Input VAT which is VAT charged by a supplier to the retailer.
SL VAT Out	Output VAT which is VAT charged by a business to a customer.
SL Weight Var Retail	Retail variance due to variance in weight for catchweight items.
SL Cum Mkon Pct	Amount added to the cost to determine the selling price and is stated as a fraction of the selling price. This is used in the retail method of accounting.
SL Gross Sales Qty	Total units of merchandise sold.

## Dimension

**Table C-14 Dimension Metrics**

<b>Metric</b>	<b>Definition</b>
Item Count	This is a count of unique items on a sales transaction. If multiple quantities of an item are purchased, the item will be counted only once.
Item OOS Count	This is the count of all items which are out of stock. This metrics is used to derive other metrics.

## Affinity

**Table C-15 Affinity Metrics**

<b>Metric</b>	<b>Definition</b>
% Support for Rule	Given an association rule such that if X then Y, Support is the frequency in which, out of all transactions, that the customer purchased both X and Y.
Rule Confidence	Given an association rule such that if X then Y, Confidence is the estimated probability that Y will be purchased in the same transactions where a customer has purchased X, expressed as a percentage.
Affinity Reverse Confidence	Given an association rule such that if X then Y, Reverse Confidence is the estimated probability that X will be purchased in the same transactions where a customer has purchased Y, expressed as a percentage.
% Market Basket Sales	The percentage of sales the items on the given association rules contributed to total sales for a specified time period.
Total Basket Sales Value	The total revenue for all items, in all transactions which were mined.
Antecedent Sales Value	The revenue generated by IF items on the given association rules.
Antecedent Sales Qty	The units sold from IF subclasses on the given association rules.
Target Sales Value	The revenue generated by THEN items on the given association rules.
Avg Sales per Affinity MB	The average revenue for all items in a given association rule, for the transactions where a customer has purchased all the items of the rule.
Avg Profit per Affinity MB	The average profit for all items in a given association rule, for the transactions where a customer has purchased all the items of the rule.
Avg Qty per Affinity MB	The average number of units sold of all the items in a given association rule, for the transactions where a customer has purchased all the items of the rule.
MB Total Trx Count	Count of transactions which were mined.
Total Trx Count	Count of transactions regardless of mining.
Rule Trx Count	Count of transactions in which the customer has purchased all the items of the rule.
Avg Weekly Basket Sales Value	The average weekly sales value from IF and THEN components. This metric is calculated based on all transactions that contained the specified rule, for the period and location that was mined.
Avg Weekly Target Sales Value	The average weekly sales value of THEN components. This metric is calculated based on all transactions that contained the specified rule, for the period and location that was mined.
Antecedent Profit	The sum of profit for the IF components of the rule, from transactions which contain the rule.
Target Profit	The sum of profit for the THEN components of the rule, from transactions which contain the rule.
MB Total Profit	The sum of profit for both the IF and THEN components of the rule, from transactions which contain the rule.
Total Profit	The sum of profit from all transactions regardless of mining.
Avg MB Unit Qty	Average basket size of transactions that were mined, expressed as number of units per transaction.
Basket Component Count	Count of items that participate in the rule definition, inclusive of items in the IF and THEN side of the rule.

## Customer

**Table C-16 Customer Metrics**

<b>Metric</b>	<b>Definition</b>
% Pro Discount Amt by Sales	This is a ratio of Pro Discount Amount to Total Sales for a specific customer segment, geography, RFM score, or gender.
Avg Gross Profit per Basket	This is an average across all transactions of the Gross Profit Amount fact column for the relevant time frame of the report. It is important to have Customer Type available for this metric.
Avg Gross Sales per Basket	This is an average across all transactions for the customers in specific geography, or segment, as grouped together by the template, of the Gross Sales Amount fact column for the relevant time frame of the report.
Avg Item Count per Basket (by Cust Type)	Average items per market basket for a specific customer type. Calculated by number of items divided by number of transactions, in other words: count (item)/count (distinct transactions).
Avg Net Sales per Basket	This is an average across all transactions of the Net Sales Amount fact column for the relevant time frame of the report.
Avg Sales Amount per Customer	Average sales amount per customer.
Avg Sales Quantity per Customer	Average sales quantity per customer.
Avg Trx Count per Customer	Average transaction count per customer.
Known Customer Count	Count of unique customers.
Segment Percent Return Amount	This is a ratio of Return Amount to Total Sales for a specific customer segment or geography.
Total Trx	Total Transactions is the total number of transactions carried out at a retailer's stores by all customers.
Trx % to Total Trx (by Cust Type)	Transaction for a specific customer type as a ratio of all the transactions. This is calculated by (Trxn for customer type/total transactions)*100.

## Promotion

**Table C-17 Promotion Metrics**

<b>Metric</b>	<b>Definition</b>
Pro Campaign Cost	Actual cost incurred to execute a promotion campaign.
Fcst Pro Sales Amt	Value of promotion sales that have been forecast for the given timeframe.
Fcst Pro Sales Qty	Quantity of promotion sales units that have been forecast for the given timeframe.
Fcst Pro Gross Profit	Forecasted gross profit from promotion sales.
Fcst Gross Pro Profit to Fcst Sales Amt %	Ratio of promotion profit achieved on total promotion sales. The ratio reflects a company's ability to balance its costs with sales. It is a key performance indicator of a company's efficiency and performance.
Fcst Pro Trx Count	Count of forecast sales transactions that contain promoted items.
Fcst Pro Disc	Forecast discount from promotion sales.
Fcst Pro Loc Count	Count of forecast stores yielding promotion sales.
Fcst Pro Count	Count of forecast promotions for the given timeframe.

**Table C-17 (Cont.) Promotion Metrics**

<b>Metric</b>	<b>Definition</b>
Pro Sales Amt Var Fcst Sales %	Gross promotion sales amount variance compared to the forecast promotion sales.
Pro Sales Unit Var Fcst %	Gross promotion sales quantity variance compared to the forecast promotion quantity.
Pro Gross Profit Var Fcst %	Gross promotion profit variance compared to the forecast promotion profit.
Pro Trx Var Fcst %	Gross promotion sales transaction count variance compared to the forecast promotion sales transaction count.
Pro Disc Amt Var Fcst %	Gross promotion discount variance compared to the forecast promotion discount.
Pro Campaign Budget Requested	Amount of budget requested to execute a promotion campaign.
Pro Campaign Budget Assigned	Amount of budget granted to execute a promotion campaign.
Pro Campaign Budget Var Cost	Promotion campaign assigned budget variance compared to the actual cost of executing the promotion campaign.
Pro Campaign Budget Var Requested	Promotion campaign assigned budget variance compared to the requested budget
Pro Campaign Requested Var Cost	Promotion campaign requested budget variance compared to the actual cost of executing the promotion campaign.
Pro Days Count	Number of days an item is on promotion.
Pro Sales % to Total Sales	Promotion sales amount as a percentage of total sales.
Baseline Sales Amt	Estimated baseline sales value generated by the promotion item before and after the promotion period.
Baseline Qty	Estimated baseline units of advertised items in offer during the advertisement period.
Baseline Profit	Estimated baseline profit generated by the advertised item during the advertisement period.
Sales Lift to Sales Fcst Qty%	Incremental sales amount as a percent of forecast sales amount.
Sales Lift to Pro Fcst %	Incremental sales amount as a percent of actual promotion sales amount.
Sales Lift Amt	Additional sales value generated by an item as a result of an advertisement event, compared with the estimated baseline sales value.
Sales Lift Amt %	Sales lift value as a percentage of baseline sales value.
Incremental Profit	Additional profit during an advertisement event of the promoted item, plus additional profit generated by non-promoted items allocated to the advertised item, compared to estimated baseline profit.
Incremental Profit Lift %	Promotion profit by an advertised item against baseline profit, the percentage change in profit over baseline due to an advertisement event.
Sales Lift Qty	Additional sales units generated by an item as a result of an advertisement event, compared with the estimated baseline sales units.
Sales Lift Qty %	Sales lift units as a percentage of baseline sales units.
Item Baseline Count	Estimated count of baseline transactions that contain the item during the period of baseline weeks used for that promotion event.
Incr Item Count	Variance between Item Baseline Count and the average transaction count during the period of baseline weeks used for that promotion event.

**Table C-17 (Cont.) Promotion Metrics**

<b>Metric</b>	<b>Definition</b>
Item Promo Count Lift	Count of item promotion transactions compared to estimated baseline transactions, giving a percentage change in promotion count over baseline due to a promotion event.
Sales Lift to Pro Sales%	Incremental sales amount as a percent of actual promotion sales amount.
Item Promo Lift Count	Count of item promo transactions compared to estimated baseline transactions, giving a percentage change in promo count over baseline due to promo event.

