



Accelerate Customer Insights Package

Version 1.10

January 2025

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Accelerate Customer Insights Package

- [Overview \(Customer Insights\)](#)
- [Business User Reference \(Customer Insights\)](#)
- [Admin User Reference \(Customer Insights\)](#)
- [Technical User Reference \(Customer Insights\)](#)
- [Glossary \(Customer Insights\)](#)
- [Release Notes \(Customer Insights\)](#)
- [Archive of Documentation \(Customer Insights\)](#)

Overview (Customer Insights)

The Customer Insights Accelerator is one of many pre-built solutions from Pricefx that provides a customer with a quicker path to the analysis of their pricing data.

Pricefx Key Accelerators



You can also watch a video introducing Customer Insights and its usage:



In this section:

- [Business Overview \(Customer Insights\)](#)
- [Accelerator Solution Capabilities \(Customer Insights\)](#)
- [Value Measurement \(Customer Insights\)](#)

Business Overview (Customer Insights)

Premise

You are involved with the review of customer and product analytics, and trend analysis as part of a team from either Pricing, Financial, Sales, or IT support within your organization.

Desired Outcome

You need to prevent margin leakages through a set of actionable analytics for sales and pricing enabling identification of customers at risk (with low health scores) and reasons behind. It includes advanced analysis of the performance of all customers, individual customers/customer groups as well product performance for a customer.

Context and Background

After loading the product, customer, and transactional history into Pricefx and creating a Datamart, you are ready to start analyzing sales and pricing information for your customers and products. You need to examine each of them to identify which ones are performing poorly and understand the reasons for this poor performance.

Problem

You recognize that not all customers or products are providing healthy contributions to your gross margin and you need to apply an analytics tool that will correctly identify those that are performing poorly and clarify the root cause.

Solution Capabilities

Once this accelerator has been implemented and linked to your Datamart, then these analytical capabilities will be available:

- Ability to health score for customers and products
- Provide insights on revenue and margin trends
- Identify the top and bottom performing customers or products
- Highlight pricing and sales opportunities

Accelerator Solution Capabilities (Customer Insights)

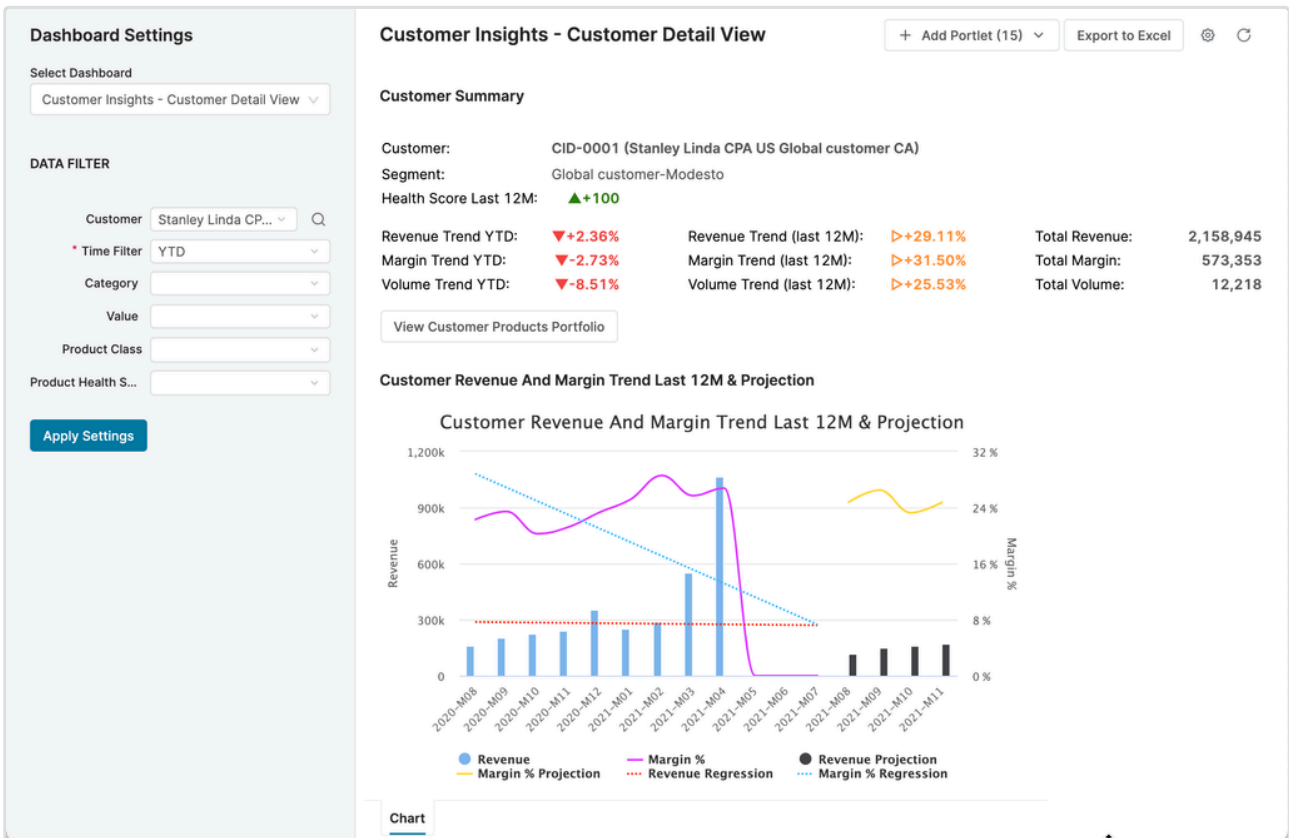
Accelerate Customer Insights Package allows management teams to prevent margin leakages through a set of actionable analytics for sales and pricing enabling identification of customers at risk (with low health score) and reasons behind.

- [Dashboards](#)
- [Configurable Options](#)
- [Entitlement](#)

It includes advanced analysis of performance of all customers, individual customers / customer groups as well product performance for a customer.

KPIs provided by the analysis:

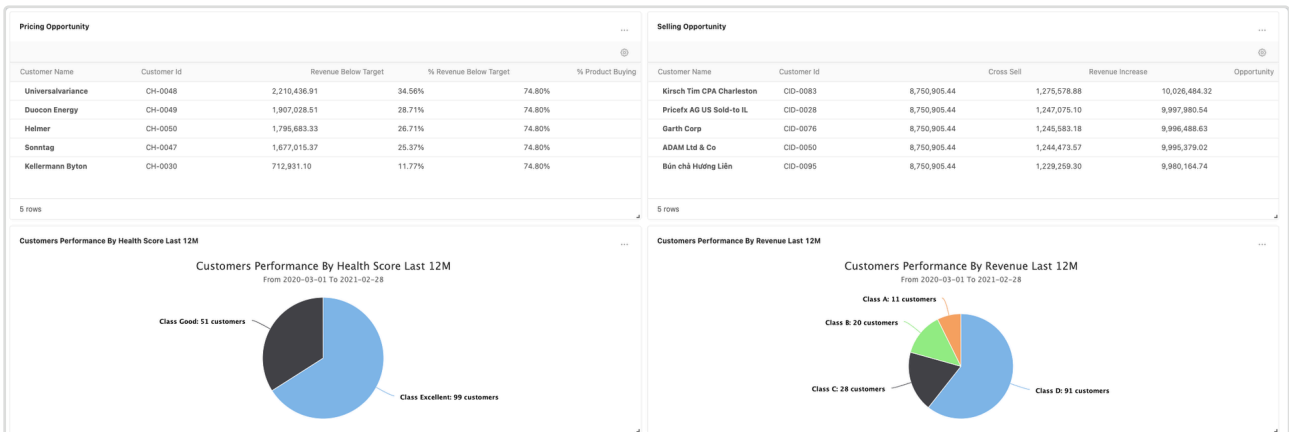
- Customer and Product health scores
- Revenue, Margin and Volume trends
- Pricing and Sales opportunities



Customer Detail View dashboard



Customer Revenue/Margin and Waterfall dashboard



Pricing and Selling Opportunity dashboard

Dashboards

| Dashboard | Charts and Table Reports | Description | Business User Reference |
|--|---|---|---|
| Customer Insights - Global View | <ul style="list-style-type: none"> • Customers Performance by Health Score • Customers Performance by Revenue • Customer Health Summary • Trends • Pricing Opportunity • Selling Opportunity • Customer Summary • Inactive Customers | This dashboard provides a structured overview of customer performance metrics and opportunities for improvement in engagement and revenue. | Global View Dashboard (Customer Insights) |
| Customer Insights - Customer Detail View | <ul style="list-style-type: none"> • Specialty and Commodity Products • High Volume and Low Volume Products • Revenue and Margin chart • Waterfall chart • Revenue Breakdown chart • Number of Transactions in Last 12M & Projection • Customer Revenue and Margin Trend in Last 12M & Projection • Customer Summary | This dashboard encapsulates essential insights into product performance and customer dynamics, which can assist in strategic decision-making. | Customer Detail View Dashboard (Customer Insights) |
| Customer Insights - Customer Products Portfolio | <ul style="list-style-type: none"> • Pricing Opportunity by Product Type • Pricing Opportunity by Product Attribute • Revenue and Margin Contribution • Pricing Opportunity by Top Products • Pricing Opportunity by Worst Products • Product Health Summary • Average Invoice Price • Trends • Pricing Opportunity • Selling Opportunity • Customer Summary | This dashboard encapsulates the key areas for evaluating pricing and product performance. | Customer Products Portfolio Dashboard (Customer Insights) |

Configurable Options

| Option | Description |
|---|---|
| Customer Segmentation definition | You can define grouping of customers by common characteristics/dimensions. Then selected KPIs of individual customers are calculated according to the values aggregated on the Customer Segment level. |
| Source of data | Defines from which source (Datamart / Data Source) your transactional data comes from and which fields should be used for calculations. |
| Parameters | <ul style="list-style-type: none">• Calculations of KPIs – You can set class values and thresholds for various product and customer classifications.• Displaying of certain things – You can change lists of options for filters, and default presets for dashboard filters. |
| Waterfall chart configuration | Waterfall chart configuration uses the configuration defined for the Sales Insights accelerator installed on the same partition. |

Entitlement

Note that the data displayed in the dashboards cannot be restricted based on user groups of the logged in user.

Value Measurement (Customer Insights)

This accelerator is designed to provide an overview of the trading performance of different customer groups through a series of dashboards. These are the measurements they provide.

- [Measures](#)
 - [Dimensions](#)
- [KPI and Metrics](#)
 - [Customer Insights KPI](#)

Measures

| Measure | Description |
|------------------------------------|--|
| Global View | Provides customer performance via health score and revenue, pricing and selling. |
| Detail View | Provides a detailed customer view on revenue and margin, waterfall chart, high/low volume products, and revenue and margin trends. |
| Customer Products Portfolio | Provides pricing opportunities by product type or attribute, identifies the top and bottom products. |

Dimensions

Each of these different dashboards integrates our KPIs and allows you to measure them across one or more dimensions:

- Health Score
- Date (Yr, Qtr, and Month)
- Customer ID
- Product ID
- Product Class
- Product Group
- Product attribute

KPI and Metrics

KPI stands for key performance indicator, a quantifiable measure of performance over time for a specific objective. KPIs provide targets for teams to shoot for, milestones to gauge progress, and insights that help people across the organization make better decisions.

While key performance indicators and metrics are related, they are not the same. Here is a quick explanation:

- Our definition of KPIs is the **key targets** you should be tracking **to make the biggest impact** on your strategic business outcomes. These KPIs will support your strategy and help your teams focus on what is important. For example, a key performance indicator could be targeted new consumers by month.
- Metrics, on the other hand, will measure the success of **everyday business activities** that **support your identified KPIs**. While they may have an impact on your outcomes, they are not the most critical measurements. Examples could include monthly site visits or number of modules installed.

Customer Insights KPI

As the name implies, the goal here is to examine customers and that is performed on three different levels:

- Global View ([Global View Dashboard \(Customer Insights\)](#))
- Detailed Customer View ([Customer Detail View Dashboard \(Customer Insights\)](#))
- Customer/Product Portfolio ([Customer Products Portfolio Dashboard \(Customer Insights\)](#))

The key KPIs being analyzed are:

- Revenue
- Margin
- Volume
- Health Score

Business User Reference (Customer Insights)

Customer Insights Dashboards consist of three separate dashboards which provide overview of trading performance of a customer group. They also support analysis of an individual customer's performance.

- [Global View Dashboard \(Customer Insights\)](#)
- [Customer Detail View Dashboard \(Customer Insights\)](#)
- [Customer Products Portfolio Dashboard \(Customer Insights\)](#)
- [Common Aspects of Dashboards \(Customer Insights\)](#)

 The dashboards are initially set with the Default preference, which will be updated using the Accelerator.

Global View Dashboard (Customer Insights)

Global View dashboard provides customer performance via health score and revenue, pricing and selling opportunity, and overall customer summary.

Portlets

All of the tables/charts are based on Data Source *Customer Insights Aggregated Data* if not stated otherwise.

- [Customer Summary](#)
- [Customers Performance by Health Score Last 12M](#)
- [Customers Performance by Revenue Last 12M](#)
- [Customer Health Summary](#)
- [Trends](#)
- [Pricing Opportunity](#)
- [Selling Opportunity](#)
- [Inactive Customers](#)
 - [Applied Filters](#)
 - [Not Applied Filters](#)
 - [Months Inactive](#)
- [Filter Rules](#)

Customer Summary

Displays some typical figures regarding a chosen customer or a group of customers.

- Customer displays a list of [Customer ID,(Customer Name)] following a filter group. When no customer is selected, it is left empty.
- Health Score Last 12M is re-calculated by the Trend L12M of the group.
- Pricing Opportunity = \sum Pricing Uplift
- Selling Opportunity = \sum Up Sell + \sum Cross Sell
- L12M trends are calculated on the monthly basis.

 Data are queried from Datamart.

Select Dashboard
1. Customer Insights - Global View

DATA FILTER

Customer(s)

CD-00003 x CD-00004 x

CD-00012 x CD-00014 x

CD-00018 x CD-00019 x

CD-00020 x CD-00022 x

Xing-Wop (CD-00024) x

Time Filter
L12M

Customer Rank
All

Customer Rank Bucket
5

KPI
Health Score

Customer Class

Customer Health Score

Customer Summary

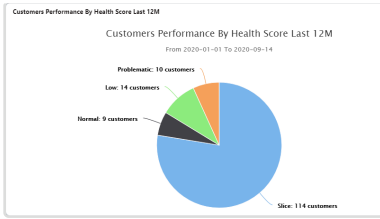
Customers: CD-00003 (M. Müller), CD-00004 (Price f(x) AG), CD-00012 (Soupo DE), CD-00014 (Kraftmeat), CD-00018 (Soupo CH), CD-00019 (Francomeat), CD-00020 (US Steak), CD-00022 (Safmeat), CD-00024 (Xing-Wop)

Health Score Last 12M: ▷+50

| | | |
|--|--------------------------|--------------------------------|
| Revenue Trend YTD: ▼-15.75% | Total Revenue: 6,819,276 | Pricing Opportunity: 9,665,503 |
| Margin Trend YTD: ▼-13.09% | Total Margin: 2,700,054 | Selling Opportunity: 8,969 |
| Volume Trend YTD: ▼-15.69% | Total Volume: 2,276,799 | Opportunity: 9,674,472 |

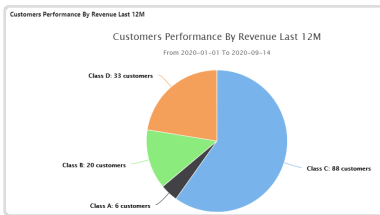
Customers Performance by Health Score Last 12M

Shows relative sizes of customer classification based on Health Score in the last 12 months.



Customers Performance by Revenue Last 12M

Shows relative sizes of customer classification based on Revenue in the last 12 months.



Customer Health Summary

Shows Customer's Health calculated based on the difference between two periods. For example, Current YTD and Previous YTD. It shows correlation between Health Score and revenue, gross margin, volume.

| Customer Name | Customer ID | Health Score | Total Revenue | Total Margin | Total Volume | Margin % | No. of Transactions per Day |
|----------------|-------------|--------------|---------------|--------------|--------------|----------|-----------------------------|
| Wacker Stein | CD-00142 | ▲ +100 | 35,303 | 6,909 | 5,987 | 54.20% | 1 |
| Appetit Mz | CD-00001 | ▲ +88 | 40,048 | 248,159 | 163,945 | 22.75% | 10 |
| Zumtoshwein KG | CD-00147 | ▲ +68 | 16,417 | 6,799 | 3,872 | 33.54% | 1 |
| WIGO Fish | CD-00144 | ○ +58 | 15,004 | 6,078 | 5,175 | 33.54% | 1 |
| Cleadio Pato | CD-00143 | ○ +43 | 11,845 | 6,266 | 4,408 | 53.10% | 1 |
| BioMélicux | CD-00038 | ▼ -2 | 181,061 | 62,099 | 34,390 | 38.09% | 8 |
| Berovo | CD-00037 | ▼ -2 | 189,932 | 62,794 | 33,380 | 38.09% | 5 |
| Dörken Gruppe | CD-00054 | ▼ -2 | 180,768 | 61,050 | 33,338 | 38.09% | 5 |
| Jamal | CD-00056 | ▼ -2 | 140,520 | 61,434 | 34,394 | 38.09% | 5 |
| Covid Ball | CD-00046 | ▼ -2 | 181,158 | 62,365 | 33,615 | 38.09% | 5 |

- Green/red color in the Customer column does not correspond to the Health score. See how it is [defined](#).
- If the revenue data are missing, then Margin % is null and this list of top customers is ordered by Customer ID. (But the customers are still listed because the application cannot resolve missing data on its own.)