## Trial and Repeat

**Table C-18 Trial and Repeat Metrics**

<b>Metric</b>	<b>Definition</b>
Trial Count	Count of distinct purchases by Customer Household and day, for the first time a customer buys the item in the time frame requested on the report. All those household counts are summed into this "Trial Purchase Count".
Repeat 1 Count	Count of first repeat purchase by Customer Household, for the first time a customer buys the item in the time frame requested on the report, after the trial purchase. All those household counts are summed into this "Repeat 1 Count". <ul style="list-style-type: none"> <li>• <b>Design note:</b> The counting logic should group purchases by Customer Household/Item/Day. For instance, the first purchase on day 1 of week 1 by Customer1, followed by a second purchase on day 2 of week 1 by Customer 2, would count as "1 trial purchase in wk1 and 1 repeat 1 purchase in wk1. • Note if Customer Household is not available as a grouping mechanism of Customers in RA 13.3, then this report name and logic should be changed to just group by individual customers, i.e. "Trial &amp; Repeat Purchases by Customers" report</li> </ul>
Repeat 2 Count	Count of second repeat purchase by Customer Household, for the second time a customer buys the item in the time frame requested on the report, after the trial purchase. All those household counts are summed into this "Repeat 2 Count".
Repeat 3 Count	Count of third repeat purchase by Customer Household, for the third time a customer buys the item in the time frame requested on the report, after the trial purchase. All those household counts are summed into this "Repeat 3 Count".
Repeat 4 Count	Count of fourth repeat purchase by Customer Household, for the fourth time a customer buys the item in the time frame requested on the report, after the trial purchase. All those household counts are summed into this "Repeat 4 Count".
Repeat 5+ Count	Count of fifth and greater repeat purchase by Customer Household, for the fifth or greater time a customer buys the item in the time frame requested on the report, after the trial purchase. All those household counts are summed into this "Repeat 5+ Count".

## Offer

**Table C–19 Offer Metrics**

<b>Metric</b>	<b>Definition</b>
Total Offers Count	Count of unique offers sent to various customers for a specific promotion component.
Redeemed Offer Count	Count of distinct transactions attributed to the promotion component. This indicates reach of this promotion component.
Offer Redemption Rate	This is actual redemption rate, based on sales transactions flagged as having a promotion discount.
Offer Redemption Rate Var Fcst%	Represents the difference between the actual and forecasted rate as of the as a percentage of the forecasted rate.

## Customer Order

**Table C–20 Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Reserved Units	This metric is the inventory units that are currently approved for transfer between two locations.
CO Backorder Reserved Units	This metric is the inventory units that are currently approved for transfer between two locations and are in backorder status.
CO EOH Reserved Units	This metric is the ending on hand inventory that is currently approved for transfer between two locations.
CO EOH Backorder Reserved Units	This metric is the ending on hand inventory that is currently approved for transfer between two locations and is in backorder status.
CO Demand Qty	This metric is the number of customer order units.
CO Demand Qty LW	This metric is the number of customer order units for last week.
CO Demand Qty LY	This metric is the number of customer order units for last year.
CO Demand Qty WTD	This metric is the customer order units for week-to-date.
CO Demand Qty MTD	This metric is the customer order units for month-to-date.
CO Demand Qty QTD	This metric is the customer order units for quarter-to-date.
CO Demand Qty YTD	This metric is the customer order units for year-to-date.
CO Demand Qty LY WTD	This metric is the customer order units for last year week-to-date.
CO Demand Qty LY MTD	This metric is the customer order units for the last year month-to-date.
CO Demand Qty LY QTD	This metric is the customer order units for last year quarter-to-date.
CO Demand Qty LY YTD	This metric is the customer order units for last year year-to-date.
CO Demand Retail Amt	This metric is the retail value of the customer order.
CO Demand Retail Amt LW	This metric is the retail value of the customer order for last week.
CO Demand Retail Amt LY	This metric is the retail value of the customer order for last year.
CO Demand Retail Amt WTD	This metric is the retail value of the customer order items for week to date.
CO Demand Retail Amt MTD	This metric is the customer order quantity retail value for month-to-date.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Demand Retail Amt QTD	This metric is the customer order quantity retail value for quarter-to-date.
CO Demand Retail Amt YTD	This metric is the customer order quantity retail value for year-to-date.
CO Demand Retail Amt LY WTD	This metric is the customer order quantity retail value for last year week-to-date.
CO Demand Retail Amt LY MTD	This metric is the customer order quantity retail value for last year month-to-date.
CO Demand Retail Amt LY QTD	This metric is the customer order quantity retail value for last year quarter-to-date.
CO Demand Retail Amt LY YTD	This metric is the customer order quantity retail value for last year year-to-date.
CO Demand Cost Amt	This metric is the customer order cost amount.
CO Demand Cost Amt LW	This metric is the customer order cost amount for last week.
CO Demand Cost Amt LY	This metric is the customer order cost amount for last year.
CO Demand Cost Amt WTD	This metric is the customer order cost amount for week-to-date.
CO Demand Cost Amt MTD	This metric is the customer order cost amount for month-to-date.
CO Demand Cost Amt QTD	This metric is the customer order cost amount for quarter-to-date.
CO Demand Cost Amt YTD	This metric is the customer order cost amount for year-to-date.
CO Demand Cost Amt LY WTD	This metric is the customer order cost amount for last year week-to-date.
CO Demand Cost Amt LY MTD	This metric is the customer order cost amount for last year month-to-date.
CO Demand Cost Amt LY QTD	This metric is the customer order cost amount for last year quarter-to-date.
CO Demand Cost Amt LY YTD	This metric is the customer order cost amount for last year year-to-date.
CO Demand Profit	This metric is the profit amount of the customer order
CO Demand Profit LW	This metric is the profit amount of the customer order quantity for last week.
CO Demand Profit LY	This metric is the profit amount of the customer order quantity for last week last year.
CO Demand Profit WTD	This metric is the profit amount of the customer order quantity for week-to-date.
CO Demand Profit MTD	This metric is the profit amount of the customer order quantity for month-to-date.
CO Demand Profit QTD	This metric is the profit amount of the customer order quantity for quarter-to-date.
CO Demand Profit YTD	This metric is the profit of the order for demand quantity for year-to-date.
CO Demand Profit LY WTD	This metric is the profit amount of customer orders for last year week-to-date.
CO Demand Profit LY MTD	This metric is the profit amount of customer orders for last year month-to-date.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Demand Profit LY QTD	This metric is the profit amount of customer orders for last year quarter-to-date.
CO Demand Profit LY YTD	This metric is the profit amount of customer orders for last year year-to-date.
CO Demand Profit Var LW	This metric is the variance of the profit amount of customer orders compared to last week.
CO Demand Profit Var LY	This metric is the variance in profit amount of customer orders compared to last year.
CO Demand Profit WTD Var LY WTD	This metric is the variance of week-to-date profit amount of customer orders compared to last year week-to-date.
CO Demand Profit MTD Var LY MTD	This metric is the variance of month-to-date profit amount of customer orders compared to last year month-to-date.
CO Demand Profit QTD Var LY QTD	This metric is the variance quarter-to-date profit amount of customer orders compared to last year, quarter-to-date.
CO Demand Profit YTD Var LY YTD	This metric is the variance of year-to-date profit amount of customer order compared to last year, year-to-date.
CO EOP Reserve Qty	This metric is the reserved units at the end of a period.
CO Reserve Qty	This metric is the number of reserved customer order units.
CO Reserve Qty LW	This metric is the number of reserved customer order units for last week.
CO Reserve Qty LY	This metric is the customer order reserve units for last year.
CO EOP Reserve Retail Amt	This metric is the customer order reserve units' retail value at the end of a period.
CO Reserve Retail Amt	This metric is the customer order reserve units' retail value.
CO Reserve Retail Amt LW	This metric is the customer order reserve units' retail value for the last week.
CO Reserve Retail Amt LY	This metric is the customer order reserve units' retail value for last year.
CO EOP Reserve Cost Amt	This metric is the customer order reserved units' cost value at the end of a period.
CO Line Reserve Cost Amt	This metric is the customer order reserved units' cost value at the order line level.
CO Reserve Cost Amt	This metric is the customer order reserved units' cost value.
CO Reserve Cost Amt LW	This metric is the customer order reserve units' cost value for last week.
CO Reserve Cost Amt LY	This metric is the customer order reserve units' cost value for last year.
CO EOP Pick Qty	This metric is the customer order picked units for the end of a period.
CO Pick Qty	This metric is the customer order picked units.
CO Pick Qty LW	This metric is the customer order picked units for last week.
CO Pick Qty LY	This metric is the customer order picked units for last year.
CO EOP Pick Retail Amt	This metric is the customer order picked units' retail value at the end of a period.
CO Pick Retail Amt	This metric is the customer order picked units' retail value.
CO Pick Retail Amt LW	This metric is the customer order picked units' retail value for last week.
CO Pick Retail Amt LY	This metric is the customer order picked units' retail value for last year.
CO EOP Pick Cost Amt	This metric is the customer order picked units' cost at the end of period.
CO Pick Cost Amt	This metric is the customer order picked units' cost value.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Pick Cost Amt LW	This metric is the customer order picked units' cost value for last week.
CO Pick Cost Amt LY	This metric is the customer order picked units' cost value for last year.
CO EOP Backorder Qty	This metric is the customer order backorder units at the end of period.
CO Backorder Qty	This metric is the customer order backorder units.
CO Backorder Qty LW	This metric is the customer order backorder units for last week.
CO Backorder Qty LY	This metric is the customer order backorder units for last year.
CO Backorder Qty WTD	This metric is the customer order backorder units for week-to-date.
CO Backorder Qty MTD	This metric is the customer order backorder units for month-to-date.
CO Backorder Qty QTD	This metric is the customer order backorder units for quarter-to-date.
CO Backorder Qty YTD	This metric is the customer order backorder units for year-to-date.
CO Backorder Qty LY WTD	This metric is the customer order backorder units last year week-to-date.
CO Backorder Qty LY MTD	This metric is the customer order backorder units last year month-to-date.
CO Backorder Qty LY QTD	This metric is the customer order backorder units for last year quarter-to-date.
CO Backorder Qty LY YTD	This metric is the customer order backorder units last year year-to-date.
CO EOP Backorder Retail Amt	This metric is the retail value of customer order backorder units at the end of a period.
CO Backorder Retail Amt	This metric is the retail value of customer order backorder units.
CO Backorder Retail Amt LW	This metric is the retail value of customer order backorder units for last week.
CO Backorder Retail Amt LY	This metric is the retail value of customer order backorder units for last year.
CO Backorder Retail Amt WTD	This metric is the retail value of customer order backorder units for week-to-date.
CO Backorder Retail Amt MTD	This metric is the retail value of customer order backorder units for month-to-date.
CO Backorder Retail Amt QTD	This metric is the retail value of customer order backorder units for quarter-to-date.
CO Backorder Retail Amt YTD	This metric is the retail value of customer order backorder units for year-to-date.
CO Backorder Retail Amt LY WTD	This metric is the retail value of customer order backorder units for last year week-to-date.
CO Backorder Retail Amt LY MTD	This metric is the retail value of customer order backorder units for last year month-to-date.
CO Backorder Retail Amt LY QTD	This metric is the retail value of customer order backorder units for last year quarter-to-date.
CO Backorder Retail Amt LY YTD	This metric is the retail value of customer order backorder units for last year year-to-date.
CO EOP Backorder Cost Amt	This metric is the cost value of customer order backorder units at the end of a period.
CO Backorder Cost Amt	This metric is the cost value of customer order backorder units.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Backorder Cost Amt LW	This metric is the cost value of customer order backorder units for last week.
CO Backorder Cost Amt LY	This metric is the cost value of customer order backorder units for last year.
CO Backorder Cost Amt WTD	This metric is the cost value of customer order backorder units for week-to-date.
CO Backorder Cost Amt MTD	This metric is the cost value of customer order backorder units for month-to-date.
CO Backorder Cost Amt QTD	This metric is the cost value of customer order backorder units for quarter-to-date.
CO Backorder Cost Amt YTD	This metric is the cost value of customer order backorder units for year-to-date.
CO Backorder Cost Amt LY WTD	This metric is the cost value of customer order backorder units for last year week-to-date.
CO Backorder Cost Amt LY MTD	This metric is the cost value of customer order backorder units for last year month-to-date.
CO Backorder Cost Amt LY QTD	This metric is the cost value of customer order backorder units for last year quarter-to-date.
CO Backorder Cost Amt LY YTD	This metric is the cost value of customer order backorder units for last year year-to-date.
CO Demand Line Ct	This metric is the count of distinct customer order lines.
CO Demand Order Ct	This metric is the count of distinct customer orders.
CO Avg Lines	This metric is the average number of lines per customer order.
CO Avg Lines LY	This metric is the average number of lines per customer order for last year.
CO Line Avg order qty	This metric is the average number of items per customer order line.
CO Line Avg order qty LY	This metric is the average number of items per customer order line for last year.
CO Avg order qty	Average ordered qty per customer order.
CO Avg order qty LY	Average ordered qty per customer order last year.
CO Line Avg Retail Amt	This metric is the average retail amount per customer order line.
CO Line Avg Retail Amt LY	This metric is the average retail amount per customer order line for last year.
CO Avg Demand Retail Amt	This metric is the average retail value of all customer orders.
CO Avg Demand Retail Amt LY	This metric is the average retail value of all customer orders for last year.
CO Line Avg Cost Amt	This metric is the average cost value of all customer order lines.
CO Line Avg Cost Amt LY	This metric is the average cost value of all customer order lines for last year.
CO Avg Demand Cost Amt	This metric is the average cost value of all customer orders.
CO Avg Demand Cost Amt LY	This metric is the average cost value of all customer orders for last year.
CO Tax Amt	This metric is the customer order tax amount.
CO Disc Amt	This metric is the discount given to the customer at the customer order level. This discount amount excludes promotional discounts.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Promo Disc Amt	This metric is the customer order promotional discount amount.
CO Tender Amt	This metric is the amount the customer paid for the order, after all discounts and offers have been accounted for.