Trends

For details on trends see [Common Aspects of Dashboards \(Customer Insights\)](#).

| Customer Name | Customer ID | Revenue Trend Last 12M | Margin Trend Last 12M | Volume Trend Last 12M | Revenue Trend |
|----------------|-------------|------------------------|-----------------------|-----------------------|---------------|
| Wacker Stein | CD-00142 | ▼ -22.89% | ▼ -4.32% | ▼ -20.76% | ▲ |
| Appetit Mz | CD-00001 | ▲ +172.10% | ▲ +171.61% | ▲ +165.92% | ▲ |
| Zumtoshwein KG | CD-00147 | ▼ -23.23% | ▼ -5.14% | ▼ -20.29% | ▲ |
| WIGO Fish | CD-00144 | ▼ -23.77% | ▼ -6.90% | ▼ -23.33% | ▲ |
| Cleadio Pato | CD-00143 | ▼ -32.24% | ▼ -31.19% | ▼ -29.58% | ▲ |
| BioMélicux | CD-00038 | ▲ +97.11% | ▲ +72.30% | ▲ +99.20% | ▼ |
| Berovo | CD-00037 | ▲ +76.15% | ▶ +55.79% | ▲ +74.42% | ▼ |
| Dörken Gruppe | CD-00054 | ▲ +113.64% | ▲ +78.84% | ▲ +107.72% | ▼ |
| Jamal | CD-00056 | ▲ +81.41% | ▶ +57.83% | ▲ +81.18% | ▼ |
| Covid Ball | CD-00046 | ▲ +82.80% | ▶ +58.59% | ▲ +77.48% | ▼ |

Pricing Opportunity

Shows a list of customers who can be targeted to sell at a higher price point, based on comparison to customers of the same segment. The top of the list represents the highest opportunity, these customers are under the average point in the customers set. The bottom of the list represents the lowest opportunity (hidden).

| Customer Name | Customer Id | % Products Buying | Pricing Uplift | % Pricing Uplift |
|------------------|-------------|-------------------|----------------|------------------|
| ▲ M. Müller | CD-00003 | 100.00% | 2,115,428 | 194.26% |
| ▲ Saftmeat | CD-00022 | 97.18% | 1,328,129 | 249.55% |
| ▲ US Steak | CD-00020 | 97.18% | 1,176,556 | 227.79% |
| ▲ Continent Meat | CD-00045 | 97.18% | 812,809 | 347.33% |
| ▲ Great Hu | CD-00043 | 97.18% | 705,344 | 295.58% |

- **Pricing Uplift** (Evaluate purchased products)
 - If the value > 0, customers have reached the revenue *under* the average point among the customers set, it indicates the value that customer should obtain to reach the average base.
 - If the value = 0, customers have reached the revenue *above* the average point among the customers set, they are good customers.
- **% Product Buying** – Shows how many products (in %) the customer purchased in the given period.
 - If the value = 100%, the customer purchased full products set presented in the given period. It correlates with Cross Sell Opportunity = 0.
 - If the value < 100%, the customer did not purchase the full products set presented in the given period. It means this customer must have Cross Sell Opportunity > 0.

Selling Opportunity

Shows the total value which can be gained for products that the customer already bought and not bought in the given period.

- **Cross Sell** (Evaluate non-purchased products)
 - The value that the customer should spend by purchasing a product which they did not buy in the past, but other customers bought it.
 - If the value = 0, the customer bought full products set presented in the given period.
- **Revenue Increase** (Evaluate purchased products)
 - The value that the customer should spend more by purchasing a product which they already bought in the past.
 - If the value = 0, the customer purchased products that all are above average point in the customers set.
- **Opportunity** – This is the total additional value that can be obtained for the customer, evaluate for both purchased and non purchased products.

| Customer Name | Customer Id | Cross Sell | Revenue Increase | Opportunity |
|-------------------|-------------|------------|------------------|-------------|
| ▲ Primuto | CD-00150 | 13,499,352 | 299,526 | 13,798,878 |
| ▲ Progusto | CD-00148 | 13,298,458 | 358,403 | 13,656,861 |
| ▲ Steak House | CD-00013 | 0 | 3,510,184 | 3,510,184 |
| ▲ Zumtoschwein KG | CD-00147 | 1,525,037 | 1,946,204 | 3,471,242 |
| ▲ Georgs Burger | CD-00069 | 0 | 3,375,533 | 3,375,533 |
| ▼ New York Meat | CD-00008 | 324 | 0 | 324 |

Inactive Customers

This portlet shows a list of “inactive” customers so that you can identify customers which are marked as active and for which there are no transactions in the chosen **time period**.

For more details see [Inactive Customer Classification Configuration](#).

| Customer Name | Customer Id | Last Active Month | Months Inactive |
|-----------------|-------------|-------------------|-----------------|
| Progetto | CD-00143 | No data | No data |
| APPO AG | CD-0001 | No data | No data |
| Zumtoschwein KG | CD-00147 | 2020-M03 | 21 |
| WSDO Fish | CD-00144 | 2020-M06 | 18 |
| Wurter Wurst | CD-00145 | 2020-M06 | 18 |
| MX Meat Inc. | CD-00146 | 2020-M06 | 18 |
| Claudio Pesto | CD-00143 | 2020-M06 | 18 |

Applied Filters

- Customer(s)
- Time filter

Not Applied Filters

- Customer Rank
- Customer Rank Bucket
- KPI
- Customer Class
- Customer Health Score

Months Inactive

1 Months Inactive = Current Month - Last Active Month

| Conditions | Results |
|---------------------------------------|--|
| If PP define + No filter customer | Get list customers PP defined that have no transaction in period |
| If PP define + Filter customer | Get list customers PP defined that have no transaction in period |
| If PP not define + No filter customer | Get list all customers in master have no transaction in period |
| If PP not define + Filter customer | Get list all customers in master have no transaction in period |

Dashboard Settings

Select Dashboard
1. Customer Insights - Global View

DATA FILTER

Customer(s)

Time Filter **QTD**

Customer Rank **All**

Customer Rank Bucket **5**

KPI **Health Score** no effect

Customer Class **A X D X**

Customer Health Score **Excellent X**

Customer Base

Apply Settings

1. Customer Insights - Global View

+ Add Portlet (13) Export to Excel

Inactive Customers

| Customer Name | Customer Id | Last Active Month | Months Inactive |
|------------------|-------------|-------------------|-----------------|
| Lindo Healthball | CD-00085 | 2021-M04 | 3 |
| Medtroba | CD-00087 | 2021-M04 | 3 |
| Meridi US | CD-00091 | 2021-M04 | 3 |
| Michelsdo | CD-00093 | 2021-M04 | 3 |
| Oxea Food | CD-00101 | 2021-M04 | 3 |
| Vino Tinto | CD-00111 | 2021-M04 | 3 |
| Schneider Ochs | CD-00115 | 2021-M04 | 3 |
| Schweizer Group | CD-00117 | 2021-M04 | 3 |
| Simesoc Wurceksa | CD-00123 | 2021-M04 | 3 |
| Simuto | CD-00124 | 2021-M04 | 3 |
| St. Jude Food | CD-00128 | 2021-M04 | 3 |
| Stomach | CD-00129 | 2021-M04 | 3 |
| ZPQ Ltd. | CD-00151 | 2018-M11 | 32 |

User Inputs

DATA FILTER

Customer(s)

Time Filter *

Customer Rank *

Customer Rank Bucket *

KPI *

Customer Class

Customer Health Score

Customer Base

To set up the dashboard, use these options:

- **Customer(s)**
- **Time Filter** – Possible values: MTD, QTD, YTD, L12M, L6M, L3M
 - For time filters with Last Period (L3M, L6M, L12M, ...):
 - [Start date] = First month beginning date
 - [End date] = Previous month end date
 - E.g.: Today is 2021-08-06 => L3M: From 2021-05-01 to 2021-07-31
 - For time filters with up To Date (YTD, QTD, MTD, ...):
 - [Start date] = Period Beginning Date
 - [End date] = Current date
 - E.g.: Today is 2021-08-06 => QTD: From 2021-07-01 to 2021-08-06
- **Customer Rank** – Possible values: All, Top, Worst
- **Customer Rank Bucket** – Possible values: 5,10, 50, 100

Counted items shown in the top or bottom of the list are based on the Rank Bucket input.

If the whole list has 12 customers and Customer Rank Bucket =10, then the top part of the list shows 10 customers and the bottom part shows 2 customers.

| Customer ID | Customer Name | Health Score | Revenue | Volume | Health Score | Revenue | Volume |
|-------------|---------------|--------------|---------|--------|--------------|---------|--------|
| 00-00001 | Customer A | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 00-00002 | Customer B | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 00-00003 | Customer C | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 00-00004 | Customer D | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 00-00005 | Customer E | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 00-00006 | Customer F | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 00-00007 | Customer G | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 00-00008 | Customer H | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 00-00009 | Customer I | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 00-00010 | Customer J | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 00-00011 | Customer K | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 00-00012 | Customer L | ▲ 100 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

i Customers column typically shows the top/worst aggregation of data which is driven by inputs on the left-hand side of the dashboard. Columns with Trends usually show increase/constant/decrease metrics based on the Data Load calculation results. There is no direct relation between these two types of metrics and columns.

- **KPI** – Possible values: Revenue, Margin %, Volume, Health Score
- **Customer Class** – Based on cumulative contribution to the total revenue in the last 12 months, the customer is assigned into a category (the thresholds are configurable).
 - A <= 20%
 - B <= 50%
 - C <= 95%
 - D = rest
- **Customer Health Score** – Possible values: Excellent, Normal, Low, Problematic (multiselect is enabled). For details see [Common Aspects of Dashboards \(Customer Insights\)](#).
- **Customer Base** – Based on cumulative revenue contribution and the threshold defined, Customers are classified as either Core or Long Tailed. For detailed formula explanation see [Glossary \(Customer Insights\)](#).
 - Core <=80%
 - Long Tailed > 80%

Filter Rules

Does not apply

| | | Customer(s) | Time Filter | Customer Rank + Customer Rank Bucket | KPI | Customer Class | Customer Health Score | Customer Base |
|------------------|--|-------------|-------------|---|-----|----------------|-----------------------|---------------|
| Summary | Customer Summary | X | X | | | X | X | X |
| Pie Chart | Customers Performance by Health Score Last 12M | X | X | | | X | X | X |
| | Customers Performance by Revenue Last 12M | X | X | | | X | X | X |
| Table | Customer Health Summary | X | X | X | X | X | X | X |
| | Trends | X | X | X (*) | X | X | X | X |
| | Pricing Opportunity | X | X | X (Ranked by Pricing Uplift descending) | | X | X | X |
| | Selling Opportunity | X | X | X (Ranked by Opportunity descending) | | X | X | X |
| | Inactive Customers | | | | | | | |

(*): Only sorts out Customers/Products that have traded in the period, does not affect calculation results.

See Also

- [Configuration in Company Parameters \(Customer Insights\)](#)
- [Dashboards Components](#)

Customer Detail View Dashboard (Customer Insights)

Customer Detail View dashboard provides a detailed customer view on revenue and margin, waterfall chart, high/low volume products, and revenue and margin trends.

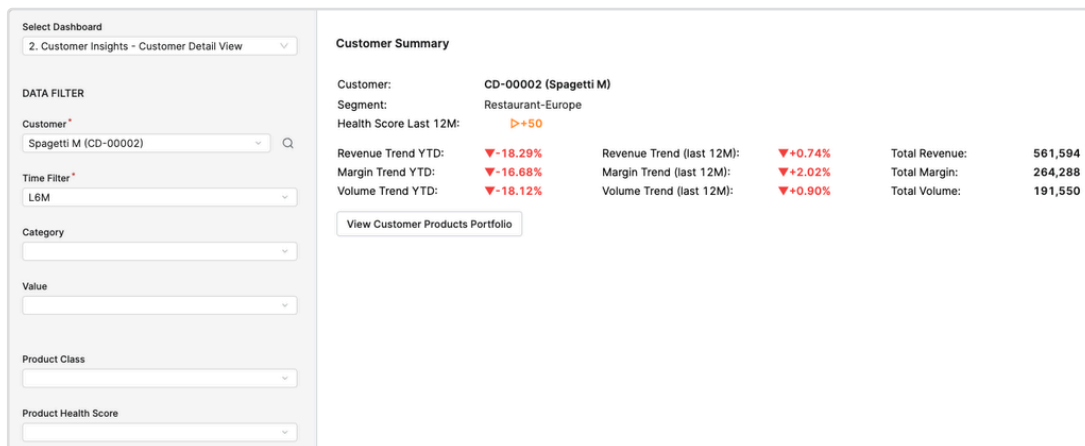
Portlets

- [Customer Summary](#)
- [Specialty and Commodity Products](#)
- [High Volume and Low Volume Products](#)
- [Revenue and Margin Chart](#)
- [Waterfall Chart](#)
- [Revenue Breakdown Chart](#)
- [Number of Transactions in Last 12M & Projection](#)
- [Customer Revenue and Margin Trend in Last 12M & Projection](#)

Customer Summary

Displays some typical figures regarding the chosen customer.

- All values are aggregated on the Customer(s) and Category levels.
- If a Category value is not selected, it will be hidden in the portlet.
- On click “View Customer Products Portfolio” to open new tab “Customer Products Portfolio” dashboard.
- L12M trends are calculated on monthly basis.
- This chart is based on Datamart.

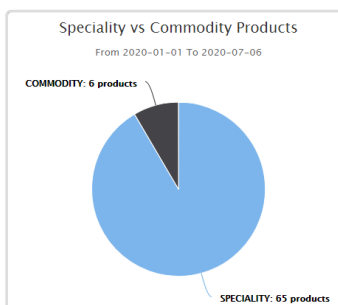


Specialty and Commodity Products

Shows relative sizes of product classification based on the margin %.

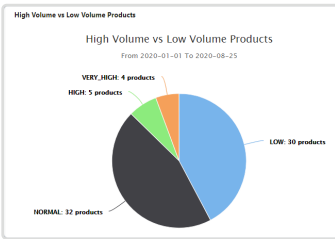
- **Specialty products** – Higher than the defined margin %
- **Commodity products** – Lower than the defined margin %

The chart is based on Data Source *Customer Insights Aggregated Data*.



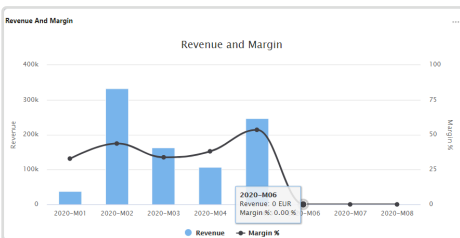
High Volume and Low Volume Products

Shows relative sizes of product classification based on volume. The chart is based on Data Source *Customer Insights Aggregated Data*.



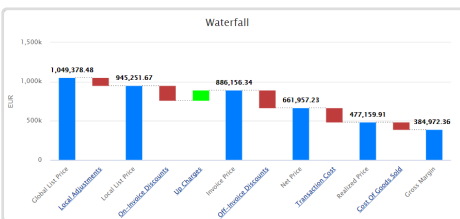
Revenue and Margin Chart

Shows Revenue and Margin values over several months in the given period. The chart is based on Data Source *Customer Insights Aggregated Data*.



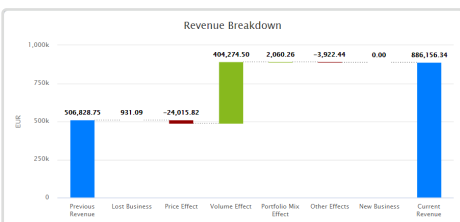
Waterfall Chart

Shows a running total profit as values are added or subtracted. This chart is based on Datamart. For more details see [Waterfall Dashboard](#).



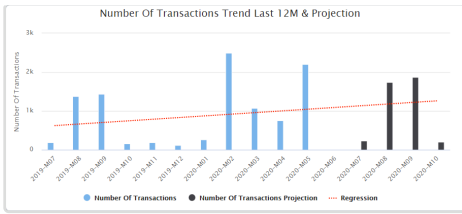
Revenue Breakdown Chart

Shows what the difference in revenue between two periods can be attributed to. It allows you to compare two years or quarters and optionally filter for only certain products and/or customers. The chart is based on Data Source *Customer Insights Aggregated Data*. For more details see [Revenue Breakdown Dashboard](#).