CO Cancel Tax Amt	This metric is the tax amount from the original sale that was returned to the customer after the order was canceled.
CO Line Promo Amt	This metric is the retail amount of the customer order line that was purchased on promotion.
CO Line Promo Amt LW	This metric is the retail amount of the customer order line that was purchased on promotion for last week.
CO Line Promo Amt LY	This metric is the retail amount of the customer order line that was purchased on promotion for last year.
CO Line Promo Amt WTD	This metric is the retail amount of the customer order line that was purchased on promotion for week-to-date.
CO Line Promo Amt MTD	This metric is the retail amount of the customer order line that was purchased on promotion for month-to-date.
CO Line Promo Amt YTD	This metric is the retail amount of the customer order line that was purchased on promotion for year-to-date.
CO Line Promo Amt LY WTD	This metric is the retail amount of the customer order line that was purchased on promotion for last year week-to-date.
CO Line Promo Amt LY MTD	This metric is the retail amount of the customer order line that was purchased on promotion for last year month-to-date.
CO Line Promo Amt LY YTD	This metric is the retail amount of the customer order line that was purchased on promotion last year year-to-date.
CO Promo Amt	This metric is the retail amount of the customer order that was purchased on promotion.
CO Promo Amt LW	This metric is the retail amount of the customer order that was purchased on promotion for last week.
CO Promo Amt LY	This metric is the retail amount of the customer order that was purchased on promotion for last year.
CO Promo Amt WTD	This metric is the retail amount of the customer order that was purchased on promotion for week-to-date.
CO Promo Amt MTD	This metric is the retail amount of the customer order that was purchased on promotion for month-to-date.
CO Promo Amt YTD	This metric is the retail amount of the customer order that was purchased on promotion for year-to-date.
CO Promo Amt LY WTD	This metric is the retail amount of the customer order that was purchased on promotion for last year week-to-date.
CO Promo Amt LY MTD	This metric is the retail amount of the customer order that was purchased on promotion for last year month-to-date.
CO Promo Amt LY YTD	This metric is the retail amount of the customer order that was purchased on promotion for last year year-to-date.
CO Demand Clr Amt	This metric is the retail amount of the customer order that was purchased on clearance.
CO Demand Clr Amt LW	This metric is the retail amount of the customer order that was purchased on clearance for last week.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Demand Clr Amt LY	This metric is the retail amount of the customer order that was purchased on clearance for last year.
CO Demand Clr Amt WTD	This metric is the retail amount of the customer order that was purchased on clearance for week-to-date.
CO Demand Clr Amt MTD	This metric is the retail amount of the customer order that was purchased on clearance for month-to-date.
CO Demand Clr Amt YTD	This metric is the retail amount of the customer order that was purchased on clearance for year-to-date.
CO Demand Clr Amt LY WTD	This metric is the retail amount of the customer order that was purchased on clearance for last year week-to-date.
CO Demand Clr Amt LY MTD	This metric is the retail amount of the customer order that was purchased on clearance for last year month-to-date.
CO Demand Clr Amt LY YTD	This metric is the retail amount of the customer order that was purchased on clearance for last year year-to-date.
CO Line Promo Mkdn Amt	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order line.
CO Line Promo Mkdn Amt LW	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order line for last week.
CO Line Promo Mkdn Amt LY	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order line for last year.
CO Line Promo Mkdn Amt WTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order line for week-to-date.
CO Line Promo Mkdn Amt MTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order line for month-to-date.
CO Line Promo Mkdn Amt YTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order line for year-to-date.
CO Line Promo Mkdn Amt LY WTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order line for last year week-to-date.
CO Line Promo Mkdn Amt LY MTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order line for last year month-to-date.
CO Line Promo Mkdn Amt LY YTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order line for last year year-to-date.
CO Promo Mkdn Amt	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order.
CO Promo Mkdn Amt LW	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order for last week.
CO Promo Mkdn Amt LY	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order for last year.
CO Promo Mkdn Amt WTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order for week-to-date.
CO Promo Mkdn Amt MTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order for month-to-date.
CO Promo Mkdn Amt YTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order for year-to-date.
CO Promo Mkdn Amt LY WTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order for last year week-to-date.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Promo Mkdn Amt LY MTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order for last year month-to-date.
CO Promo Mkdn Amt LY YTD	This metric is the difference between the original selling price and the actual selling price due to a promotion on the customer order for last year year-to-date.
CO Line Promo Mkdn to Promo Amt	This metric is an indication of how large a markdown was required on an order line item to generate the total promotional sales for that item. In general, the smaller the number for this metric the better for the retailer, as it means a small markdown amount generated a large amount of promotional sales.
CO Line Promo Mkdn To Promo Amt LY	This metric is an indication of how large a markdown was required on an order line item to generate the total promotional sales for that item for last year. In general the smaller the number for this metric the better for the retailer, as it means a small markdown amount generated a large amount of promotional sales.
CO Promo Mkdn To Promo Amt	This metric is an indication of how large a markdown was required on a customer order to generate the total promotional sales amount. In general the smaller the number for this metric the better for the retailer, as it means a small markdown amount generated a large amount of promotional sales.
CO Promo Mkdn To Promo Amt LY	This metric is an indication of how large a markdown was required on a customer order to generate the total promotional sales for last year. In general the smaller the number for this metric the better for the retailer, as it means a small markdown amount generated a large amount of promotional sales.
CO Line Promo Qty	This metric is the number of customer order line units that were sold on promotion.
CO Line Promo Qty LW	This metric is the number of customer order line units that were sold on promotion for last week.
CO Line Promo Qty LY	This metric is the number of customer order line units that were sold on promotion for last year.
CO Line Promo Qty WTD	This metric is the number of customer order line units that were sold on promotion for week-to-date.
CO Line Promo Qty MTD	This metric is the number of customer order line units that were sold on promotion for month-to-date.
CO Line Promo Qty YTD	This metric is the number of customer order line units that were sold on promotion for year-to-date.
CO Line Promo Qty LY WTD	This metric is the number of customer order line units that were sold on promotion for last year week-to-date.
CO Line Promo Qty LY MTD	This metric is the number of customer order line units that were sold on promotion for last year month-to-date.
CO Line Promo Qty LY YTD	This metric is the number of customer order line units that were sold on promotion for last year year-to-date.
CO Promo Qty	This metric is the number of customer order units that were sold on promotion.
CO Promo Qty LW	This metric is the number of customer order units that were sold on promotion for last week.
CO Promo Qty LY	This metric is the number of customer order units that were sold on promotion for last year.
CO Promo Qty WTD	This metric is the number of customer order units that were sold on promotion for week-to-date.
CO Promo Qty MTD	This metric is the number of customer order units that were sold on promotion for month-to-date.
CO Promo Qty YTD	This metric is the number of customer order units that were sold on promotion for year-to-date.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Promo Qty LY WTD	This metric is the number of customer order units that were sold on promotion for last year week-to-date.
CO Promo Qty LY MTD	This metric is the number of customer order units that were sold on promotion for last year month-to-date.
CO Promo Qty LY YTD	This metric is the number of customer order units that were sold on promotion for last year year-to-date.
CO Clr Qty	This metric is the number of customer order units sold on clearance.
CO Clr Qty LW	This metric is the number of customer order units sold on clearance for last week.
CO Clr Qty LY	This metric is the number of customer order units sold on clearance for last year.
CO Clr Qty WTD	This metric is the number of customer order units sold on clearance for week-to-date.
CO Clr Qty MTD	This metric is the number of customer order units sold on clearance for month-to-date.
CO Clr Qty YTD	This metric is the number of customer order units sold on clearance for year-to-date.
CO Clr Qty LY WTD	This metric is the number of customer order units sold on clearance for last year week-to-date.
CO Clr Qty LY MTD	This metric is the number of customer order units sold on clearance for last year month-to-date.
CO Clr Qty LY YTD	This metric is the number of customer order units sold on clearance for last year year-to-date.
CO Shipped Complete Qty	This metric is the number of customer orders in which the shipped quantity was the same as the ordered quantity.
CO Line Fill Rate %	This metric is the number of lines that were shipped complete compared to the total number of lines ordered in a customer order.
CO SKU Fill Rate %	This metric is the quantity that was shipped complete compared to the total quantity ordered in a customer order.
CO Demand Cancel Amt	This metric is the retail value of the customer order canceled quantity.
CO Demand Cancel Qty	This metric is the customer order canceled quantity.
CO Demand Cancel Cost	This metric is the cost value of the customer order canceled quantity.
CO Cancel Rate	This metric is the count of canceled order lines compared to the total order lines.
CO Line Avg Number of Backorder Days	This metric is the average number of days that a customer order line is in backorder status. This calculation is done using only order lines that are currently in backorder status.
CO Line Number of Backorder Days	This metric is the number of days that a customer order line is in backorder status. This calculation is done only for order lines that are still in backorder status.
CO Line Number of Pick Days	This metric is the number of days that a customer order line took to be picked.
CO Line Avg Number of Pick Days	This metric is the number of average days it takes a customer order line to be picked.
CO Line Number of Reserve Days	This metric is the number of days that a customer order line is in reserve status.
CO Line Avg Number of Reserve Days	This metric is the average number of days a customer order line is in reserve status.
CO Avg Number of Fulfillment Days	This metric is the average number of days to fulfill a customer order. The calculation excludes order lines that have not yet been fulfilled.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO On-Time Shipment Ct	This metric is the number of customer order lines for which the actual shipment date was earlier than or equal to the expected shipment date.
CO Late Shipment Ct	This metric is the number of customer order lines for which the actual shipment date was later than the expected shipment date.
CO % On-Time Shipments	This metric is the on-time customer order line shipments as a percentage of total customer order lines.
CO Fulfillment Order Ct	This metric is the total number of customer orders that have been fulfilled.
CO Fulfillment Order Line Ct	This metric is the total number of customer order lines that have been fulfilled.
CO Fulfillment Retail Amt	This metric is the retail value of the customer orders that have been fulfilled.
CO Fulfillment Retail Amt LW	This metric is the retail value of the customer orders that have been fulfilled for last week.
CO Fulfillment Retail Amt LY	This metric is the retail value of the customer orders that have been fulfilled for last year.
CO Fulfillment Retail Amt WTD	This metric is the retail value of the customer orders that have been fulfilled for week-to-date.
CO Fulfillment Retail Amt MTD	This metric is the retail value of the customer orders that have been fulfilled for month-to-date.
CO Fulfillment Retail Amt QTD	This metric is the retail value of the customer orders that have been fulfilled for quarter-to-date.
CO Fulfillment Retail Amt YTD	This metric is the retail value of the customer orders that have been fulfilled for year-to-date.
CO Fulfillment Retail Amt LY WTD	This metric is the retail value of the customer orders that have been fulfilled for last year week-to-date.