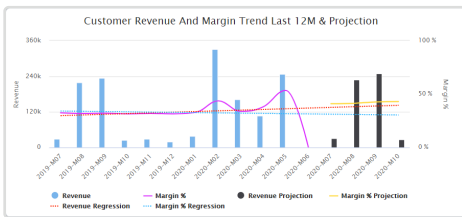
Number of Transactions in Last 12M & Projection

Bar & line chart shows the number of transactions for the last 12 months and estimation for the next 3 months. The current month is considered as a future month (as it has not ended yet). This chart is based on Datamart.



Customer Revenue and Margin Trend in Last 12M & Projection

Bar & line chart shows Revenue and Margin for the last 12 months and estimation for the next 3 months. The current month is considered as a future month (as it has not ended yet). This chart is based on Datamart.



User Inputs

DATA FILTER

Customer *

Time Filter *

Category

Value

Product Class

Product Health Score

Product Base

To set up the dashboard, use these options:

- **Customer**
- **Time Filter** – Possible values: MTD, QTD, YTD, L12M, L6M, L3M
 - For time filters with Last Period (L3M, L6M, L12M, ...):
 - [Start date] = First month beginning date
 - [End date] = Previous month end date
 - E.g.: Today is 2021-08-06 => L3M: From 2021-05-01 to 2021-07-31
 - For time filters with up To Date (YTD, QTD, MTD, ...):
 - [Start date] = Period Beginning Date
 - [End date] = Current date
 - E.g.: Today is 2021-08-06 => QTD: From 2021-07-01 to 2021-08-06
- **Category (+ Value)** – E.g.: Product ID, Product Group
- **Product Class** – Based on cumulative contribution to the total volume in the last 12 months, the product is assigned into a category (the thresholds are configurable).
 - Very High Volume <= 10%
 - High Volume <= 20%
 - Normal Volume <= 75%
 - Low Volume = rest
- **Product Health Score** – Possible values: Excellent, Normal, Low, Problematic (multiselect enabled).
 For details see [Common Aspects of Dashboards \(Customer Insights\)](#).
- **Product Base** – Based on cumulative revenue contribution and the threshold defined, Products are classified as either Core or Long Tailed. For detailed formula explanation see [Glossary \(Customer Insights\)](#).
 - Core <=80%
 - Long Tailed > 80%

Filter Rules

Does not apply

| | Portlets | User Inputs | | | | | |
|------------------|-------------------------------------|-------------|-------------|------------------|---------------|----------------------|--------------|
| | | Customer | Time Filter | Category + Value | Product Class | Product Health Score | Product Base |
| Summary | Customer Summary | X | X | X | X | X | X |
| Pie Chart | Specialty and Commodity Products | X | X | X | X | X | X |
| | High Volume and Low Volume Products | X | X | X | X | X | X |

| | | | | | | | |
|------------------|--|---|---|---|---|---|---|
| Bar Chart | Revenue and Margin chart | X | X | X | X | X | X |
| | Waterfall chart | X | X | X | X | X | X |
| | Revenue Breakdown chart | X | X | X | X | X | X |
| | Number of Transactions in Last 12M & Projection | X | | X | X | X | X |
| | Customer Revenue and Margin Trend in Last 12M & Projection | X | | X | X | X | X |

Classification

Commodity vs. Specialty Product

Based on average margin achieved by the product during the last 12 months (the thresholds are configurable). For detailed formula explanation see [Glossary \(Customer Insights\)](#).

- Commodity $\leq 40\%$
- Specialty $> 40\%$

See Also

- [Configuration in Company Parameters \(Customer Insights\)](#)
- [Dashboards Components](#)

Customer Products Portfolio Dashboard (Customer Insights)

Customer Products Portfolio dashboard provides pricing opportunities by product type or attribute, identifies the top and bottom products.

Portlets

All of the tables/charts are based on Data Source *Customer Insights Aggregated Data*.

- [Customer Summary](#)
- [Product Health Summary](#)
- [Trends](#)
- [Pricing Opportunity by Product Rank](#)
- [Pricing Opportunity by Product Type](#)
- [Pricing Opportunity by Product Attribute](#)
- [Selling Opportunity](#)
- [Pricing Opportunity](#)
- [Revenue and Margin Contribution](#)
- [Average Invoice Price](#)

Customer Summary

Displays some typical figures regarding the chosen customer, showing segment that the customer belongs to.

| 3. Customer Insights - Customer Products Portfolio | | | |
|--|------------------------|----------------------|---------|
| Customer Summary | | | |
| Customer: | CD-00001 (Appetito Mz) | | |
| Segment: | Restaurant-Europe | | |
| Health Score Last 12M: | ▲+100 | | |
| Revenue Trend YTD: | ▼-54.18% | Total Revenue: | 232,656 |
| Margin Trend YTD: | ▼-61.21% | Total Margin: | 102,795 |
| Volume Trend YTD: | ▼-54.88% | Total Volume: | 79,229 |
| | | Pricing Opportunity: | 68,813 |
| | | Selling Opportunity: | 26,063 |
| | | Opportunity: | 94,876 |

Customer Summary Table

- L12M trends are calculated on monthly basis.
- **Note** in this portlet:
 - Data queried from **DS [Customer Insights Aggregated Data]**: Trend YTD value here is the “customer YTD [revenue/margin/quantity] trend ” calculated in DS [Customer Insights Aggregated Data].
 - In **Customer Detail View dashboard**, data queried from **Datamart**: Trend YTD value will be recalculated dynamically if the product filter is selected.
- Meanwhile in Customer Products Portfolio dashboard: The trend YTD value will not change regardless of any product filter due to the complex calculation in this dashboard. This might be improved in the future, like in the Customer Detail View dashboard.

| Dashboard Settings | | 2. Customer Insights - Customer Detail View | |
|----------------------------------|------------------------|---|--|
| Customer Summary | | | |
| Customer: | CD-00001 (Appetito Mz) | | |
| Segment: | Restaurant-Europe | | |
| Health Score Last 12M: | ▲+100 | | |
| Revenue Trend YTD: | ▼-43.15% | Revenue Trend | |
| Margin Trend YTD: | ▼-46.67% | Margin Trend (I | |
| Volume Trend YTD: | ▼-50.66% | Volume Trend (I | |
| View Customer Products Portfolio | | | |

Dashboard Settings

Select Dashboard
3. Customer Insights - Customer Prod... ▾

DATA FILTER

Customer: Appetito Mz (C... ▾ Q

* Product Attribu...: Product Group ▾

* Time Filter: YTD ▾

* Product Rank: All ▾

* Product Rank ...: 5 ▾

Product Class: Very High X ▾

Product Health S...: ▾

Product Base: ▾

3. Customer Insights - Customer Products Portfolio

Customer Summary

Customer: CD-00001 (Appetito Mz)
Segment: Restaurant-Europe

Health Score Last 12M: ▲ +100

| | |
|------------------------------|----------------|
| Revenue Trend YTD: ▼ -54.18% | Total Revenue: |
| Margin Trend YTD: ▼ -61.21% | Total Margin: |
| Volume Trend YTD: ▼ -54.88% | Total Volume: |

Product Health Summary

Shows revenue and margin for top/worst products.

| Product Name | Product Id | Health Score Last 12... | Total Revenue | Total Margin | Total Volume | Margin % |
|-------------------|------------|-------------------------|---------------|--------------|--------------|----------|
| ▲ Tomato hot | MB-0044 | ▲ +92 | 59,019 | 33,081 | 7,229 | 56.05% |
| ▲ Sausage LS | MB-0034 | ▲ +60 | 36,952 | 20,833 | 8,945 | 56.38% |
| ▲ Sausage TI | MB-0039 | ▷ +47 | 31,366 | 17,523 | 7,723 | 55.87% |
| ▲ Meatball LS | MB-0007 | ▷ +45 | 89,761 | 48,812 | 13,983 | 54.38% |
| ▲ Meatball MI BxP | MB-0015 | ▷ +43 | 39,716 | 21,897 | 11,123 | 55.14% |
| ▼ NyChem 90 | NC-0090 | ▼ 0 | 804 | 325 | 338 | 40.45% |
| ▼ NyChem 100 | NC-0100 | ▼ 0 | 661 | 340 | 229 | 51.43% |
| ▼ ToughTray | NC-P-0001 | ▼ 0 | 151 | 82 | 68 | 54.27% |
| ▼ ToughTray 2000 | NC-P-0002 | ▼ 0 | 237 | 104 | 79 | 43.96% |
| ▼ ValueTray | NC-P-0003 | ▼ 0 | 172 | 93 | 54 | 54.32% |

Green/red color in the Product column does not correspond to the Health score but to the trend. See how it is [defined](#).

Trends

Show trend values for top/worst products (ranked by Health Score). For details see [Common Aspects of Dashboards \(Customer Insights\)](#).

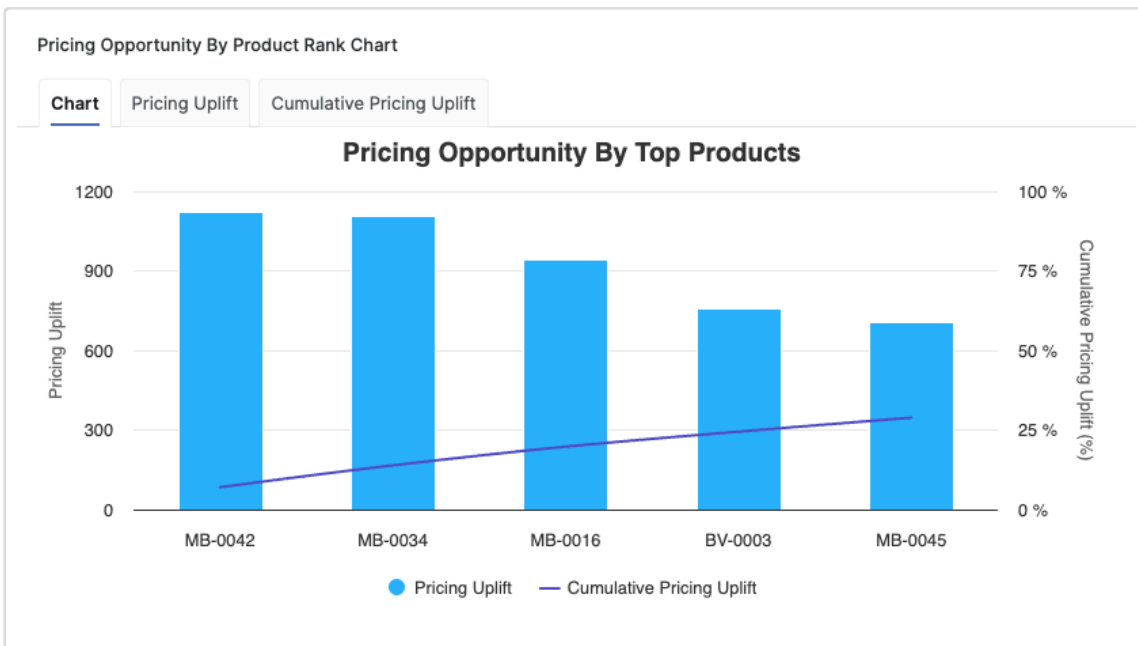
| Product Name | Product Id | Revenue Trend... | Margin Trend Last 12M | Volume Trend Last 12M | Revenue Trend YTD | Margin Trend YTD | Volume Trend YTD |
|---------------|------------|------------------|-----------------------|-----------------------|-------------------|------------------|------------------|
| ▲ NyChe... | NC-0090 | ▲ +143.20% | ▲ +123.12% | ▲ +166.30% | ▲ +206.67% | ▲ +244.05% | ▲ +193.13% |
| ▲ NyChe... | NC-0100 | ▼ -12.49% | ▼ -13.12% | ▼ -12.45% | ▲ +250.72% | ▲ +294.62% | ▲ +295.20% |
| ▲ Mustar... | MB-0047 | ▲ +333.67% | ▲ +504.89% | ▲ +360.53% | ▲ +167.49% | ▲ +291.13% | ▲ +139.67% |
| ▲ Sausage... | MB-0028 | ▶ +48.85% | ▲ +73.69% | ▶ +54.04% | ▲ +122.82% | ▲ +203.32% | ▲ +124.30% |
| ▲ Meatbal... | MB-0048 | ▲ +127.86% | ▲ +234.04% | ▲ +93.28% | ▲ +166.09% | ▲ +243.36% | ▲ +184.86% |
| ▼ Sparklin... | BV-0007 | ▼ -6.16% | ▼ +16.32% | ▼ +.82% | ▼ -36.39% | ▼ -22.36% | ▼ -32.22% |
| ▼ Tomato ... | MB-0042 | ▲ +140.16% | ▲ +237.45% | ▲ +151.49% | ▲ +138.16% | ▲ +219.63% | ▲ +117.41% |
| ▼ Multivit... | BV-0010 | ▲ +316.13% | ▲ +534.13% | ▲ +259.88% | ▼ -46.74% | ▼ -33.91% | ▼ -45.10% |
| ▼ MaiTai | BV-0004 | ▼ +5.26% | ▼ +21.75% | ▼ +5.27% | ▼ -41.19% | ▼ -27.95% | ▼ -35.97% |
| ▼ Orange ... | BV-0008 | ▲ +104.46% | ▲ +124.51% | ▲ +77.62% | ▼ -41.93% | ▼ -27.44% | ▼ -43.30% |

Trends Table

Pricing Opportunity by Product Rank

Shows products (bars) by Pricing Uplift descending and Cumulative Pricing Uplift (line). They are grouped by product ID.

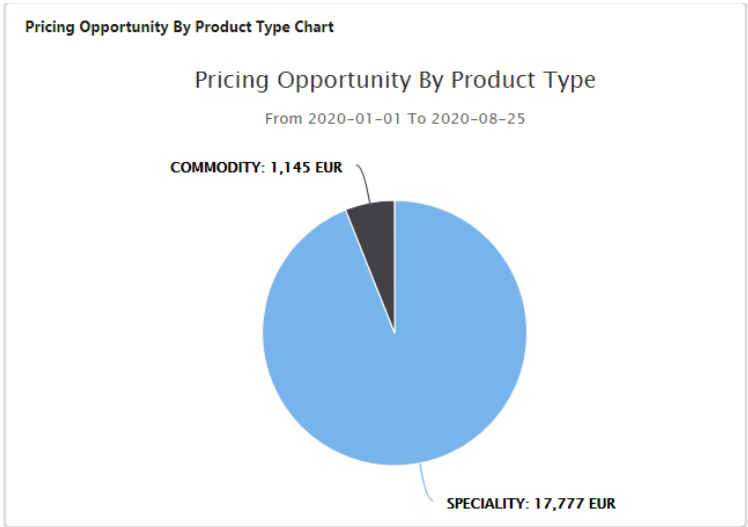
This chart displays either Top or Worst Products – as selected in the Product Rank field.



Pricing Opportunity by Product Type

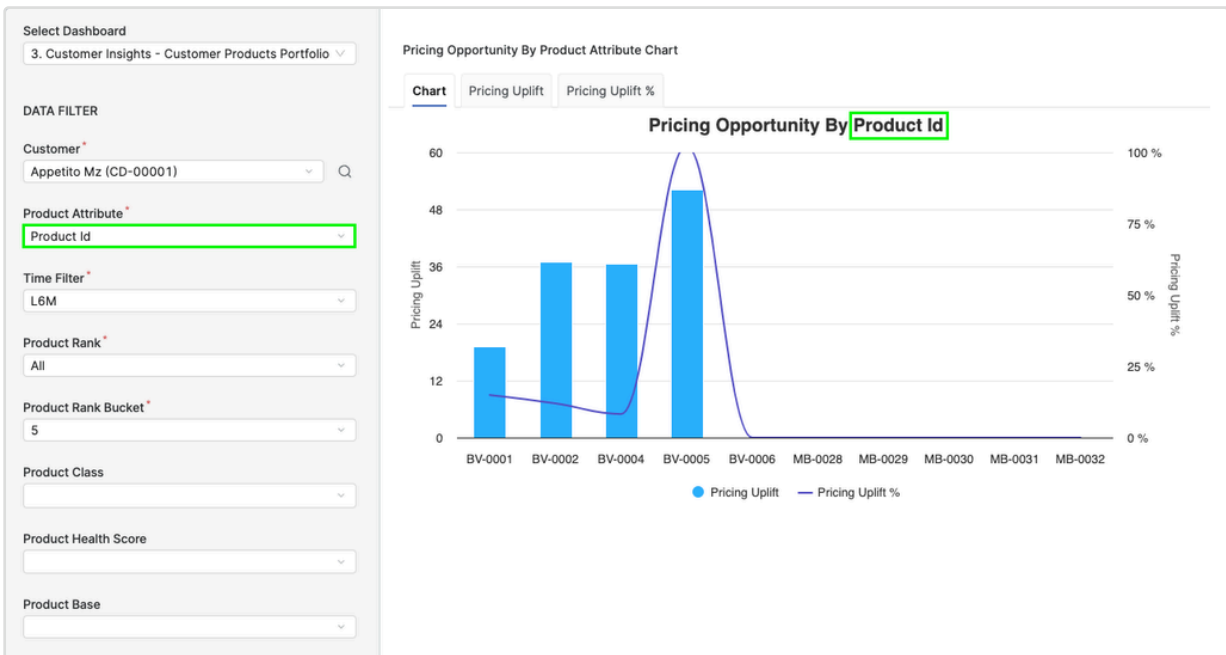
Shows relative sizes of product classification based on the margin %.