CO Fulfillment Retail Amt LY MTD	This metric is the retail value of the customer orders that have been fulfilled for last year month-to-date.
CO Fulfillment Retail Amt LY QTD	This metric is the retail value of the customer orders that have been fulfilled for last year quarter-to-date.
CO Fulfillment Retail Amt LY YTD	This metric is the retail value of the customer orders that have been fulfilled for last year year-to-date.
CO Fulfillment Retail Amt Var LW	This metric is the variance in fulfilled customer orders' retail value compared to last week.
CO Fulfillment Retail Amt Var LY	This metric is the variance in fulfilled customer orders' retail value compared to last year.
CO Fulfillment Retail Amt WTD Var LY WTD	This metric is the variance in fulfilled customer orders' retail value compared to last year.
CO Fulfillment Retail Amt MTD Var LY MTD	This metric is the month-to-date fulfilled customer order retail value variance compared to last year month-to-date.
CO Fulfillment Retail Amt QTD Var LY QTD	This metric is the quarter-to-date fulfilled customer order retail value variance compared to last year quarter-to-date.
CO Fulfillment Retail Amt YTD Var LY YTD	This metric is the year-to-date fulfilled customer order retail value variance compared to last year year-to-date.
CO Fulfillment Qty	This metric is the quantity of customer order items that have been fulfilled.
CO Fulfillment Qty LW	This metric is the quantity of customer order items that have been fulfilled for last week.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Fulfillment Qty LY	This metric is the quantity of customer order items that have been fulfilled for last year.
CO Fulfillment Qty WTD	This metric is the quantity of customer order items that have been fulfilled for week-to-date.
CO Fulfillment Qty MTD	This metric is the quantity of customer order items that have been fulfilled for month-to-date.
CO Fulfillment Qty QTD	This metric is the quantity of customer order items that have been fulfilled for quarter-to-date.
CO Fulfillment Qty YTD	This metric is the quantity of customer order items that have been fulfilled for year-to-date.
CO Fulfillment Qty LY WTD	This metric is the quantity of customer order items that have been fulfilled for last year week-to-date.
CO Fulfillment Qty LY MTD	This metric is the quantity of customer order items that have been fulfilled for last year month-to-date.
CO Fulfillment Qty LY QTD	This metric is the quantity of customer order items that have been fulfilled for last year quarter-to-date.
CO Fulfillment Qty LY YTD	This metric is the quantity of customer order items that have been fulfilled for last year year-to-date.
CO Fulfillment Qty Var LW	This metric is the variance in the quantity of customer order items that have been fulfilled compared to last week.
CO Fulfillment Qty Var LY	This metric is the variance in the quantity of customer order items that have been fulfilled compared to last year.
CO Fulfillment Qty WTD Var LY WTD	This metric is the week-to-date variance in the quantity of customer order items that have been fulfilled compared to last year week-to-date.
CO Fulfillment Qty MTD Var LY MTD	This metric is the month-to-date variance in the quantity of customer order items that have been fulfilled compared to last year month-to-date.
CO Fulfillment Qty QTD Var LY QTD	This metric is the quarter-to-date variance in the quantity of customer order items that have been fulfilled compared to last year quarter-to-date.
CO Fulfillment Qty YTD Var LY YTD	This metric is the year-to-date variance in the quantity of customer order items that have been fulfilled compared to last year year-to-date.
CO Fulfillment Cost Amt	This metric is the total cost value of fulfilled customer orders.
CO Fulfillment Cost Amt LW	This metric is the total cost value of fulfilled customer orders for last week.
CO Fulfillment Cost Amt LY	This metric is the total cost value of fulfilled customer orders for last year.
CO Fulfillment Cost Amt WTD	This metric is the total cost value of fulfilled customer orders for week-to-date.
CO Fulfillment Cost Amt MTD	This metric is the total cost value of fulfilled customer orders for month-to-date.
CO Fulfillment Cost Amt QTD	This metric is the total cost value of fulfilled customer orders for quarter-to-date.
CO Fulfillment Cost Amt YTD	This metric is the total cost value of fulfilled customer orders for year-to-date.
CO Fulfillment Cost Amt LY WTD	This attribute defines the total cost value of fulfilled customer order lines for last year week-to-date.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Fulfillment Cost Amt LY MTD	This metric is the total cost value of fulfilled customer orders for last year month-to-date.
CO Fulfillment Cost Amt LY QTD	This metric is the total cost value of fulfilled customer orders for last year quarter-to-date.
CO Fulfillment Cost Amt LY YTD	This metric is the total cost value of fulfilled customer orders for last year year-to-date.
CO Fulfillment Cost Amt Var LW	This metric is the total cost value variance of fulfilled customer orders compared to last week.
CO Fulfillment Cost Amt Var LY	This metric is the total cost value variance of fulfilled customer orders compared to last year.
CO Fulfillment Cost Amt WTD Var LY WTD	This metric is the week-to-date total cost value variance of fulfilled customer orders compared to last year week-to-date.
CO Fulfillment Cost Amt MTD Var LY MTD	This metric is the month-to-date total cost value variance of fulfilled customer orders compared to last year month-to-date.
CO Fulfillment Cost Amt QTD Var LY QTD	This metric is the quarter-to-date total cost value variance of fulfilled customer orders compared to last year quarter-to-date.
CO Fulfillment Cost Amt YTD Var LY YTD	This metric is the year-to-date total cost value variance of fulfilled customer orders compared to last year year-to-date.
CO Fulfillment Profit Amt	This metric is the profit amount of fulfilled customer orders.
CO Fulfillment Profit LW	This metric is the profit amount of fulfilled customer orders for last week.
CO Fulfillment Profit LY	This metric is the profit amount of fulfilled customer orders for last year.
CO Fulfillment Profit WTD	This metric is the profit amount of fulfilled customer orders for week-to-date.
CO Fulfillment Profit MTD	This metric is the profit amount of fulfilled customer orders for month-to-date.
CO Fulfillment Profit QTD	This metric is the profit amount of fulfilled customer orders for quarter-to-date.
CO Fulfillment Profit YTD	This metric is the profit amount of fulfilled customer orders for year-to-date.
CO Fulfillment Profit LY WTD	This metric is the profit amount of fulfilled customer orders for last year week-to-date.
CO Fulfillment Profit LY MTD	This metric is the profit amount of fulfilled customer orders for last year month-to-date.
CO Fulfillment Profit LY QTD	This metric is the profit amount of fulfilled customer orders for last year month-to-date.
CO Fulfillment Profit LY YTD	This metric is the profit amount of fulfilled customer orders for last year year-to-date.
CO Fulfillment Profit Var LW	This metric is the variance in the fulfilled customer order profit compared to last week.
CO Fulfillment Profit Var LY	This metric is the variance in the fulfilled customer order profit compared to last year.
CO Fulfillment Profit WTD Var LY WTD	This metric is the variance in the week-to-date fulfilled customer order profit compared to last year week-to-date.
CO Fulfillment Profit MTD Var LY MTD	This metric is the variance in the month-to-date fulfilled customer order profit compared to last year month-to-date.
CO Fulfillment Profit QTD Var LY QTD	This metric is the variance in the quarter-to-date fulfilled customer order profit compared to last year quarter-to-date.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
CO Fulfillment Profit YTD Var LY YTD	This metric is the variance in the year-to-date fulfilled customer order profit compared to last year year-to-date.
CO Accommodation Amt	This metric is the amount of monetary adjustments to a customer order made by the retailer in order to achieve customer satisfaction.
CO Rush Order Cost Amt	This metric is the cost of rush order services for a customer order.
CO Shipping Amt	This metric is the cost value of customer order shipping services.
CO Overnight Shipping Amt	This metric is the cost value of customer order overnight shipping services.
CO Ground Shipping Amt	This metric is the cost value of customer order ground shipping services.
CO Non Return Rate %	This metric displays the count of order lines that were returned verses number of fulfilled order lines, to help the user understand how many customer order lines were returned.
Liability Qty	The number of units that a retailer is legally bounded to deliver to a customer. For these units, retailer has received payment for but has not delivered to the consumer.
Liability Qty LW	Last Week's number of units that a retailer was legally bounded to deliver to a customer. For these units, retailer had received payment for but had not delivered to the customer at the time of order.
Liability Qty LY	Last Year's number of units that a retailer was legally bounded to deliver to a customer. For these units, retailer had received payment for but had not delivered to the customer at the time of order.
Liability Amt	The retail value tied in liability in lieu of unfulfilled order that a retailer is legally bounded to deliver to a customer. For these units, retailer has received payment for but has not delivered goods to the customer.
Liability Amt LW	Last week's retail value tied in liability in lieu of unfulfilled order that a retailer was legally bounded to deliver to a customer. For these units, retailer had received payment for but had not delivered goods to the customer at the time of order.
Liability Amt LY	Last Year's retail value tied in liability in lieu of unfulfilled order that a retailer was legally bounded to deliver to a customer. For these units, retailer had received payment for but had not delivered goods to the customer at the time of order.
Liability Canceled Qty	The number of units that were canceled for which a retailer initially had a liability on, at the time of ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Liability Cancelled Qty LW	The number of units that were canceled last week for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign .
Liability Cancelled Qty LY	The number of units that were canceled last year for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Liability Cancelled Amt	The retail value of units that were canceled for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Liability Cancelled Amt LW	The retail value of units that were canceled last week for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
Liability Canceled Amt LY	The retail value of units that were canceled last year for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Promo Liability Qty	The number of units sold on promotion that a retailer is legally bounded to deliver to a customer. For these units, retailer has received payment for but has not delivered to the customer.
Promo Liability Qty LW	Last Week's promotional units that a retailer was legally bounded to deliver to a customer. For these units, retailer had received payment for but had not delivered to the customer at the time of order.
Promo Liability Qty LY	Last Year's promotional units that a retailer was legally bounded to deliver to a customer. For these units, retailer had received payment for but had not delivered to the customer at the time of order.
Promo Liability Amt	The promotional retail value tied in liability in lieu of unfulfilled order that a retailer is legally bounded to deliver to a customer. For these units, retailer has received payment for but has not delivered goods to the customer.
Promo Liability Amt LW	Last week's promotional retail value tied in liability in lieu of unfulfilled order that a retailer was legally bounded to deliver to a customer. For these units, retailer had received payment for but had not delivered goods to the customer at the time of order.
Promo Liability Amt LY	Last Year's promotional retail value tied in liability in lieu of unfulfilled order that a retailer was legally bounded to deliver to a customer. For these units, retailer had received payment for but had not delivered goods to the customer at the time of order.
Promo Liability Canceled Qty	The number of promotional units that were canceled for which a retailer initially had a liability on, at the time of ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Promo Liability Canceled Qty LW	The number of promotional units that were canceled last week for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Promo Liability Canceled Qty LY	The number of promotional units that were canceled last year for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Promo Liability Canceled Amt	The promotional retail value of units that were canceled for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Promo Liability Canceled Amt LW	The promotional retail value of units that were canceled last week for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Promo Liability Canceled Amt LY	The promotional retail value of units that were canceled last year for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Profit Liability Amt	The profit value of goods/units that are ordered as liability for which a retailer is legally bond or obligated.
Profit Liability Canceled Amt	The loss on profit amount occurred due to cancelation of goods/units that were ordered as liability for which a retailer was legally bound or obligated. These values will be positive.

**Table C-20 (Cont.) Customer Order Metrics**

<b>Metric</b>	<b>Definition</b>
Pack Liability Amt	The retail value of sales pack tied in liability in lieu of unfulfilled order that a retailer is legally bounded to deliver to a customer. For these units, retailer has received payment for but has not delivered goods to the customer.
Pack Liability Canceled Amt	The retail value of sales pack that were canceled for which a retailer initially had a liability on, at the time of customer ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Pack Liability Qty	The sales pack quantity tied in liability in lieu of unfulfilled order that a retailer is legally bounded to deliver to a customer. For these units, retailer has received payment for but has not delivered goods to the customer.
Pack Liability Canceled Qty	The number of sales pack units that were canceled for which a retailer initially had a liability on, at the time of ordering. Since these values are received in negative Trx sign from retail merchandising system, a transformation is performed to indicate the values in positive sign.
Pack Profit Liability Amt	The profit value of sales packs that are ordered as liability for which a retailer is legally bound or obligated.
Pack Profit Liability Canceled Amt	The loss on profit amount occurred due to cancelation of goods/ units that were ordered as liability for which a retailer was legally bound or obligated. These values will be positive.

## Consumer

**Table C-21 Consumer Metrics**

<b>Metric</b>	<b>Definition</b>
Avg Market Retail	This metric is the average price paid by consumers for a given market item.
Avg Market Retail LY	This metric is the average price paid by consumers for a given market item last year.
Consumer Score	This metric measures consumer loyalty to a retailer. It serves as an alternative to traditional customer satisfaction research.
Consumer Shopping Trips	This metric is the number of trips that a consumer made over a period of time to buy a market item.
Consumer Avg Spend Per Trip	Average monetary value spent per trip, calculated by dividing gross spend by all trips made.
Consumer Avg Spend Per Trip LY	Last year's average monetary value spent per trip, calculated by dividing gross spend by all trips made.
Consumer Household Count	The count of consumer households with specific attributes that have shopped for the market item in a trade area and timeframe specified for a given sales channel
Consumer Count	The count of consumers with specific attributes that have shopped for the market item in a trade area and timeframe specified for a given sales channel.
Total Time Spent On Trips	This metric is the total time taken by a consumer for making all trips to a retailer.
Total Time Spent On Trips LY	This metric is the total time taken by a consumer for making all trips to a retailer for the last year.
Market Avg Time Spent	This metric is the average time spent by a consumer at the retailer's store location.
Market Avg Time Spent LY	This metric is the average time spent by a consumer at the retailer's store location for the last year.
Market Gross Spend Amt	Gross spend amount for this metric is the value of market items purchased before deducting consumer's returns and inclusive of taxes.

**Table C-21 (Cont.) Consumer Metrics**

<b>Metric</b>	<b>Definition</b>
Market Gross Spend Amt Last Period	Gross spend amount for this metric is the value of market items purchased before deducting consumer's returns and inclusive of taxes for the previous period.
Market Gross Spend Qty	This metric is the quantity of market items purchased before deducting consumer's returns.
Market Return Amt	This metric is the value of market items returned by the consumer.
Market Return Qty	This metric is the quantity of market items returned by the consumer.
Market Net Spend Amt	This metric is the value of market items purchased after deducting consumer's returns.
Market Net Spend Qty	This metric is the quantity of market items purchased after deducting consumer's returns.
Market Net Reg Spend Amt	This metric is the value of market items purchased at regular price after deducting consumers' returns.
Market Net Promo Spend Amt	This metric is the value of promoted market items purchased, after deducting returns of promoted market items.
Market Net Clr Spend Amt	This metric is the sales value of clearance market items.
Market Net Reg Spend Qty	This metric is the number of market items purchased at regular price after deducting returns.
Market Net Promo Spend Qty	This metric is the units of promoted market items purchased.
Market Net Clr Spend Qty	This metric is the units of market items purchased on clearance.
Market Gross Spend Amt LY	This metric is the value of market items purchased for the last year. It includes taxes, but does not include discounts or returns.
Market Return Amt LY	This metric is the value of market items returned by the consumer for the last year.
Market Net Reg Spend Amt LY	This metric is the value of market items purchased at regular price for the last year after deducting returns.
Market Net Promo Spend Amt LY	This metric is the value of promoted market items purchased for last year.
Market Net Clr Spend Amt LY	This metric is the value of market items purchased on clearance for the last year.
Market Gross Spend Qty LY	This metric is the units of market items purchased for the last year before deducting returns.
Market Return Qty LY	This metric is the number of market items returned by the consumer for the last year.
Market Net Reg Spend Qty LY	This metric is the quantity of market items purchased on regular price after deducting consumer returns for last year.
Market Net Promo Spend Qty LY	This metric is the value of promoted market items purchased for the last year, after deducting returns of promoted market items.
Market Clr Spend Qty LY	This metric is the number of market items purchased on clearance for the last year.
% Market Items Scoring "Good"	This metric is the percentage of items in a market category that consumers scored in the "good" range from 8-10 for the selected channel.
% Market Items Scoring "Poor"	This metric is the percentage of items in a market category that consumers scored in the "poor" range from 1-4 for the selected channel.
% Market Items Scoring "Average"	This metric is the percentage of items in a market category that consumers scored in the "average" range from 5-7 for the selected channel.

**Table C-21 (Cont.) Consumer Metrics**

<b>Metric</b>	<b>Definition</b>
Market Penetration	This metric is the ratio of Market Gross Sales Amount for a lower level of the market item hierarchy to the Market Gross Sales Amount for a market category. It indicates what proportion of a market category's sales are due to a particular item or subcategory.
Item % Contribution to Subcategory	This metric displays the amount of sales of a lower level of the market item hierarchy as a percentage of total sales for a subcategory. It will reveal the relative importance of specified items to their subcategory sales.
Market Subcategory Gross Spend Amt	This metric displays the gross spend amount for a particular market subcategory.

## Cluster

**Table C-22 Cluster Metrics**

<b>Metric</b>	<b>Definition</b>
Avg Disc Amt	This metric is the average of the difference between the regular price-point and the discounted price-point times the sales units at the discounted price-point.
Cluster Loc Ct	The Cluster Location Count is the count of all locations within one cluster.
Cluster Group Loc Ct	The Cluster Location Group Count is the count of all locations within a cluster group.
Cluster Avg Loc Gross Sales Amt	The Cluster Average Location Gross Sales Amount is the average gross sales amount of a location within the cluster in question
Cluster Avg Loc Net Sales Amt	The Cluster Average Location Net Sales Amount is the average net sales amount per location in a given cluster.
Cluster Avg Loc Profit	The Cluster Average Location Profit Amount is the average profit amount per location in a given cluster.
Cluster Group Tot Inv Retail	Projected owned inventory retail amount.
Cluster Group Avg Loc Stock Turnover	The Cluster Group Average Location Stock Turnover is how fast a location within a cluster group on average turns inventory in a given period like a year.
Cluster Avg Loc Tot Inv Retail	The Cluster Average Location Inventory Amount is how a location within a cluster does on average for inventory amount (level).
Cluster Stock Turnover	The number of times inventory is sold in a time period such as a year for a cluster.
Ending Cluster In-Stock %	This metric is the percentage of item-location combinations in a cluster that are in-stock at a specific point in time.
Cluster Group Avg Loc Gross Sales Amt	The Cluster Average Location Gross Sales Amount is the average gross sales amount of a location within the cluster in question.
Cluster Group Avg Loc Net Sales Amt	The Cluster Average Location Net Sales Amount is the average net sales amount per location in a given cluster.
Cluster Group Avg Loc Profit Amt	The Cluster Group Average Location Profit Amount is the average profit amount per location in a given cluster Group.

## Wholesale Order

**Table C-23 Wholesale Order Metrics**

<b>Metric</b>	<b>Definition</b>
Wholesale Stock Turnover	Inventory in this metric is initial stock on hand for the virtual warehouse, but in this case sales are divided by inventory, which is the inverse of the inventory/sales ratio.
Wholesale Returns	This metric is the amount of returns for wholesale transactions only, leaving out regular retail returns.
Wholesale Gross Profit Amt	This metric is the gross profit value for wholesale transactions.
Quarterly % Change in Wholesale Sales	This metric is calculated by comparing the current period's wholesale sales to the previous period's wholesale sales to reveal trends over time.
Wholesale Gross Sales Amt	This metric is sales for wholesale transactions only.
Wholesale Gross Sales Amt	This metric is sales for wholesale transactions only.

## Inventory Adjustment

**Table C-24 Inventory Adjustment Metrics**

<b>Metric</b>	<b>Definition</b>
Adjustment Units	This metric is the number of units adjusted on stock on hand in a location to an item.
Adjustment Cost Value	This metric is the cost value of units adjusted on stock on hand in a location to an item.
Adjustment Retail Value	This metric is the retail value of units adjusted on stock on hand in a location to an item.