- **Specialty Products** – Higher than the defined margin %
- **Commodity Products** – Lower than the defined margin %



Pricing Opportunity by Product Attribute

Sums Pricing Uplift by the input value in the product attribute filter. The chart label reflects the input value in the product attribute filter.



Selling Opportunity

Shows the total value which can be gained for products that the customer already bought and not bought in the given period. They are grouped by the input value in the product attribute filter.

Select Dashboard
3. Customer Insights - Customer Products Portfolio

DATA FILTER

Customer*
Appetito Mz (CD-00001)

Product Attribute*
Product Id

Time Filter*
L6M

Product Rank*
All

Product Rank Bucket*
5

Product Class

Product Health Score

Selling Opportunity

| <input type="checkbox"/> Product Id | Cross Sell | Revenue Increase | Opportunity |
|-------------------------------------|------------|------------------|-------------|
| <input type="checkbox"/> ▲ MB-0005 | 0 | 2,883 | 2,883 |
| <input type="checkbox"/> ▲ MB-0004 | 0 | 2,729 | 2,729 |
| <input type="checkbox"/> ▲ BV-0009 | 0 | 2,339 | 2,339 |
| <input type="checkbox"/> ▲ BV-0008 | 0 | 2,300 | 2,300 |
| <input type="checkbox"/> ▲ BV-0005 | 0 | 2,169 | 2,169 |
| <input type="checkbox"/> ▼ MB-0047 | 0 | 0 | 0 |
| <input type="checkbox"/> ▼ MB-0048 | 0 | 0 | 0 |
| <input type="checkbox"/> ▼ MB-0049 | 0 | 0 | 0 |
| <input type="checkbox"/> ▼ MB-0050 | 0 | 0 | 0 |
| <input type="checkbox"/> ▼ MB-0051 | 0 | 0 | 0 |

10 rows

Pricing Opportunity

Shows Pricing Uplift value and % Pricing Uplift. They are grouped by the input value in the product attribute filter.

Select Dashboard
3. Customer Insights - Customer Products Portfolio

DATA FILTER

Customer*
Appetito Mz (CD-00001)

Product Attribute*
Product Id

Time Filter*
L6M

Product Rank*
All

Product Rank Bucket*
5

Product Class

Product Health Score

Product Base

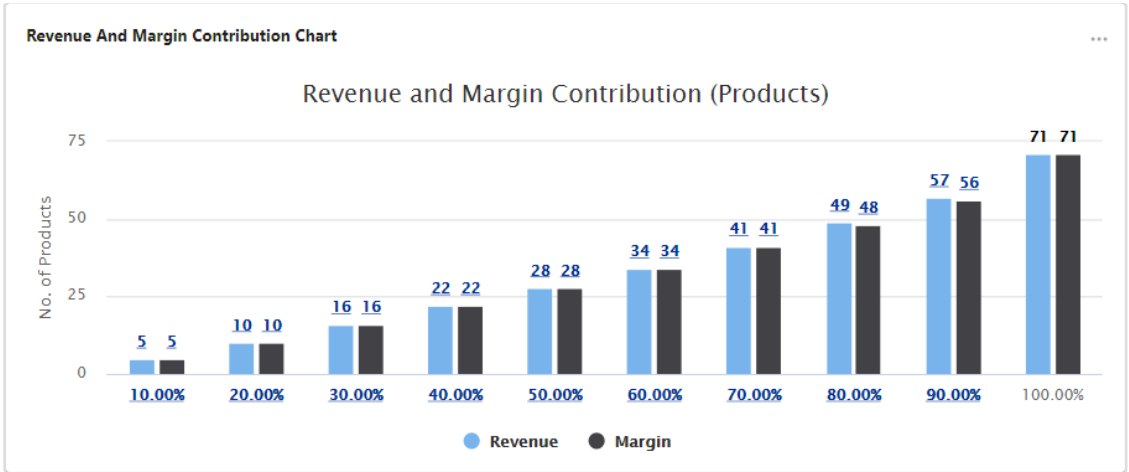
Pricing Opportunity

| <input type="checkbox"/> Product Id | Pricing Uplift | % Pricing Uplift |
|-------------------------------------|----------------|------------------|
| <input type="checkbox"/> ▲ BV-0001 | 19 | 14.95% |
| <input type="checkbox"/> ▲ BV-0002 | 37 | 12.01% |
| <input type="checkbox"/> ▲ BV-0004 | 36 | 8.26% |
| <input type="checkbox"/> ▲ BV-0005 | 52 | 102.22% |
| <input type="checkbox"/> ▲ BV-0006 | 0 | 0.00% |
| <input type="checkbox"/> ▼ MB-0028 | 0 | 0.00% |
| <input type="checkbox"/> ▼ MB-0029 | 0 | 0.00% |
| <input type="checkbox"/> ▼ MB-0030 | 0 | 0.00% |
| <input type="checkbox"/> ▼ MB-0031 | 0 | 0.00% |
| <input type="checkbox"/> ▼ MB-0032 | 0 | 0.00% |

10 rows

Revenue and Margin Contribution

Shows revenue and margin split into ten buckets to visualize the number of products needed to cover each bucket (cumulative contribution).



Average Invoice Price

Shows average unit price per product ID and customer classification by revenue.

- **Customer Revenue Class A/B/C/D** – Average invoice price per product and customer classification.
- **Overall** – Average invoice price per product and all customers
- **Customer** – Average invoice price per product and customer.

Average invoice price calculated based on data in the last 12 months. Time filter has no effect in this table.

| Product Name | Product Id | Customer Revenue Class A | Customer Revenue Class B | Customer Revenue Class C | Customer Revenue Class D | Overall | Customer |
|--------------|------------|--------------------------|--------------------------|--------------------------|--------------------------|---------|----------|
| ▲ Bundle | MB-0060 | 3.07 | 3.08 | 3.07 | | 3.10 | 3.11 |
| ▲ Config... | MB-0052 | 3.03 | 2.99 | 3.08 | | 3.08 | 2.89 |
| ▲ Meal S | Meal-C0... | 3.07 | 3.02 | 3.04 | | 3.07 | 3.03 |
| ▲ Meatb... | MB-0022 | 2.99 | 3.02 | 3.06 | 3.12 | 3.06 | 3.10 |
| ▲ Meal M | Meal-C0... | 3.06 | 3.05 | 3.05 | | 3.06 | 2.89 |
| ▼ Still W... | BV-0006 | 2.98 | 2.91 | 2.94 | 2.93 | 2.94 | 2.99 |
| ▼ Multivi... | BV-0010 | 2.98 | 2.89 | 2.99 | 2.84 | 2.93 | 2.87 |
| ▼ Sparkli... | BV-0007 | 2.97 | 3.00 | 2.94 | 2.88 | 2.93 | 2.91 |
| ▼ Mojito | BV-0005 | 2.91 | 2.90 | 2.94 | 2.94 | 2.93 | 3.08 |
| ▼ Meatb... | MB-0001 | 2.83 | 2.94 | 2.93 | 2.89 | 2.92 | 2.74 |

Average Invoice Price Table

User Inputs

DATA FILTER

Customer *

Product Attribute *

Time Filter *

Product Rank *

Product Rank Bucket *

Product Class

Product Health Score

Product Base

To set up the dashboard, use these options:

- **Customer**
- **Product Attribute** – Relevant product related dimensions, by default it is Product Group. Values available here are fields from the Product Master table which are selected as "Dimension" in Product Data Source.
- **Time Filter** – Possible values: MTD, QTD, YTD, L12M, L6M, L3M
 - For time filters with Last Period (L3M, L6M, L12M, ...):
 - [Start date] = First month beginning date
 - [End date] = Previous month end date
 E.g.: Today is 2021-08-06 => L3M: From 2021-05-01 to 2021-07-31
 - For time filters with up To Date (YTD, QTD, MTD, ...):
 - [Start date] = Period Beginning Date
 - [End date] = Current date
 E.g.: Today is 2021-08-06 => QTD: From 2021-07-01 to 2021-08-06
- **Product Rank** – Possible values: All, Top, Worst
- **Product Rank Bucket** – Possible values: 5, 10, 50, 100

Counted items shown in the top or bottom of the list are based on the Rank Bucket input.

If the whole list has 12 products and Product Rank Bucket =10, then the top part of the list shows 10 products and the bottom part shows 2 products.

| Customer Name | Customer ID | Health Score Last 12M | Trend | Rank Range |
|---------------|-------------|-----------------------|-------|------------|
| Customer A | 02-0001 | 100 | ▲ | 1-10 |
| Customer B | 02-0002 | 95 | ▲ | 1-10 |
| Customer C | 02-0003 | 90 | ▲ | 1-10 |
| Customer D | 02-0004 | 85 | ▲ | 1-10 |
| Customer E | 02-0005 | 80 | ▲ | 1-10 |
| Customer F | 02-0006 | 75 | ▲ | 1-10 |
| Customer G | 02-0007 | 70 | ▲ | 1-10 |
| Customer H | 02-0008 | 65 | ▲ | 1-10 |
| Customer I | 02-0009 | 60 | ▲ | 1-10 |
| Customer J | 02-0010 | 55 | ▲ | 1-10 |
| Customer K | 02-0011 | 50 | ▲ | 1-10 |
| Customer L | 02-0012 | 45 | ▲ | 1-10 |
| Customer M | 02-0013 | 40 | ▲ | 1-10 |
| Customer N | 02-0014 | 35 | ▲ | 1-10 |
| Customer O | 02-0015 | 30 | ▲ | 1-10 |
| Customer P | 02-0016 | 25 | ▲ | 1-10 |
| Customer Q | 02-0017 | 20 | ▲ | 1-10 |
| Customer R | 02-0018 | 15 | ▲ | 1-10 |
| Customer S | 02-0019 | 10 | ▲ | 1-10 |
| Customer T | 02-0020 | 5 | ▲ | 1-10 |
| Customer U | 02-0021 | 0 | ▲ | 1-10 |
| Customer V | 02-0022 | -5 | ▲ | 1-10 |
| Customer W | 02-0023 | -10 | ▲ | 1-10 |
| Customer X | 02-0024 | -15 | ▲ | 1-10 |
| Customer Y | 02-0025 | -20 | ▲ | 1-10 |
| Customer Z | 02-0026 | -25 | ▲ | 1-10 |
| Customer AA | 02-0027 | -30 | ▲ | 1-10 |
| Customer AB | 02-0028 | -35 | ▲ | 1-10 |
| Customer AC | 02-0029 | -40 | ▲ | 1-10 |
| Customer AD | 02-0030 | -45 | ▲ | 1-10 |
| Customer AE | 02-0031 | -50 | ▲ | 1-10 |
| Customer AF | 02-0032 | -55 | ▲ | 1-10 |
| Customer AG | 02-0033 | -60 | ▲ | 1-10 |
| Customer AH | 02-0034 | -65 | ▲ | 1-10 |
| Customer AI | 02-0035 | -70 | ▲ | 1-10 |
| Customer AJ | 02-0036 | -75 | ▲ | 1-10 |
| Customer AK | 02-0037 | -80 | ▲ | 1-10 |
| Customer AL | 02-0038 | -85 | ▲ | 1-10 |
| Customer AM | 02-0039 | -90 | ▲ | 1-10 |
| Customer AN | 02-0040 | -95 | ▲ | 1-10 |
| Customer AO | 02-0041 | -100 | ▲ | 1-10 |

i Product column typically shows the top/worst aggregation of data which is driven by inputs on the left-hand side of the dashboard. Columns with Trends usually show increase/constant/decrease metrics based on the Data Load calculation results. There is no direct relation between these two types of metrics and columns.

- **Product Class** – Based on cumulative contribution to the total volume in the last 12 months, the product is assigned into a category (the thresholds are configurable).
 - Very High Volume <= 10%
 - High Volume <= 20%
 - Normal Volume <= 75%
 - Low Volume = rest
- **Product Health Score** – Possible values: Excellent, Normal, Low, Problematic (multiselect enabled). For details see [Common Aspects of Dashboards \(Customer Insights\)](#).
- **Product Base** – Based on cumulative revenue contribution and the threshold defined, Customers and Products are classified as either Core or Long Tailed. For detailed formula explanation see [Glossary \(Customer Insights\)](#).
 - Core <=80%
 - Long Tailed > 80%

Filter Rules

Does not apply

| Portlets | | User Inputs | | | | | | |
|------------------|--|-------------|-------------|-------------------|--------------------------------------|---------------|----------------------|--------------|
| | | Customer | Time Filter | Product Attribute | Customer Rank + Customer Rank Bucket | Product Class | Product Health Score | Product Base |
| Summary | Customer Summary | X | X | | | X | X | X |
| Pie Chart | Pricing Opportunity by Product Type | X | X | | | X | X | X |
| Bar Chart | Pricing Opportunity by Product Attribute | X | X | X | | X | X | X |
| | Revenue and Margin Contribution | X | X | | | X | X | X |
| | Pricing Opportunity by Top Products | X | | | X | X | X | X |
| | Pricing Opportunity by Worst Products | X | X | | X | X | X | X |
| Table | Product Health Summary | X | X | | X (by Health Score) | X | X | X |
| | Average Invoice Price | X | X (*) | | X (by Overall) | X | X | X |
| | Trends | X | X (*) | | X (by Health Score) | X | X | X |
| | Pricing Opportunity | X | X | X | X | X | X | X |
| | Selling Opportunity | X | X | X | X | X | X | X |

(*): Only sorts out Customers/Products that have traded in the period, does not affect calculation results.

See Also

- [Configuration in Company Parameters \(Customer Insights\)](#)
- [Dashboards Components](#)

Common Aspects of Dashboards (Customer Insights)

- Customer Health Score, Product Health Score
 - Health Score Classes
- Customer Segmentation
- Trends Calculation
- Create Quote from a Dashboard
 - Steps
 - Example
 - Example

Customer Health Score, Product Health Score

Customers or products are assigned into different classes based on Health Score calculated as a summary of Revenue Health Score and Margin Health Score (with weights set for particular inputs).

The Revenue Health Score and Margin Health Score are set according to the Revenue and Margin monthly change (trend) in the last 12 months (the maximum value is 100, the minimum value is 0) and to this classification:

| Revenue or Margin Trend Last 12M | Revenue or Margin Health Score |
|----------------------------------|--------------------------------|
| >25% | 100 |
| 15% - 25% | 75 |
| 5% - 15% | 60 |
| -5% - 5% | 50 |
| -5% - -15% | 40 |
| -15% - -25% | 25 |
| < -25% | 0 |

1 $\text{Health Score} = \text{Revenue Score} * \text{Revenue Weight} + \text{Margin Score} * \text{Margin Weight}$

The weight value is configurable and can be set between 0 and 1 for each (the default value is 0.5 for each); the summary of these two has to be equal to 1 (e.g. Revenue Weight = 0,5, Margin Weight = 0,5 => 0,5 + 0,5 = 1).

If a customer or product is decreasing in revenue and margin, the Health Score value goes down.

Health Score Classes

- Excellent > 75
- Normal > 50
- Low > 25
- Problematic = rest

Customer Segmentation

To group customers by common characteristics, the Customer Segment is defined in configuration (Price Parameters) – a list of fields the segment consists of, e.g. customer size, region, country etc.

According to values aggregated on the Customer Segment level, certain KPIs for particular customers are calculated, e.g. cross sell.

Trends Calculation

In many portlets there are Last 12M trends of particular KPIs (for example Revenue Trend Last 12M) presented either as such or as a part of a formula to calculate other KPIs.

The trends calculation granularity (time units between which the KPI change is considered) differs per various dashboards:

- Global View: monthly
- Detail View: monthly
- Product Portfolio: monthly

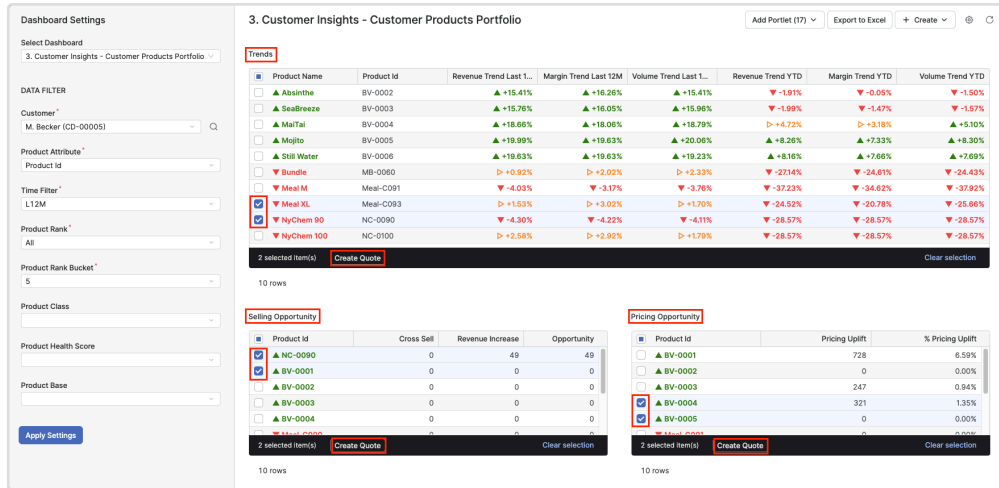
In the Customer Summary portlets these are calculated always on the monthly level.

The formulas as such are described in [Glossary \(Customer Insights\)](#).

Create Quote from a Dashboard

You can create a quote from the Customer Insights - Customer Products Portfolio dashboard, specifically from these portlets:

- Trends
- Pricing Opportunity
- Selling Opportunity



Steps

- As inputs, select:
 - Customer and Time Filter which transactions exist.
 - Product Attribute = Product Id
- Select a row in the result matrix.
- Click the **Create Quote** button.
- A new quote is created and opened and it includes the parameters passed from the dashboard. Quote Type is defined in the PP table [CI_QuoteType_Mapping](#). If Quote Type is not defined in PP, the quote is created with the default Quote Type.

| Company Parameter Values: CI Quote Type Mapping | | | + Add Record | Mass edit | Mass delete | ... |
|---|---------------------|--------------------|--------------|-----------|-------------|-----|
| Dashboard Name | Portlet Name | Quote Type | | | | |
| Select Value | Select Value | Search... | | | | |
| <input type="checkbox"/> CustomerInsights_CustomerProductsPortfolio | Trends | __DEFAULT__ | | | | |
| <input type="checkbox"/> CustomerInsights_CustomerProductsPortfolio | Pricing Opportunity | EVA | | | | |
| <input type="checkbox"/> CustomerInsights_CustomerProductsPortfolio | Selling Opportunity | CPQ | | | | |

Example

Quote created from Trends, Quote Type = default (CPQ)

P-1350 (New Quote) 📄 ○ Draft Submit Recalculate Export Email Quote Dup

Header **Items** Attachments Workflow Messages

Items + Add Items + Add Folder ... 🌐

| <input type="checkbox"/> Label | Product Id | Date Added | Default Inputs | Color |
|--|--|--|--|--|
| <input type="text" value="Search..."/> | <input type="text" value="Search..."/> | <input type="text" value="Search..."/> | <input type="text" value="Search..."/> | <input type="text" value="Search..."/> |
| <input type="checkbox"/> Sausage BM | MB-0029 | a few seconds ago | Open | |
| <input type="checkbox"/> Sausage BI | MB-0030 | a few seconds ago | Open | |
| <input type="checkbox"/> Sausage PS | MB-0031 | a few seconds ago | Open | |

Detail & Settings

Details Input Parameters Calculations

Quote Type
(Default)

Created By
tan

Status

Example

Quote created from Selling Opportunity, Quote Type = CPQ

P-1351 (New Quote) 📄 ○ Draft Submit Recalculate Export Email

Header **Items** Attachments Workflow Messages

Items + Add Items + Add Folder ... 🌐

| <input type="checkbox"/> Label | Product Id | Date Added | Default Inputs | Color |
|--|--|--|--|--|
| <input type="text" value="Search..."/> | <input type="text" value="Search..."/> | <input type="text" value="Search..."/> | <input type="text" value="Search..."/> | <input type="text" value="Search..."/> |
| <input type="checkbox"/> NyChem 075 | NC-0075 | a few seconds ago | Open | |
| <input type="checkbox"/> Mustard mild | MB-0045 | a few seconds ago | Open | |
| <input type="checkbox"/> NyChem 90 | NC-0090 | a few seconds ago | Open | |
| <input type="checkbox"/> Meatball BS & Mustard | MB-0049 | a few seconds ago | Open | |

Detail & Settings

Details Input Parameters

Quote Type
CPQ

Created By
tan

Status
Draft

Admin User Reference (Customer Insights)

- [Mandatory Data \(Customer Insights\)](#)
- [User Roles \(Customer Insights\)](#)
- [Deployment \(Customer Insights\)](#)

Mandatory Data (Customer Insights)

| Type | Data | Fields | Use Case |
|------------------|---------------------------|--|---|
| Master Data | Customer | Custom attributes (optional) | <ul style="list-style-type: none"> Active/Inactive Customers identification E.g. if CM.Attribute15 = "10" then the particular customer is considered active. Customer segmentation (any other data source can be used as well) For example, the segment can be defined by: <ul style="list-style-type: none"> Country + Region Customer Type + Customer Group ... |
| | Product | All the dimensions in the relevant Product Data Source (optional) | <p>Customer Products Portfolio: Pricing and Selling Opportunities by Product Attribute:</p> <ul style="list-style-type: none"> Product Attribute defined by a user input, the filter items are loaded from the Data Source definition. Used in Pricing Opportunities and Selling Opportunities portlets as a dimension (aggregation level). |
| Transaction Data | Sales Data (Transactions) | <ul style="list-style-type: none"> Unique ID Customer ID Customer Name Product ID Product Name Pricing Date Invoice Price (Gross) Margin Quantity | Core |


User Roles (Customer Insights)

To use Customer Insights Package, you need to be assigned the following Pricefx [user roles](#):

- Run Analytics Queries
- Manage Data Analyzer
- Manage Analytics Calculation Logics
- View Company Parameters

Deployment (Customer Insights)

Customer Insights Package is an extension of Sales Insights Package – it re-uses some Sales Insights components.

 For the correct functionality, both Sales Insights Package 1.6 and Customer Insights Package 1.6 (or later versions) have to be present at the partition.

In this section:

- [A. Delete Previously Created Objects](#)
- [B. Run Deployment from PlatformManager](#)
- [C. Update Price Parameters and Advanced Configuration Options](#)
- [D. Verify Number of Threads at Partition](#)
- [E. Configure Batching](#)
- [F. Deploy & Run Calculation Flows \(Manual Step\)](#)

As the current version of PlatformManager does not support all of the steps needed to deploy the Customer Insights Package, the step [Deploy & Run Calculation Flows \(Manual Step\)](#) needs to be performed manually.


A. Delete Previously Created Objects

If you are going to run deployment to a partition where Customer Insights Package had been installed before, it is recommended to delete the previously created objects, namely:

- **Company Parameters** (main menu **Company Parameters** > `CustomerInsights` : all)

This step can be skipped if it is obvious that no changes were made to these objects (Company Parameters structure) since the previous version (see [Customer Insights Release Notes](#)).

B. Run Deployment from PlatformManager

1. Get access to PlatformManager and target partition, as described in common [installation prerequisites](#).
2. Access PlatformManager at <https://platform.pricefx.com/> and log in.
3. Go to **Marketplace** and find the *Customer Insights* package.
4. Click the accelerator package tile, select the partition where you want to deploy the package and confirm the deployment dialog to start.
 For detailed description of all deployment options, see [PlatformManager documentation](#).
5. Set up Datamart mapping.

Customer Insights

Datamart Mapping

Customer Insights Package (CIP) is an extension of Sales Insights Package (SIP) - re-uses some of its components. For the correct functionality either the latest version of both SIP and CIP or at least versions mentioned in [Customer Insights Dashboard Deployment](#) guide (or later ones) have to be present at the partition.

Source Type *

Datamart

Datamart Name

Standard_Sales_Data

Datamart CustomerId Field Name *

Customer Id

Datamart Customer Name Field Name *

Customer Id

Datamart ProductId Field Name *

Product Id

Datamart Product Name Field Name *

Product Name

Datamart Pricing Date Field Name *

Pricing Date

Datamart Invoice Price Field Name *

Invoice Price

Datamart Margin Field Name *

Gross Margin

Datamart Quantity Field Name *

Quantity

Datamart Unique Id Field Name *

Unique Id

Continue **Cancel**

Select the Datamart name and field names (from the Datamart) for mapping and click **Continue**.

6. Wait for the system to finish the import.

7. The deployment is complete.

C. Update Price Parameters and Advanced Configuration Options

The [PFXTemplate_CustomerInsights_Customer_Segment](#) Company Parameter needs to be consistent with the partition data for the fields set as Active. This CP defines the fields used for a customer segmentation.

If the partition has some special setting (different from the Accelerator default setting), check and update the settings in other Company Parameters.

For more details see [Configuration in Company Parameters \(Customer Insights\)](#).

D. Verify Number of Threads at Partition

Starting with Customer Insights Package version 1.6, it is recommended to have 8 threads per partition where Customer Insights is deployed. If the number is lower, Data Load calculations may fail.

By default, the value is lower, so you need to check with Pricefx Support. Threads are set by them as a server config parameter `numberOfThreadsPerPartition` for both `paQuery` and `paDataLoad`.

E. Configure Batching

Batching for the aggregated Data Load must be configured **before** the calculation is triggered (next step). For more details, refer to [Configurable Batching for Aggregation Data Load](#).

F. Deploy & Run Calculation Flows (Manual Step)

To keep the aggregated data (`CI_AggregatedData` Data Source) synchronized with customer classification data (`CI_CustomerClassification` Data Source), a scheduled job needs to be set to run the Data Load `CI_CustomerClassification` first and then run `CI_AggregatedData` Data Load (Distributed Calculation).

This can be done in Calculation Flows by taking these steps:

1. Go to **Administration > Configuration > Calculation Flows**.
2. Find a calculation flow with the name `CustomerInsights_Sequencer` .

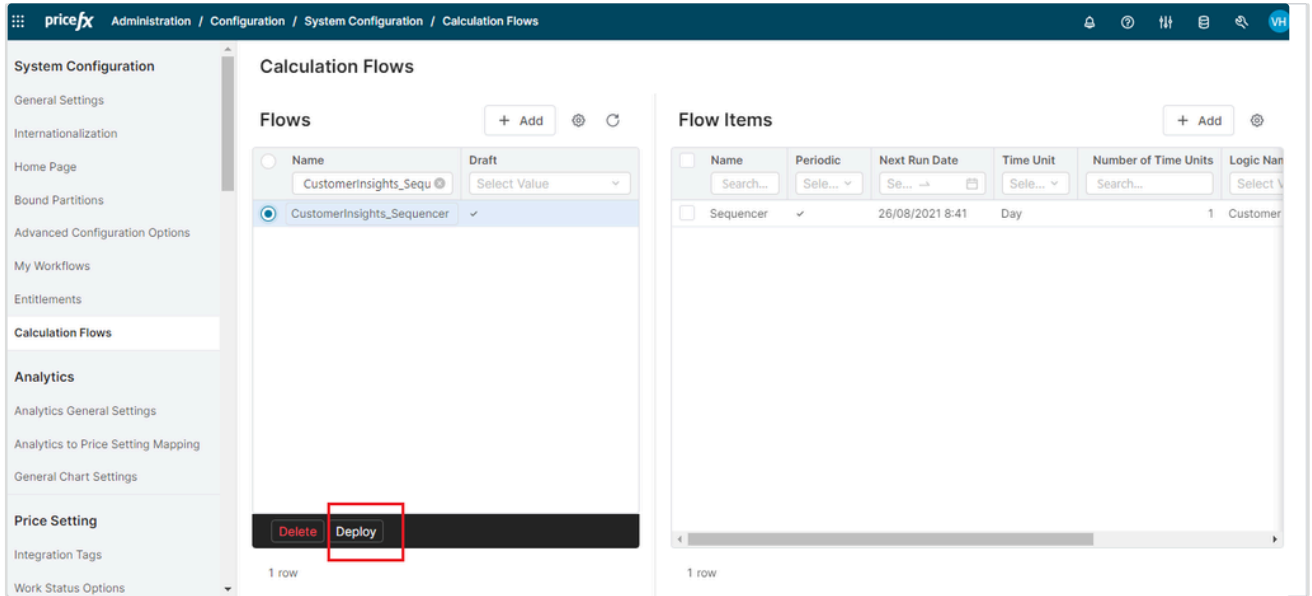
The screenshot shows the 'Calculation Flows' configuration page. On the left, the 'Calculation Flows' menu item is highlighted. The main area is divided into two panels: 'Flows' and 'Flow Items'. In the 'Flows' panel, a table lists the 'CustomerInsights_Sequencer' flow, which is selected. Below the table are 'Delete' and 'Deploy' buttons. The 'Flow Items' panel shows a table with one item named 'Sequencer', which is periodic and runs on '26/08/2021 8:41' with a 'Time Unit' of 'Day' and 'Number of Time Units' of '1'.

3. Select the `CustomerInsights_Sequencer` and update **Time Unit** and **Number of Time Units**.

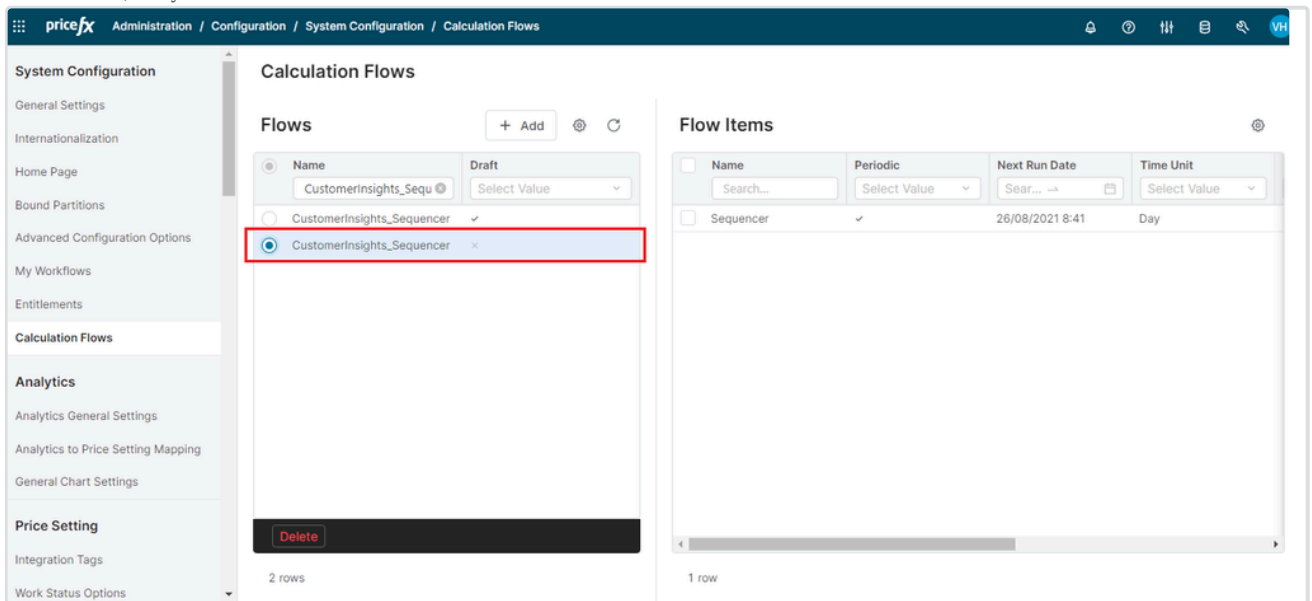
You define here how often the data will be refreshed and when. This setting has a big impact on the dashboard results and their validity.

This screenshot is identical to the previous one, but with a red box highlighting the 'Time Unit' and 'Number of Time Units' columns in the 'Flow Items' table. The 'Time Unit' is 'Day' and the 'Number of Time Units' is '1'.

4. Click the **Deploy** button to deploy the calculation flow.



5. When finished, the system will show more lines for the flows.



6. If you want to run the calculation flow immediately, select the row in the right window and then click **Run now**.

pricefx Administration / Configuration / System Configuration / Calculation Flows

System Configuration

- General Settings
- Internationalization
- Home Page
- Bound Partitions
- Advanced Configuration Options
- My Workflows
- Entitlements
- Calculation Flows**
- Analytics**
 - Analytics General Settings
 - Analytics to Price Setting Mapping
 - General Chart Settings
- Price Setting**
 - Integration Tags
 - Work Status Options

Calculation Flows

Flows + Add ⚙ 🔄

| Name | Draft |
|----------------------------|--------------|
| CustomerInsights_Sequ | Select Value |
| CustomerInsights_Sequencer | ✓ |
| CustomerInsights_Sequencer | ✓ |

Delete

2 rows

Flow Items

| Name | Periodic | Next Run Date | Time Unit |
|-----------|----------|-----------------|-----------|
| Sequencer | ✓ | 26/08/2021 8:41 | Day |

1 selected item(s) Run now Clear selection

1 row

Technical User Reference (Customer Insights)

- [Configuration in Company Parameters \(Customer Insights\)](#)
- [Advanced Configuration Options \(Customer Insights\)](#)
- [Waterfall Chart Configuration \(Customer Insights\)](#)
- [Architecture Components \(Customer Insights\)](#)
- [Groovy Libraries and Logics \(Customer Insights\)](#)
- [Data Flow \(Customer Insights\)](#)
- [Common Errors \(Customer Insights\)](#)

Configuration in Company Parameters (Customer Insights)

Customer Insights Package works based on configuration data which users can adjust to match their business case. These configuration data are stored in Company Parameter tables. In addition, the package uses Company Parameters tables to define currency symbols and Quote Types.