## Inventory Transfer

**Table C-25 Inventory Transfer Metrics**

<b>Metric</b>	<b>Definition</b>
Transfer Out Units	This metric is the number of units being transferred from the location to any other retailer's entity as part of different transfer types (book transfer, Inter Company etc.)
Transfer Out Cost Value	This metric is the cost value of units being transferred from the location to any other retailer's entity as part of different transfer types (book transfer, Inter Company etc.)
Transfer Out Retail Value	This metric is the retail value of units being transferred from the location to any other retailer's entity as part of different transfer types (book transfer, Inter Company etc.)
Transfer In Units	This metric is the number of units being transferred to the location from any other retailer's entity as part of different transfer types (book transfer, Inter Company etc.)
Transfer In Cost Value	This metric is the cost value of units being transferred to the location from any other retailer's entity as part of different transfer types (book transfer, Inter Company etc.)
Transfer In Retail Value	This metric is the retail value of units being transferred to the location from any other retailer's entity as part of different transfer types (book transfer, Inter Company etc.)

## Return to Vendor

**Table C–26 Return to Vendor Metrics**

<b>Metric</b>	<b>Definition</b>
RTV Units	This metric is the number of units being returned from the location to supplier as part of returns.
RTV Cost	This metric is the Cost value of units being returned from the location to supplier as part of returns.
RTV Retail	This metric is the retail value of units being returned from the location to supplier as part of returns.
RTV Cancelled Units	This metric is the number of units cancelled during the return from the location to supplier as part of returns.
RTV Cancelled Cost	This metric is the cost value of units cancelled during the return from the location to supplier as part of returns.
RTV Cancelled Retail	This metric is the retail value of units cancelled during the return from the location to supplier as part of returns.

## Similarity Score

**Table C–27 Similarity Score Metrics**

<b>Metric</b>	<b>Definition</b>
Product Attribute Dissimilarity Score	Similarities calculate how likely a customer is to switch from one item attribute to another in a range from 0 to 1. For example, if the similarity rate for Toothpaste A and Toothpaste B is 0.75 while the similarity rate for Toothpaste A and Toothpaste C is 0.21, the customer is more likely to switch to Toothpaste B than Toothpaste C. Retailers can use dissimilarity or similarity interchangeably, depending on which term makes more sense for their analysis.
Product Attribute Similarity Score	Similarities calculate how likely a customer is to switch from one item attribute to another in a range from 0 to 1. For example, if the similarity rate for Toothpaste A and Toothpaste B is 0.75 while the similarity rate for Toothpaste A and Toothpaste C is 0.21, the customer is more likely to switch to Toothpaste B than Toothpaste C. Retailers can use dissimilarity or similarity interchangeably, depending on which term makes more sense for their analysis.
Product Dissimilarity Score	Similarities calculate how likely a customer is to switch from one item to another in a range from 0 to 1. For example, if the similarity rate for Toothpaste A and Toothpaste B is 0.75 while the similarity rate for Toothpaste A and Toothpaste C is 0.21, the customer is more likely to switch to Toothpaste B than Toothpaste C. Retailers can use dissimilarity or similarity interchangeably, depending on which term makes more sense for their analysis.
Product Similarity Score	Similarities calculate how likely a customer is to switch from one item to another in a range from 0 to 1. For example, if the similarity rate for Toothpaste A and Toothpaste B is 0.75 while the similarity rate for Toothpaste A and Toothpaste C is 0.21, the customer is more likely to switch to Toothpaste B than Toothpaste C. Retailers can use dissimilarity or similarity interchangeably, depending on which term makes more sense for their analysis.

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# Glossary

## **13-period calendar**

A business calendar that contains 13 equal periods, each of 4 weeks (28 days) in length. Every fifth or sixth year, there are 53 weeks. The calendar has a 28-year cycle of 6 years, 5 years, 6 years, 6 years, and 5 years. *See also* 4-5-4 calendar, Gregorian calendar.

## **4-5-4 calendar**

The default Retail Insights business calendar, in which each quarter contains 13 full weeks in three periods of 4 weeks, 5 weeks, and 4 weeks in length. The calendar can also be implemented as 4-4-5 or 5-4-4. *See also* 13-period calendar, Gregorian calendar.

## **additive fact**

A fact column or measure that can be summed to arrive at a meaningful value. For example, the total daily sales values for every day of a week can be added together to arrive at the total sales value for the week. *Contrast with* positional fact. *See also* semi-additive fact.

## **advance shipping notice**

*See* ASN.

## **ASN**

*Abbreviation for* advance shipping notice, an electronic data interface (EDI) transaction from supplier to retailer that identifies the supplier number, order number, carton contents, and store or warehouse destination for a particular delivery.

## **affinity**

The relationship between items or groups of items in the basket of a customer.

## **attribute**

In Oracle BI, a detail of a dimension in an Oracle BI repository. For example, Package Size is an attribute of the Product dimension. Attributes usually appear as columns of a dimension table.

## **baseline price**

The price calculated for an item for a preconfigured duration (default 16 weeks), by calculating the average price when an item is not on promotion.

## **baseline sales**

Sales calculated for an item for a preconfigured duration (default 16 weeks), by multiplying the baseline price times the baseline units of an item.

**behavioralistic segment**

A traditional form of segmentation that identifies target consumers or groups based on characteristics, including benefits sought, usage rate, readiness to buy, and occasions of purchase.

**BOH**

*Abbreviation for* beginning on-hand, an inventory position at the beginning of a time period.

**buyer**

A person who develops business strategies and seasonal assortment plans to maximize the development of the brand, sales, and profits for a department or assigned area. The buyer identifies opportunities and recommends new products or concepts for the department.

**buyer analyst**

A person who assists the buyer in developing business strategies and seasonal assortment plans to maximize the development of the brand, sales, and profits for a department or assigned area. The buyer analyst identifies opportunities and recommends new products or concepts for the department.

**campaign**

The entire communication strategy for a specific marketing communications program. The marketing communications program is frequently in support of promotional events and individual promotions, but it can stand alone. Retailers execute several different types of campaigns, including advertising, direct marketing, and in-store marketing.

**cannibalization**

The reduction in sales of one item from its baseline sales when another item is on promotion. Retail Insights calculates this metric in conjunction with affinity items. When Item A, to which Item B has affinity, is promoted, any negative impact on Item B sales during this promotion period is referred to as cannibalization .

**catalog**

*See* subject area.

**comparable (comp) sales**

Sales within two specific periods (usually this year and last year) that can be used as measures of productivity and to understand business trends and growth. Comparable sales metrics also help to differentiate between revenue gains that come from new stores and operations at established stores.

**comparable (comp) store**

A store that is open for business for a set period of time (usually at least 53 weeks) and was in operation within the time period of analysis. In other words, comparable stores are established stores, rather than new or closed stores. Comparable stores can be used for comparative analysis in various areas such as profit, sales, margin, and merchandising.

**complex pack**

*See* sales pack.

**confidence**

Given an association rule that if X then Y, the frequency with which, in transactions in which the customer purchased X, they also purchased Y.

**consumer**

Any potential shopper. Consumers are a superset of a retailer's customers.

**CPC**

*Abbreviation for current plan for cost-based planning.*

**CPR**

*Abbreviation for current plan for retail-based planning.*

**customer**

A shopper who has bought from a retailer. A customer has one or more associated transactions in a sales transaction table.

**customer segment**

A preparation step for classifying each customer according to the customer groups that have been identified in the retailer's customer data. Segmentations can be broadly classified as demographic or behavioral (customers who shop at a particular retailer).

**demographic segment**

A traditional form of segmentation that identifies target customers based on characteristics including age, generation, income range, family size, presence of children, race, gender, education, and occupation.

**dimension**

A conceptual grouping that qualifies data at a general level. Metrics such as sales do not exist in isolation, but rather in the context of dimensions such as product, geography, and time. These dimensions define what type of data is available. When considering a metric such as sales, it is important to consider what data is available. Does sales information exist for each of my products? Is there sales data for each country, region, and state? Is there sales data exist for the last five years?

In Oracle BI, a dimension is a hierarchical organization of logical columns (attributes). One or more logical dimension tables can be associated with at most one dimension. A dimension can contain one or more hierarchies. There are two types of logical dimensions: dimensions with level-based hierarchies (structure hierarchies), and dimensions with parent-child hierarchies (value hierarchies). A particular type of level-based dimension, called a time dimension, provides special functionality for modeling time series data.

**EOH**

*Abbreviation for ending on-hand, an inventory position at the end of a time period.*

**filter**

In Oracle BI, criteria that are applied to attribute and metric (measure) columns to limit the results that are displayed when an analysis is run. For metric columns, filters are applied before the query is aggregated. They affect the query and thus the resulting values.

**franchisee**

A merchant who operates under a contractual agreement with a parent company under an established name. The parent company controls major business operation decisions for a franchise location.

**geographic segment**

A traditional form of segmentation that identifies target customers based on characteristics including region, size of metropolitan area, population density, and climate.

**GMROI**

*Abbreviation for gross margin return on investment, an assessment of the amount of money earned or lost compared to the amount of money invested.*

**Gregorian calendar**

The internationally accepted civil calendar with 12 months and 365 days per year (366 days in leap years). *See also* 13-period calendar, 4-5-4 calendar.