PFXTemplate_CustomerInsights_Configuration

i In the 1.10.0 release, the default values for the PFXTemplate_CustomerInsights_Configuration Company Parameter have been updated to better align with the business. This change enables you to work with dashboards without needing further adjustments.

Most parameters used in Customer Insights are saved in this table, including these main columns:

| Column | Description |
|------------|--|
| Category | Category of the configuration. |
| Key Name | Key name of the configuration. |
| Value | Defines the value corresponding to the key-set. |
| Is Default | If set to Yes, the dashboard will use the value of this item as a default value. |
| Order | Sets the order of items in the same Category. |
| Key Label | Defines a label shown on the chart/input. |
| Note | Specifies which logic type is used. |

| Category | Key Name | Value | IsDefault | Order | Key Label | Note |
|-------------------------|---------------------|-------|-----------|-------|-------------|------------------|
| MASTER_DATA | TIME_FILTER | MTD | | 1 | MTD | Dashboard logic |
| MASTER_DATA | TIME_FILTER | QTD | | 2 | QTD | Dashboard logic |
| MASTER_DATA | TIME_FILTER | YTD | Yes | 3 | YTD | Dashboard logic |
| MASTER_DATA | TOP_WORST_CUSTOMERS | 10 | | 2 | | Dashboard logic |
| MASTER_DATA | TOP_WORST_CUSTOMERS | 100 | | 5 | | Dashboard logic |
| MASTER_DATA | TOP_WORST_CUSTOMERS | 20 | | 3 | | Dashboard logic |
| MASTER_DATA | TOP_WORST_CUSTOMERS | 5 | Yes | 1 | | Dashboard logic |
| MASTER_DATA | TOP_WORST_CUSTOMERS | 50 | | 4 | | Dashboard logic |
| MASTER_DATA | TOP_WORST_PRODUCTS | 10 | | 2 | | Dashboard logic |
| MASTER_DATA | TOP_WORST_PRODUCTS | 100 | | 5 | | Dashboard logic |
| MASTER_DATA | TOP_WORST_PRODUCTS | 20 | | 3 | | Dashboard logic |
| MASTER_DATA | TOP_WORST_PRODUCTS | 5 | Yes | 1 | | Dashboard logic |
| MASTER_DATA | TOP_WORST_PRODUCTS | 50 | | 4 | | Dashboard logic |
| PRODUCT_CLASSIFICATI... | EXCELLENT | 75 | | 1 | Excellent | Simulation logic |
| PRODUCT_CLASSIFICATI... | GOOD | 50 | | 2 | Good | Simulation logic |
| PRODUCT_CLASSIFICATI... | NORMAL | 25 | | 3 | Normal | Simulation logic |
| PRODUCT_CLASSIFICATI... | PROBLEMATIC | 0 | | 4 | Problematic | Simulation logic |

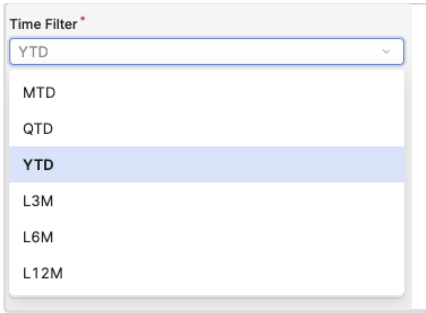
PFXTemplate_CustomerInsights_Configuration

Dashboard Configuration

Time Filter Selector Input

Data for this selector are defined in Category = MASTER_DATA and Key Name = TIME_FILTER .

| Category | Key Name | Value | IsDefault | Order | Key Label |
|-------------|-------------|-------|-----------|-------|-----------|
| MASTER_DATA | TIME_FILTER | L12M | | 6 | L12M |

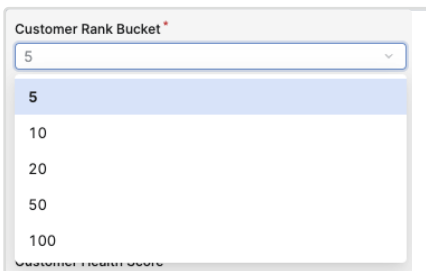


Time Filter

| | | | | | |
|-----------------|-------------|-----|-----|---|-----|
| MASTER_DA TA | TIME_FILTER | L3M | | 4 | L3M |
| MASTER_DA TA | TIME_FILTER | L6M | | 5 | L6M |
| MASTER_DA TA | TIME_FILTER | MTD | | 1 | MTD |
| MASTER_DA TA | TIME_FILTER | QTD | | 2 | QTD |
| MASTER_DA TA | TIME_FILTER | YTD | Yes | 3 | YTD |

i If you want to change the text shown in the Time Filter selector (e.g. MTD → Month To Date), you need to update the value of the column **Key Label** from MTD to **Month To Date**. If you clear the value of this column, the Time Filter selector will show the value of the **Value** column.

Top/Worst Customers Selector Input



Top Worst Customers

Data for this selector are defined in **Category** = MASTER_DATA and **Key Name** = TOP_WORST_CUSTOMERS.

| Category | Key Name | Value | IsDefault | Order |
|-------------|---------------------|-------|-----------|-------|
| MASTER_DATA | TOP_WORST_CUSTOMERS | 5 | Yes | 1 |
| MASTER_DATA | TOP_WORST_CUSTOMERS | 10 | | 2 |
| MASTER_DATA | TOP_WORST_CUSTOMERS | 20 | | 3 |
| MASTER_DATA | TOP_WORST_CUSTOMERS | 50 | | 4 |
| MASTER_DATA | TOP_WORST_CUSTOMERS | 100 | | 5 |

i If you want to add more values to this list, you need add a new row with same category and key name.

Example

To add a value “200” to the list and put it at the end of the list, you need to add the following:

- **Category** = MASTER_DATA
- **Key Name** = TOP_WORST_CUSTOMERS
- **Value** = 200
- **Order** = 6

Top/Worst Products Selector Input

Top Worst Products

Data for this selector are defined in `Category = MASTER_DATA` and `Key Name = TOP_WORST_PRODUCTS`.

| Category | Key Name | Value | IsDefault | Order |
|-------------|--------------------|-------|-----------|-------|
| MASTER_DATA | TOP_WORST_PRODUCTS | 5 | Yes | 1 |
| MASTER_DATA | TOP_WORST_PRODUCTS | 10 | | 2 |
| MASTER_DATA | TOP_WORST_PRODUCTS | 20 | | 3 |
| MASTER_DATA | TOP_WORST_PRODUCTS | 50 | | 4 |
| MASTER_DATA | TOP_WORST_PRODUCTS | 100 | | 5 |

KPI Selector Input

KPI

Data for this selector are defined in `Category = MASTER_DATA` and `Key Name = KPI`.

| Category | Key Name | Value | IsDefault | Order | Key Label |
|-------------|----------|--------------|-----------|-------|--------------|
| MASTER_DATA | KPI | Revenue | | 1 | Revenue |
| MASTER_DATA | KPI | Margin% | | 2 | Margin % |
| MASTER_DATA | KPI | Volume | | 3 | Volume |
| MASTER_DATA | KPI | Health Score | Yes | 4 | Health Score |

i If you want to change the text shown in the KPI selector (e.g. “Margin %” → “Margin Percent”), you need to update the value of the column `Key Label` from `Margin %` to `Margin Percent`. If you clear the value of this column, the KPI selector will show the value of the `Value` column.

Display of Trend Columns in Table

In the tables of the dashboard, **Trend** columns are displayed with three formats based on the setting:

- **Green** up arrow ▲
- **Orange** horizontal arrow ⇨
- **Red** down arrow ▼

You can define threshold values to match your business case – just update the value of the key name `TREND_UPPER` and `TREND_LOWER`:

| Trend | Logic |
|----------------------|--|
| Green and up arrow ▲ | <code>Trend value >= TREND_UPPER</code> |

| Revenue Trend Last 12M | Margin Trend Last 12M | Volume Trend Last 12M | Revenue Trend YTD | Margin Trend YTD | Volume Trend YTD |
|------------------------|-----------------------|-----------------------|-------------------|------------------|------------------|
| ▲ +16.98% | ▶ +16.50% | ▶ +15.90% | ▼ -1.37% | ▼ -0.65% | ▼ -2.01% |
| ▶ +14.6% | ▶ +16.77% | ▶ +14.78% | ▼ -8.05% | ▼ -8.24% | ▼ -8.47% |
| ▶ +14.4% | ▶ +14.96% | ▶ +14.29% | ▼ -9.40% | ▼ -7.06% | ▼ -9.47% |
| ▶ +14.32% | ▶ +13.33% | ▶ +14.11% | ▼ -6.04% | ▼ -8.29% | ▼ -6.88% |
| ▶ +11.38% | ▶ +13.35% | ▶ +11.63% | ▼ -2.50% | ▼ -2.70% | ▼ -3.89% |
| ▼ -22.36% | ▼ -21.70% | ▼ -21.60% | ▼ -66.67% | ▼ -66.67% | ▼ -66.67% |
| ▼ -15.99% | ▼ -16.15% | ▼ -15.25% | ▼ -66.67% | ▼ -66.67% | ▼ -66.67% |
| ▼ -16.81% | ▼ -16.55% | ▼ -16.65% | ▼ -66.67% | ▼ -66.67% | ▼ -66.67% |
| ▼ -15.98% | ▼ -15.52% | ▼ -15.26% | ▼ -66.67% | ▼ -66.67% | ▼ -66.67% |
| ▼ -18.70% | ▼ -19.28% | ▼ -21.32% | ▼ -66.67% | ▼ -66.67% | ▼ -66.67% |

Revenue and Margin Trend Summary

| | |
|----------------------------------|--|
| Orange and horizontal arrow □ | TREND_LOWER < Trend value < TREND_UPPER |
| Red and down arrow ▼ | Trend value <= TREND_LOWER |

Display of Health Score Columns

This column has the same display format as the trends columns but the threshold is different.

The Health Score column is included in two tables:

- Customer Health Summary Table (Customer Global View Dashboard)
- Product Health Summary Table (Customer Product Portfolio View Dashboard):

| Customer Name | Customer Id | Health Score Last 12M | Total Revenue | Total Margin | Total Volume | No. of Transactions per Day | Margin % |
|--------------------|-------------|-----------------------|---------------|--------------|--------------|-----------------------------|----------|
| ▲ Retail Health AB | CD-00007 | ▲ +151 | 266,168 | 106,314 | 522,757 | 9 | 40.61% |
| ▲ Andro | CD-00023 | ▲ +75 | 360,372 | 146,367 | 178,500 | 9 | 40.62% |
| ▲ Andro-Mobay | CD-00020 | ▲ +75 | 371,687 | 162,281 | 122,881 | 9 | 40.61% |
| ▲ Pedia Inc. | CD-00028 | ▲ +188 | 361,667 | 142,642 | 192,245 | 9 | 40.63% |
| ▲ Alpha Food | CD-00018 | ▶ +161 | 343,982 | 141,132 | 175,588 | 9 | 40.60% |
| ▼ Pedia Health | CD-00045 | ▶ +160 | 262,232 | 123,646 | 122,289 | 1 | 46.01% |
| ▼ H&M Health | CD-00048 | ▶ +161 | 38,677 | 16,287 | 16,768 | 1 | 48.98% |
| ▼ SunLife | CD-00027 | ▶ +161 | 24,728 | 12,071 | 12,319 | 1 | 49.98% |
| ▼ Pedia AB | CD-00006 | ▶ +161 | 104,532,668 | 478,713 | 371,868 | 38 | 5.99% |
| ▼ PediaHealth AB | CD-00047 | ▼ -111 | 6,437 | 8,788 | 6,872 | 1 | 53.94% |

Customer Health Summary

| Product Name | Product Id | Health Score Last 12M | Total Revenue | Total Margin | Total Volume | Margin % |
|----------------------|------------|-----------------------|---------------|--------------|--------------|----------|
| Long Island/End Tea | BP-0001 | ▲ +75 | 3,395 | 1,995 | 1,001 | 49.2 |
| Orange Juice | BP-0008 | ▲ +75 | 3,367 | 1,995 | 1,179 | 60.8 |
| Mountain ES | MB-0001 | ▲ +75 | 1,836 | 879 | 724 | 47.8 |
| Alkaline | BP-0002 | ▶ +161 | 3,939 | 1,929 | 1,287 | 48.4 |
| Seawater | BP-0003 | ▶ +161 | 2,228 | 1,544 | 1,076 | 47.8 |
| Mountain ES | MB-0003 | ▼ -125 | 1,254 | 421 | 321 | 34.3 |
| Savanna ES & Mutator | MB-0005 | ▼ -125 | 799 | 269 | 293 | 34.0 |
| Beville | MB-0003 | ▼ -125 | 294 | 78 | 152 | 26.4 |
| Muir S | Muir-C000 | ▼ -125 | 1,378 | 474 | 472 | 30.0 |
| Muir M | Muir-C001 | ▼ -125 | 1,123 | 364 | 359 | 32.4 |

Product Health Summary

| Category | Key Name | Value | IsDefault | Order |
|---------------|-------------|-------|-----------|-------|
| CONFIGURATION | TREND_LOWER | 0.0 | | |
| CONFIGURATION | TREND_UPPER | 0.05 | | |

You can define it in `Category = CONFIGURATION`, the key names are `CUSTOMER_HEALTH_SCORE_UPPER` and `CUSTOMER_HEALTH_SCORE_LOWER`:

| | |
|-------------------------------|--|
| Green and up arrow ▲ | Health Score >= CUSTOMER_HEALTH_SCORE_UPPER |
| Orange and horizontal arrow □ | CUSTOMER_HEALTH_SCORE_LOWER < Health Score < CUSTOMER_HEALTH_SCORE_UPPER |
| Red and down arrow ▼ | Health Score <= CUSTOMER_HEALTH_SCORE_LOWER |

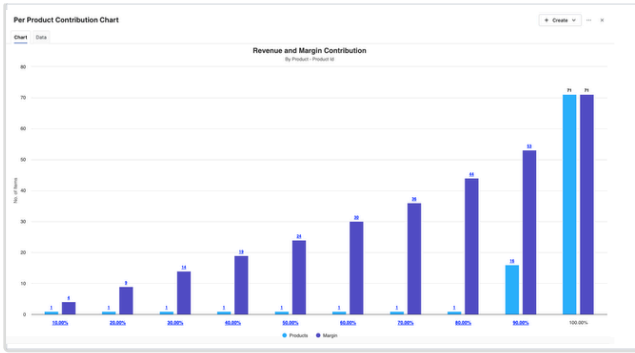
| Category | Key Name | Value | IsDefault | Order |
|---------------|-----------------------------|-------|-----------|-------|
| CONFIGURATION | CUSTOMER_HEALTH_SCORE_LOWER | 40 | | |
| CONFIGURATION | CUSTOMER_HEALTH_SCORE_UPPER | 60 | | |

Revenue and Margin Contribution Chart (Customer Product Portfolio Dashboard)

In this chart, you can re-define:

- Number of buckets – via the Key Name = `NUMBER_OF_BUCKETS`
- Percent of the start bucket / percent of the end bucket via the Key Name = `BUCKET_START_PERCENT` and `BUCKET_END_PERCENT`

| Category | Key Name | Value | Note |
|----------|----------|-------|------|
|----------|----------|-------|------|



Revenue and Margin Contribution Chart

| | | | |
|---------------------------------|----------------------|-----|-----------------|
| REVENUE_AND_MARGIN_CONTRIBUTION | BUCKET_END_PERCENT | 100 | Dashboard logic |
| REVENUE_AND_MARGIN_CONTRIBUTION | BUCKET_START_PERCENT | 0 | Dashboard logic |
| REVENUE_AND_MARGIN_CONTRIBUTION | NUMBER_OF_BUCKETS | 10 | Dashboard logic |

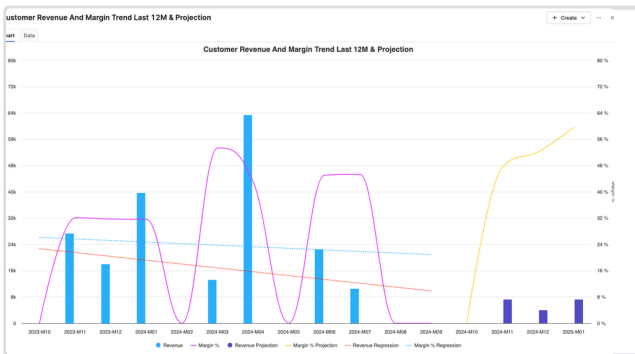
Number of Next months (Customer Detail View Dashboard)

In the Customer Detail View dashboard, we have two charts:

- [Customer Revenue And Margin Trend Last 12M & Projection](#)
- [Number Of Transactions Trend Last 12M & projection](#)

The default number of next months is three. You can update this value in

Category = MASTER_DATA and Key Name = NEXT_MONTH_AMOUNT .



Customer Revenue and Margin Trend Projection Chart

| Category | Key Name | Value | IsDefault | Order | Key Label | Note |
|-------------|-------------------|-------|-----------|-------|-----------|-----------------|
| MASTER_DATA | NEXT_MONTH_AMOUNT | 3 | | | | Dashboard logic |

Customer Base, Product Base (Core Customers and Products) Selector Input

Customer Base Selector Input

Data for this selector are defined in Category = Configuration and Key Name = CUSTOMER_CORE or PRODUCT_CORE .

The value specifies the cumulative revenue thresholds for the Core vs. Long Tailed definition.

Values range: 0..1 (e.g. 0.8 = 80%).

| Category | Key Name | Value |
|---------------|---------------|-------|
| CONFIGURATION | CUSTOMER_CORE | 0.8 |
| CONFIGURATION | PRODUCT_CORE | 0.8 |

Pre-Processing Logic Configuration

Customer Health Score

For more details see [Glossary \(Customer Insights\)](#).

1 Health Score = Revenue Score * Revenue Weight + Margin Score * Margin Weight

i Revenue Weight + Margin Weight = 1

Revenue Score / Margin Score is based on the defined table (the Trend value is the revenue/margin trend last 12M):

| Trend | Health Score |
|-------------|--------------|
| >25% | 100 |
| 15% - 25% | 75 |
| 5% - 15% | 60 |
| -5% - 5% | 50 |
| -5% - -15% | 40 |
| -15% - -25% | 25 |
| < -25% | 0 |

You can change the threshold trends value in the CP as shown below:

| Category | Key Name | Value | IsDefault | Order |
|----------------------|----------|-------|-----------|-------|
| SCORE_CLASSIFICATION | 100 | 0.2 | | 1 |
| SCORE_CLASSIFICATION | 99 | 0.195 | | 2 |
| SCORE_CLASSIFICATION | 98 | 0.19 | | 3 |
| SCORE_CLASSIFICATION | 97 | 0.185 | | 4 |
| SCORE_CLASSIFICATION | 96 | 0.18 | | 5 |
| SCORE_CLASSIFICATION | 95 | 0.175 | | 6 |
| SCORE_CLASSIFICATION | 94 | 0.17 | | 7 |

You can change the Revenue Weight and Margin Weight values in the Company Parameter.

- If you set just the value of Revenue Weight, the system will calculate Margin Weight = (1 - Revenue Weight) automatically.
- If you set just the value of Margin Weight, the system will calculate Revenue Weight = (1 - Margin Weight) automatically.
- If you do not set either of these values, the default value is: Revenue Weight = Margin Weight = 0.5.

| Category | Key Name | Value | IsDefault | Order |
|---------------|----------------|-------|-----------|-------|
| CONFIGURATION | REVENUE_WEIGHT | 0.5 | | |
| CONFIGURATION | MARGIN_WEIGHT | 0.5 | | |

Customer Revenue Classification

The simulation logic uses this setting to identify the customer classification based on the contribution and cumulative revenue contribution of each customer.

You can change the threshold value and label (show on the dashboard) in the PP as shown below:

| Category | Key Name | Value | IsDefault | Order | Key Label | Note |
|---------------------------------|----------|-------|-----------|-------|-----------|----------------|
| CUSTOMER_CLASSIFICATION_REVENUE | A | 20 | | 1 | A | Dataload logic |
| CUSTOMER_CLASSIFICATION_REVENUE | B | 40 | | 2 | B | Dataload logic |
| CUSTOMER_CLASSIFICATION_REVENUE | C | 60 | | 3 | C | Dataload logic |
| CUSTOMER_CLASSIFICATION_REVENUE | D | 80 | | 4 | D | Dataload logic |
| CUSTOMER_CLASSIFICATION_REVENUE | E | 100 | | 5 | E | Dataload logic |

Customer Health Score Classification

This classification is based on the customer health score – the simulation logic assigns customers to different classes based on Health Score.

You can change the threshold value and label (shown on the dashboard) in the PP as shown below:

| Category | Key Name | Value | IsDefault | Order | Key Label | Note |
|--------------------------------------|-------------|-------|-----------|-------|-------------|----------------|
| CUSTOMER_CLASSIFICATION_HEALTH_SCORE | EXCELLENT | 75 | | 1 | Excellent | Dataload logic |
| CUSTOMER_CLASSIFICATION_HEALTH_SCORE | GOOD | 60 | | 2 | Good | Dataload logic |
| CUSTOMER_CLASSIFICATION_HEALTH_SCORE | MEDIOCRE | 30 | | 4 | Mediocre | Dataload logic |
| CUSTOMER_CLASSIFICATION_HEALTH_SCORE | NORMAL | 40 | | 3 | Normal | Dataload logic |
| CUSTOMER_CLASSIFICATION_HEALTH_SCORE | PROBLEMATIC | 10 | | 5 | Problematic | Dataload logic |

Product Quantity Classification

The simulation logic uses this setting to identify the product classification based on the contribution and cumulative volume contribution of each product.

You define the threshold value in this CP, for example:

- Very High Volume <= 10%
- High Volume <= 20%
- Normal Volume <= 75%
- Low Volume = rest

You must update the threshold value and label (shown on the dashboard) in the CP as shown below:

| Category | Key Name | Value | IsDefault | Order | Key Label | Note |
|---------------------------------|-----------|-------|-----------|-------|-----------|----------------|
| PRODUCT_CLASSIFICATION_QUANTITY | VERY_HIGH | 10 | | 1 | Very High | Dataload logic |
| PRODUCT_CLASSIFICATION_QUANTITY | HIGH | 20 | | 2 | High | Dataload logic |
| PRODUCT_CLASSIFICATION_QUANTITY | NORMAL | 75 | | 3 | Normal | Dataload logic |
| PRODUCT_CLASSIFICATION_QUANTITY | LOW | 100 | | 4 | Low | Dataload logic |

Commodity vs. Specialty Product Classification

The simulation logic uses this setting to identify if a product is Commodity or Specialty Product.

It is defined based on an average margin achieved by the product.

- Speciality \geq 30%
- Commodity = rest

You can update the threshold value and label (shown on the dashboard) in the CP as shown below:

| Category | Key Name | Value | IsDefault | Order | Key Label | Note |
|---------------------------------------|------------|-------|-----------|-------|------------|----------------|
| PRODUCT_CLASSIFICATION_MARGIN_PERCENT | SPECIALITY | 30 | | 1 | Speciality | Dataload logic |
| PRODUCT_CLASSIFICATION_MARGIN_PERCENT | COMMODITY | 0 | | 2 | Commodity | Dataload logic |

Inactive Customer Classification

There is an option to define the name and value of the key which identifies active Customers in Customer Master (e.g., Customer Class = C -> active).

Definition

- Category = CUSTOMER_MASTER_ACTIVE_KEY
- Fields = KEY_NAME, KEY_VALUE

| Category | Key Name | Value | IsDefault | Order | Key Label |
|----------------------------|-----------|------------|-----------|-------|----------------|
| CUSTOMER_MASTER_ACTIVE_KEY | KEY_VALUE | C | | | |
| CUSTOMER_MASTER_ACTIVE_KEY | KEY_NAME | attribute3 | | | Customer Class |

PFXTemplate_CustomerInsights_Customer_Segment

This table is used to define the customer segmentation. Customer segments can be obtained from multi data source types such as: Data Source, Customer Master, Customer Extensions. You can define it in this table.

You can add more customer attributes to the table if they are not present yet. Set the value of the Is Active column to YES , if you want to add this attribute into the segmentation processing and exclude the field with `isCustomerId = YES` . The field set to `Is Customer Id = YES` will **not** join into the segment data, the system uses it as a key to find data.

Main Columns

| Column | Description |
|----------------|---|
| Source Type | Data Source types from which we get data for the customer segments. They include: <ul style="list-style-type: none"> DMDS (Data Source) C (Customer Master) CX (Customer Extension) |
| Source Name | Data source name. |
| Source Field | Source Field in the Data Source. |
| Field Label | Label of the field in the Data Source. |
| Is Active | If set to YES , the dashboard will add this field in the segmentation. |
| Is Customer Id | If this field is customer ID in a Data Source, set the value to YES . It helps the system get the correct Customer Id field in the source. If the Data Source is Customer Master or Customer Extension, you do not need to add the “customer Id” field name. If the Data Source is datasource, you must add the customer Id field name. |

i For the field you want to be a key to find data in DMDS, you need to set `IsActive = YES` and `IsCustomerId = YES` .

Example

We define that a customer segment will be obtained from the Data Source named 'Customer' with these parameters:

Case 1: Segment data query from one source

Customer Type = active

Region = active

3 Customer Types = {Enduser, Industry, Restaurant}

4 Regions = {America, Oceania, Asia, Europe}

=> We will have $3*4 = 12$ Customer segments = {Enduser_America, Enduser_Oceania,.....}

Case 2: Segment data query from two sources

Customer Type: get from Customer Master

Region: get from DMDS “Customer”

You need to create a configuration like this:

| <input type="checkbox"/> | Source Type | Source Name | Source Field | Field Label | Is Active | Is Customer Id |
|--------------------------|----------------|-------------|--------------|----------------|----------------|----------------|
| | Select Value ▾ | Search... | Search... | Search... | Select Value ▾ | Select Value ▾ |
| <input type="checkbox"/> | C | Customer | attribute1 | Customer Group | | |
| <input type="checkbox"/> | C | Customer | attribute2 | Customer Type | Yes | |
| <input type="checkbox"/> | C | Customer | attribute3 | Customer Class | | |
| <input type="checkbox"/> | C | Customer | attribute4 | Region | | |
| <input type="checkbox"/> | DMDS | Customer | CustomerId | | Yes | Yes |
| <input type="checkbox"/> | DMDS | Customer | CustomerType | Customer Type | | |
| <input type="checkbox"/> | DMDS | Customer | Region | Region | Yes | |

DMDS Customer: Case 2

| <input type="checkbox"/> | Source Type | Source Name | Source Field | Field Label | Is Active | Is Customer Id |
|--------------------------|----------------|-------------|--------------|----------------|----------------|----------------|
| | Select Value ▾ | Search... | Search... | Search... | Select Value ▾ | Select Value ▾ |
| <input type="checkbox"/> | C | Customer | attribute1 | Customer Group | | |
| <input type="checkbox"/> | C | Customer | attribute2 | Customer Type | | |
| <input type="checkbox"/> | C | Customer | attribute3 | Customer Class | | |
| <input type="checkbox"/> | C | Customer | attribute4 | Region | | |
| <input type="checkbox"/> | DMDS | Customer | CustomerId | Customer Type | Yes | Yes |
| <input type="checkbox"/> | DMDS | Customer | CustomerType | Customer Type | Yes | |
| <input type="checkbox"/> | DMDS | Customer | Region | Region | Yes | |

DMDS Customer: Case 1

- When querying segment data from multiple sources, the system will take time to process (query and combine). You should consider this before processing.
- If the segment data is large and complex for combination, you should create a DMDS to build the customer segment data first, then use it in this configuration for Customer Insights Package.

i If the customer segment is queried from a Data Source, we **must** add the `customer Id` field name in this source and set the value to `YES` in the `Is Customer Id` column.

CurrencySymbols

This is a Company Parameter of Sales Insights Package and it should be deployed by this package. Customer Insights re-uses it to show the currency symbol in charts. If your currency is missing, you can add it to this table.

| Name | Value |
|------|-------|
| AUD | \$ |
| EUR | € |
| GBP | £ |
| HKD | \$ |
| JPY | ¥ |
| NZD | \$ |
| USD | \$ |

CI_QuoteType_Mapping

This table is used to define the Quote Type on each portlet of the dashboard. When a user selects multiple products and clicks the **Create Quote** button on a portlet, a new Quote with this Quote Type mapping will be created.

Currently, we support creating a new quote from 3 portlets of the Customer Products Portfolio dashboard, so this table has just 3 rows:

| Dashboard Name | Portlet Name | Quote Type |
|--|---------------------|-------------|
| CustomerInsights_CustomerProductsPortfolio | Pricing Opportunity | __DEFAULT__ |
| CustomerInsights_CustomerProductsPortfolio | Selling Opportunity | __DEFAULT__ |
| CustomerInsights_CustomerProductsPortfolio | Trends | __DEFAULT__ |

If you want to change Quote Type, you need to update the column `Quote Type` of this table from `__DEFAULT__` to your Quote Type name.

Advanced Configuration Options (Customer Insights)

Customer Insights Package also uses the **Advanced Configuration Options** to store:

- Data source information
- Mapping fields

Path

Administration > Configuration > System Configuration > Advanced Configuration Options

List of Advanced Configuration Fields

- `sourceName`
- `sourceType`
- `customerIdFieldName`
- `customerNameFieldName`
- `productIdFieldName`
- `productNameFieldName`
- `pricingDateFieldName`
- `invoicePriceFieldName`
- `marginFieldName`
- `quantityFieldName`
- `uniqueIdFieldName`

Example

| Name | Value |
|--|---|
| <code>customer-insights-accelerator</code> | <pre>1 { 2 "sourceName": "Standard_Sales_Data", 3 "sourceType": "DM", 4 "customerIdFieldName": "CustomerId", 5 "customerNameFieldName": "Name", 6 "productIdFieldName": "ProductId", 7 "productNameFieldName": "ProductName", 8 "pricingDateFieldName": "PricingDate", 9 "invoicePriceFieldName": "InvoicePrice", 10 "marginFieldName": "GrossMargin", 11 "quantityFieldName": "Quantity", 12 "uniqueIdFieldName": "UniqueId" 13 }</pre> |

Waterfall Chart Configuration (Customer Insights)

As Customer Insights is an extension of Sales Insights, the configuration of waterfall chart is re-used from Sales Insights. To update the waterfall configuration, follow [waterfall configuration details](#).

Architecture Components (Customer Insights)

- Extension
- Advanced Configuration Options
- Logics
 - Library
 - PA Data Load
 - Generic Logic
- Dashboards Components
 - Global View Dashboard
 - Customer Detail View Dashboard
 - Customer Products Portfolio Dashboard
- Customer Parameters
- Aggregated Data
- Data Sources
- Data Loads
- Calculation Flow
- Preferences
- Dependencies

Extension

Customer Insights Package is an extension of the [Sales Insights Package](#):

- The configuration settings of waterfall chart is re-used from [Sales Insights](#).

Advanced Configuration Options

| Name | Description |
|-------------------------------|---|
| customer-insights-accelerator | <pre>1 { 2 "sourceName": "Standard_Sales_Data", 3 "sourceType": "DM", 4 "customerIdFieldName": "CustomerId", 5 "customerNameFieldName": "Name", 6 "productIdFieldName": "ProductId", 7 "productNameFieldName": "ProductName", 8 "pricingDateFieldName": "PricingDate", 9 "invoicePriceFieldName": "InvoicePrice", 10 "marginFieldName": "GrossMargin", 11 "quantityFieldName": "Quantity", 12 "uniqueIdFieldName": "UniqueId" 13 }</pre> |

 For more information see the [Advanced Configuration Options \(Customer Insights\)](#).

Logics

Library

- CustomerInsights

PA Data Load

- CustomerInsights_Aggregation_Sim

Generic Logic

- CustomerInsights_CustomerDetails
- CustomerInsights_CustomerProductsPortfolio
- CustomerInsights_DimensionFilter_Configurator
- CustomerInsights_GlobalView

Dashboards Components

Global View Dashboard

| Component | Name |
|-------------------|--|
| Logic | CustomerInsights_GlobalView |
| Dashboard | CustomerInsights_GlobalView |
| Company Parameter | PFXTemplate_CustomerInsights_Configuration |

Customer Detail View Dashboard

| Component | Name |
|-------------------|--|
| Logic | CustomerInsights_CustomerDetails |
| Dashboard | CustomerInsights_CustomerDetailView |
| Company Parameter | PFXTemplate_CustomerInsights_Configuration |

Customer Products Portfolio Dashboard

| Component | Name |
|-------------------|--|
| Logic | CustomerInsights_CustomerProductsPortfolio |
| Dashboard | CustomerInsights_CustomerProductsPortfolio |
| Company Parameter | PFXTemplate_CustomerInsights_Configuration |

Customer Parameters

| Name | Description |
|---|--|
| PFXTemplate_CustomerInsights_Configuration , including sample data | The majority of the parameters utilized in the Customer Insights accelerator are stored in this table. |
| PFXTemplate_CustomerInsights_Customer_Segment , including sample data | Defines the customer segmentation. |

 For details see [Configuration in Company Parameters \(Customer Insights\)](#).