**halo**

The increase in sales of one item from its baseline sales when another item is on promotion. Retail Insights calculates this metric in conjunction with affinity items. When Item A, to which Item B has affinity, is promoted, any positive impact on Item B sales during this promotion period is referred to as halo.

**hierarchy**

In an Oracle BI repository, a system of levels in a logical dimension that are related to each other by one-to-many relationships. All hierarchies must have a common leaf level and a common root (all) level. Hierarchies are not modeled as separate objects in the metadata; instead, they are an implicit part of dimension objects.

**historic baseline**

The normal expected sales in the absence of any promotion. All baseline methods are modeled using previous non-promoted sales movement of a product to model (prediction) of what the expected sales of that product will be. Baseline volume can exceed total volume if expected sales are greater than actual sales. All the baseline metrics (units, profit, and sales) are calculated for a default period of 16 weeks, or other duration specified by system options for market basket analysis. The default weight age scheme is  $(1/2)^n$ ; however, it can be configured.

This duration is divided into 2 equal periods. Using a 16-week period (the default configuration), to find baseline amount, use 8 weeks of sales before the promotional week, and 8 weeks of sales after the promotional week.

If the user-specified duration  $x$  weeks is not even, then  $(x-1)/2$  weeks are used for pre-promotion sales and  $(x+1)/2$  weeks for after-promotional sales.

**household penetration**

A percentage of households in a specific market that use or consume an item. The value is calculated by dividing the total number of households that buy a product by the total number of households in the market.

**inventory**

Finished items intended for sale. Inventory can also include items that may not be available for various reasons, such as designated display units or defective units being repaired. Inventory is recorded as an asset on a company's balance sheet.

**inventory analyst**

A person who conducts in-depth review of the business to drive sales. This includes identifying specific opportunities (for example, sales/stock relationships, underperformance) and recommending actions to be taken.

**inventory manager**

A person who replenishes stock in stores on a daily basis, tracks supplier service levels; collaborates with the commercial team and suppliers to improve efficiency. The inventory manager reviews and recommends refinements to parameters in IT reporting.

**inventory position**

The measure of the current level of owned inventory. Inventory position includes on-hand inventory (including reserved inventory), in-transit inventory, and on-order inventory.

**invoice**

A contractual document that specifies the money owed by the buyer to the seller. An invoice is an Itemized statement given by suppliers to retailers that lists purchased products, their prices, quantities, taxes, and other fees such as shipping and handling. It may also carry any discounts applied at the time of generating the invoice.

**key performance indicator (KPI)**

A measurement that defines and tracks specific business goals and strategic objectives. KPIs often roll up into larger organizational strategies that require monitoring, improvement, and evaluation. KPIs have measurable values that usually vary with time, have targets to determine a score and performance status, include dimensions to allow for more precise analysis, and can be compared over time for trending purposes and to identify performance patterns.

**LM**

*Abbreviation for last month.*

**LW**

*Abbreviation for last week.*

**LY**

*Abbreviation for last year.*

**margin**

The difference between the cost of an item and its selling price.

**markdown**

A reduction in the selling price of an item. Markdowns are often planned to boost sales of an item. The three kinds of markdowns are permanent, promotion, and clearance.

**market basket analysis**

The value of the total market basket relating to a class or subclass. This measure is meaningful when compared to the average market basket.

**markup**

The increase in the selling price of an item above cost or current selling price. Markup is the measurement of profit for each item and is similar to margin, which is the difference between the cost of the item and the selling price.

**merchandising executive**

A person who views and manages business goals and objects; roles such as buyer report to this person.

**merchandise financial planner**

A person who is responsible for financial seasonal planning of sales, stock levels, production requirements, and the control of purchases relative to planned levels of (for example) color, fabric, and branch/store volumes.

**metadata**

Data about data. Metadata objects include the descriptions of schemas (such as tables, columns, data types, primary keys, and foreign keys) and logical constructs (such as fact tables, dimensions, and logical table source mappings). The Oracle BI repository is made up of the metadata used to process queries.

**metric**

Measures or facts, typically numeric, that are the focus of a business intelligence investigation. Fact columns are columns in the data warehouse that contain the facts and are used to define metrics.

**MTD**

*Abbreviation for month to date.*

**NRF**

*Abbreviation for National Retail Federation.*

**OLAP**

*Abbreviation for online analytical processing. Oracle BI is the OLAP user interface for Oracle Retail Insights reporting and analysis.*

**OLTP**

*Abbreviation for online transaction processing. Source systems for Oracle Retail Insights data are typically OLTP systems, such as transaction-based merchandising and pricing systems.*

**OPC**

*Abbreviation for original plan for cost-based planning.*

**OPR**

*Abbreviation for original plan for retail-based planning.*

**Oracle BI repository**

A file that stores Oracle Business Intelligence metadata. The metadata defines logical schemas, physical schemas, physical-to-logical mappings, aggregate table navigation, and other constructs.

**OTB**

*Abbreviation for open-to-buy.*

**planning executive**

A person who sets the strategic long-term targets from company to division level. The planning executive is responsible for merchandise planning organization and often has assortment planning, item planning, and allocation as responsibilities.

**PO**

*Abbreviation for purchase order.*

**positional fact**

A fact column or measure that cannot be summed to arrive at a meaningful result. For example, the ending stock-on-hand counts for an item for all the days of a week do not add up to a meaningful number. *Contrast with* additive fact. *See also* semi-additive fact.

**pricing**

The process of managing markups and markdowns for merchandise. Pricing is derived from factors such as cost, profit margin, quantity break, supplier quotes, and shipment or invoice date.

**pricing analyst**

A person responsible for pricing strategies for the company through combining the objectives set by the marketing department (increase revenues, decrease inventory) with historical and predictive analytics data.

**promotion**

The tactics a retailer undertakes to generate increased incremental sales volume for specific item-store combinations within a promotional event. Promotions are frequently communicated as part of a marketing campaign to ensure that awareness is generated with the target audience. Promotions are attempts to stimulate the sale of particular merchandise, by temporarily reducing the price, advertising the merchandise, or linking sales to offers of other merchandise at reduced prices or free.

**promotional planner**

A person responsible for planning promotions within stores.

**prompt**

In Oracle BI, a type of filter that allows the content designer to build and specify data values, or the end user to choose specific data values. A prompt expands or refines existing dashboard and analysis filters. *See also* filter.

**psychographic segment**

A traditional form of segmentation that identifies target customers based on characteristics including activities, interests, opinions, attitudes, and values.

**repository**

*See* Oracle BI repository.

**retail type**

The price type at which items were sold or held as inventory. There are four values for retail type:

- Regular
- Promotional
- Clearance

- Intercompany

**RFM**

Recency, frequency, and monetary score for a customer.

**sales pack**

A grouping of items under one item number. A sales pack can be either a simple pack or a complex pack. A simple pack contains multiples of one component item. A complex pack contains multiple component items.

**semi-additive fact**

A fact column or measure that cannot be summed in the time dimension to arrive at a meaningful result, but for which a sum in other dimensions can be meaningful. For example, the ending on-hand values for an item for each day of a week do not add up to a meaningful result. On the other hand, the sum of the ending on-hand values for all items of a subclass can be added together to obtain the ending on-hand value of the subclass. *See also* additive fact, positional fact.

**set of books**

Separate financial accounting for a particular part of a company, within the same accounting system or in a physically separate system. A company may use multiple sets of books to separate accounting operations by brand/chain, country/currency, or other distinctive characteristic that makes separate financial accounting desirable.

**simple pack**

*See* sales pack.

**subject area**

In the Oracle BI repository, an object in the presentation layer that organizes and presents data about a business model. For Oracle Retail Insights, the subject areas are Retail As-Is, Retail As-Was, and Retail Point in Time. A subject area is also called a catalog. *See also* as-is reporting, as-was reporting, point in time reporting.

**support**

Given an association rule that if X then Y, the frequency with which, out of all transactions, the customer purchased both X and Y.

**target customer (target prospect)**

The ideal consumer who lives near your stores, consumes the products you sell, and that you want to attract into your stores.

**threshold**

A minimum purchase amount or quantity required for the purchaser to obtain a discount amount or percentage or other deal.

**transaction count**

The number of transactions carried out at a retailer's stores by all customers. This is different from customer trips, because there could be several transactions in one trip, but transactions are easier to quantify through the point-of-sale system.

**UDA**

*Abbreviation for* user-defined attribute.

**UOM**

*Abbreviation for unit of measure.*

**VAT**

*Abbreviation for value-added tax.*

**VMI**

*Abbreviation for vendor-managed inventory.*

**VPN**

*Abbreviation for vendor product number.*

**WF**

*Abbreviation for warehouse/franchise.*

**WH**

*Abbreviation for warehouse.*

**wholesaler**

A merchant middleman who sells chiefly to retailers, other merchants, or industrial, institutional, and commercial users, mainly for resale or business use.

**WOS**

*Abbreviation for weeks of supply.*

**WTD**

*Abbreviation for week to date.*

**YTD**

*Abbreviation for year to date.*