Aggregated Data

- CustomerInsights

Data Sources

| Name | Description |
|---------------------------|--|
| CI_AggregatedData | Stores the pre-calculated data. |
| CI_CustomerClassification | Stores information on customer segments and active/inactive attribute for Customers. |

Data Loads

| Name | Description |
|---------------------------|---|
| CI_AggregatedData | Runs a logic to fill data into Data Source CI_AggregatedData . This is Data Load of the type Calculation. |
| CI_CustomerClassification | Runs a logic to fill data into Data Source CI_CustomerClassification . This is Data Load of the type Calculation. |

Calculation Flow

| Name | Description |
|----------------------------|---|
| CustomerInsights_Sequencer | Keeps the data (Data Sources, Datamart) synchronized by filling the DS CI_CustomerClassification before the DS CI_AggregatedData is filled. |

Preferences

Used for the dashboards - with layouts of the portlets. For more information see [View Preferences](#).

| Dashboard | Preference |
|--|------------------------------------|
| CustomerInsights_GlobalView | CIGlobalViewDefault |
| CustomerInsights_CustomerDetailView | CICustomerDetailViewDefault |
| CustomerInsights_CustomerProductsPortfolio | CICustomerProductsPortfolioDefault |

Dependencies

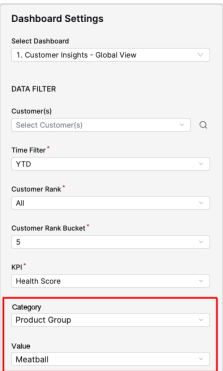
This accelerator depends on the following accelerators which will be deployed during the installation too:

- [Shared Library](#)
- [Dashboards Library](#)

Groovy Libraries and Logics (Customer Insights)

These are the main Groovy logics in this architecture:

| | |
|--|--|
| CustomerInsights (Groovy library) | The main library is used in the Customer Insights Dashboard logic. It provides functions to query and process data. |
| CustomerUtils | Provides functions related to Customer such as: getAllCustomerIdsWithOtherAttributes, groupByCustomerAttributes |
| ProductUtils | Provides functions related to Products such as: getProductAttributes, getSourceFieldsFromProductDataSource |
| DateUtils | Provides functions related to dates. |
| Configuration | Reads configured data from a price parameter and advanced configuration options. |
| CustomerGlobalDashboardUtils | Provides logics to process data to be shown in CustomerInsights_GlobalView dashboards. |
| CustomerDetailDashboardUtils | Provides logics to process data to be shown in CustomerInsights_CustomerDetails dashboards. |
| CustomerProductPortfolioDashboardUtils | Provides logics to process data to be shown in CustomerInsights_CustomerProductsPortfoliodashboards. |
| CalculationCommonUtils | Provides some common/calculation functions. |
| QueryUtils | Provides functions to query data from the Datamart / Data Source. |
| Constant | Defines constants used in the Customer Insights Dashboard. |
| DataTable | Provides functions to build the row format of the result matrix to be displayed in the dashboard. |
| InputUtils | Provides functions to build input controls such as: Time Filter, Category/Value... |
| Classification | Provides logics to pre-process data such as: calculate Customer Health Score, Trends... Used in dataload logic (CustomerInsights_DL_Aggregation). |
| ClassificationQueryHelper | Provides functions to build a Query object to summarize data from Datamart / Data Source to use in Classification. |
| CalculationQueryHelper | Provides functions to build a Query object to summarize data from Datamart / Data Source to use in Calculation. |
| SummaryPortletUtils | Provides functions to create a summary data table (Summary portlet) in dashboards. |
| CustomerSegmentUtils | Provides functions to query and build segment data from sources. |
| CommonDashboardParameter | Defines common parameters used in the package. |
| GlobalViewDashboardParameter | Defines parameters used in the Global View dashboard, they are inherited from Common Dashboard Parameter. |
| DetailViewDashboardParameter | Defines parameters used in the Detail View dashboard, they are inherited from Common Dashboard Parameter. |

| | |
|--|---|
| PortfolioDashboardParameter | Defines parameters used in the Portfolio dashboard, they are inherited from Common Dashboard Parameter. |
| DataLoadParameter | Defines parameters used in the Data Load logic (CustomerInsights_DL_Aggregation), they are inherited from Common Dashboard Parameter. |
| InactiveCustomerUtils | Provides functions to process inactive customers. |
| CommonChartUtils | Provides functions to process charts in dashboards. |
| DataLoadUtils | Provides functions to process Data Loads such as: find dataload... |
| SharedLib | Groovy library to provide common functions. |
| HighchartsLibrary | Groovy library to provide functions to build Highcharts shown on the dashboard. Use version 1.1.2 and higher. |
| SIP_Dashboards_Commons | Groovy library of Sales Insights, it re-uses some methods to build a waterfall chart in a dashboard. |
| CustomerInsights_DimensionFilter_Configurator | Configurator logic to build the Category/Value input in dashboards.  |
| CustomerInsights_GlobalView | Customer Global View dashboard logic. |
| CustomerInsights_CustomerDetails | Customer Detail View dashboard logic. |
| CustomerInsights_CustomerProductPortfolio | Customer Product Portfolio dashboard logic. |
| CustomerInsights_DL_Aggregation | Fills data into Data Source CI_AggregatedData |
| CustomerInsights_CF_Sequencer | CF logic. |
| CustomerInsights_DS_CustomerClassification | Fills data into Data Source CI_CustomerClassification. |

Note: Almost all dashboard logics use SQL to have a better performance in case there are large data sets.

Data Flow (Customer Insights)

Overview

- Configurable Batching for Aggregation Data Load

 - How to Configure Batching for Aggregation Data Load

 - Example of Batching

 - Best Practices

 - Limitations

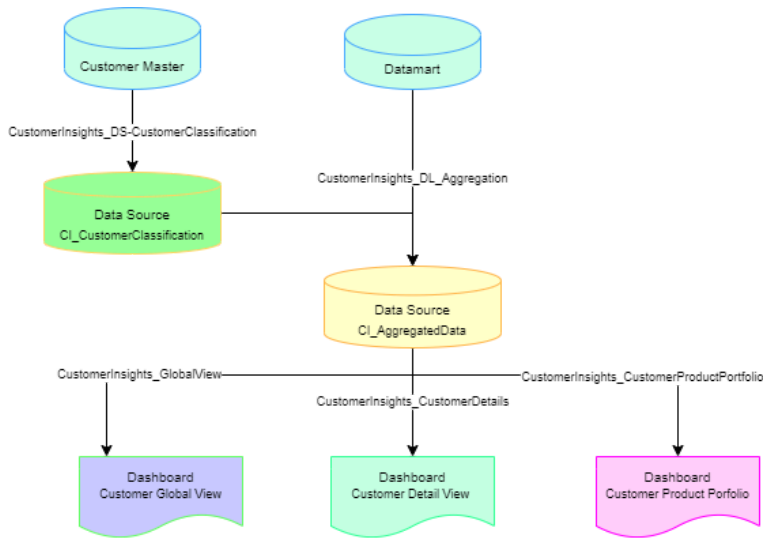
Aggregated Data

- Customer Global View Dashboard

- Customer Detail View Dashboard

- Customer Product Portfolio Dashboard

Overview



In Customer Insights Accelerator, we use Data Load to aggregate Datamart data by customer, product and pricing month and we store it in the Data Source AggregatedData. It helps improve the dashboard performance because:

- The system queries data in a smaller data set.
- Some data need to be pre-processed before showing on dashboards as trend values, product and customer classification etc.

Note: There are some charts and portlets whose data are queried from the Datamart directly, not from AggregatedData Data Source, such as:

- Customer Global View Dashboard: Customer Summary portlet
- Customer Detail View: Customer Summary Portlet, Waterfall chart

i To improve performance, the processed aggregated data is limited to the last 12 months of transaction data.

Configurable Batching for Aggregation Data Load

Configurable batching for aggregation data loads allows you to adjust batch sizes according to your specific dataset and hardware. By configuring the batch size, you can optimize performance, avoid data load failures, and ensure accurate aggregation results.

How to Configure Batching for Aggregation Data Load

1. Navigate to **Analytics > Data Manager > Data Loads > Customer Insights Aggregation** and open the **Calculation** tab.
2. In the **Batching Dimension** field, select the parameter that will be used to split the data for the batch.

Note: Use a customer attribute (customer type, customer group, ...) to ensure all data for a particular customer is processed within a single batch.

Schedule Target **Calculation**

Logic*

Batching Dimension (should be customer attributes)* ?

4. **Save** the Data Load.

When you define a batching dimension, the aggregation data load process creates batches based on the selected dimension. Only the necessary data for the specified batch will be loaded to optimize memory usage and performance.

Example of Batching

- **Batch Dimension** = *customer group*
 - Batch01: customerGroup=A → batchFilter: customerGroup = A
 - Batch02: customerGroup=B → batchFilter: customerGroup = B
 - Batch03: customerGroup=C → batchFilter: customerGroup = C

Best Practices

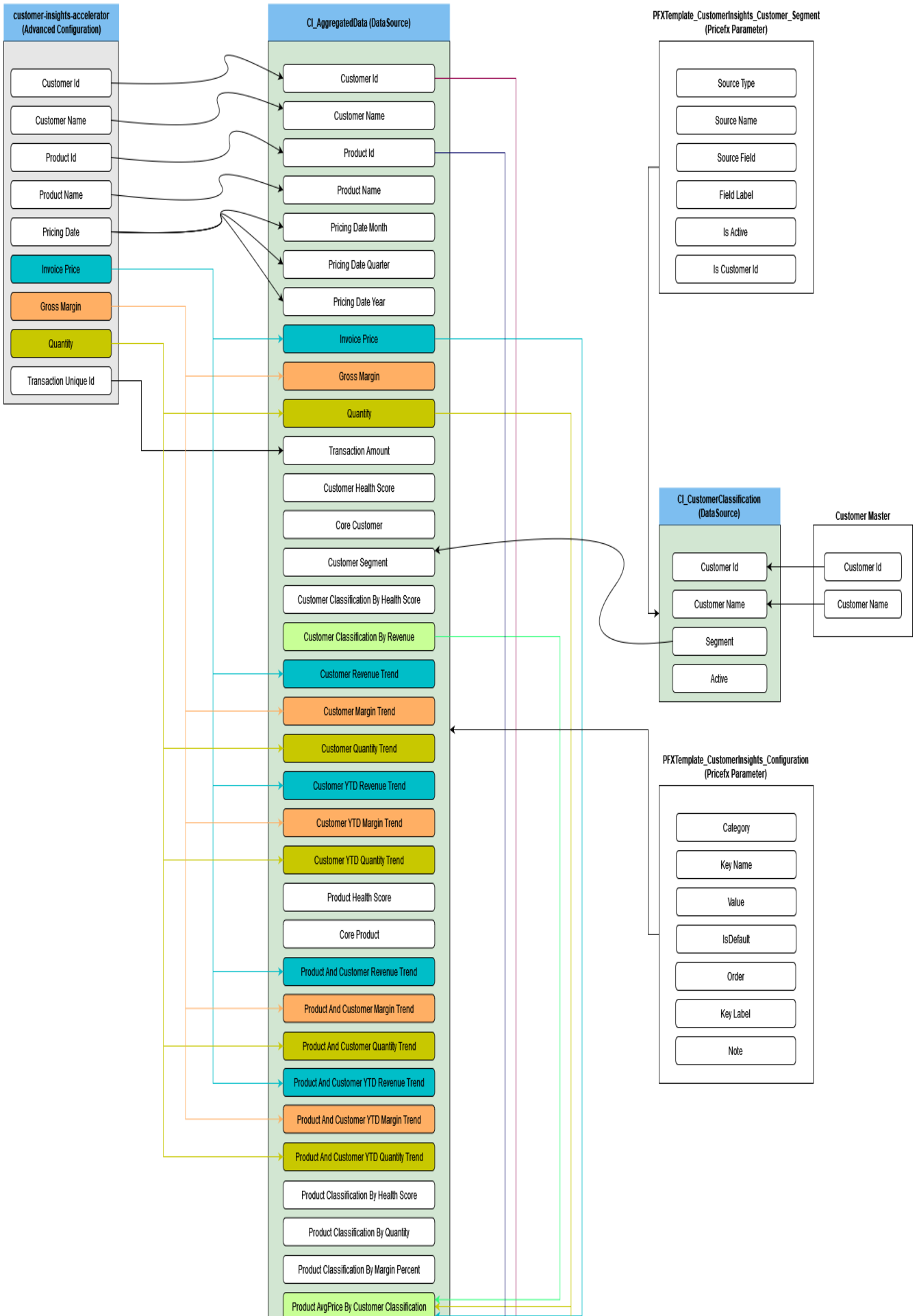
- Try to choose a batching dimension that will produce relatively even-sized data slices over the last 12 months.
- Ideally, aim for batches of approximately 100,000 transaction rows each to achieve a balance between processing speed and system stability – it all depends on your cluster setup. If other batch sizes are working well for your setup, you can continue using them.
- If you encounter data load timeouts, consider selecting a more granular batching dimension to create smaller, more manageable batches.

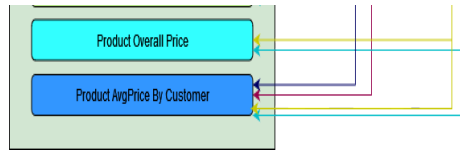
Limitations

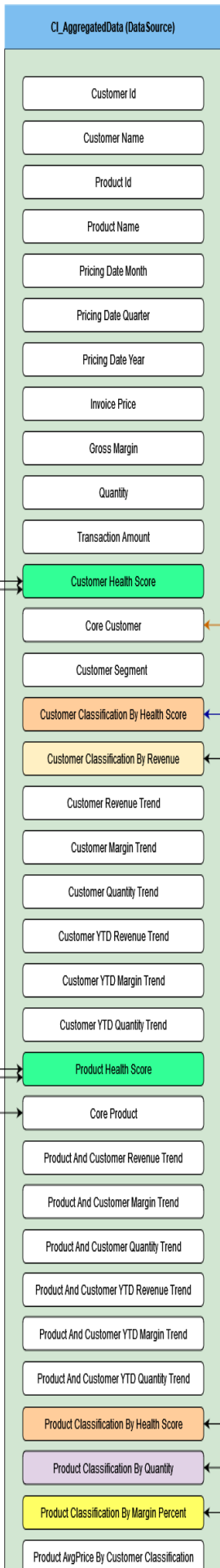
When using our test dataset containing 41 million transaction rows (with 21 million rows of the last 12 months data), we encountered the following limitations:

- A single calculation with more than 50,000 batches took approximately 7 hours to process and did not complete successfully.
- Batches covering more than 1 million transaction rows frequently resulted in timeouts.

Aggregated Data







PFXTemplate_CustomerInsights_Configuration (Pricefx Parameter)
Value is revenue/margin score

| Category | Key Name | Value | Order |
|----------------------|----------|-------|-------|
| SCORE_CLASSIFICATION | 100 | 0.25 | 1 |
| SCORE_CLASSIFICATION | 75 | 0.15 | 2 |
| SCORE_CLASSIFICATION | 60 | 0.5 | 3 |
| SCORE_CLASSIFICATION | 50 | -0.5 | 4 |
| SCORE_CLASSIFICATION | 40 | -0.15 | 5 |
| SCORE_CLASSIFICATION | 25 | -0.25 | 6 |
| SCORE_CLASSIFICATION | 0 | -10 | 7 |

PFXTemplate_CustomerInsights_Configuration (Pricefx Parameter)
Value is weighted factor

| Category | Key Name | Value | Order |
|---------------|----------------|-------|-------|
| CONFIGURATION | REVENUE_WEIGHT | 0.5 | |
| CONFIGURATION | MARGIN_WEIGHT | 0.5 | |

PFXTemplate_CustomerInsights_Configuration (Pricefx Parameter)
Value is cumulative revenue contribution of each product

| Category | Key Name | Value | Order | Key Label |
|---------------|--------------|-------|-------|-----------|
| CONFIGURATION | PRODUCT_CORE | 0.8 | | |

PFXTemplate_CustomerInsights_Configuration (Pricefx Parameter)
Value is customer health score

| Category | Key Name | Value | Order | Key Label |
|--------------------------------------|-------------|-------|-------|-------------|
| CUSTOMER_CLASSIFICATION_HEALTH_SCORE | EXCELLENT | 75 | 1 | Excellent |
| CUSTOMER_CLASSIFICATION_HEALTH_SCORE | GOOD | 50 | 2 | Good |
| CUSTOMER_CLASSIFICATION_HEALTH_SCORE | NORMAL | 25 | 3 | Normal |
| CUSTOMER_CLASSIFICATION_HEALTH_SCORE | PROBLEMATIC | 0 | 4 | Problematic |

PFXTemplate_CustomerInsights_Configuration (Pricefx Parameter)
Value is cumulative revenue contribution of each customer

| Category | Key Name | Value | Order | Key Label |
|---------------|---------------|-------|-------|-----------|
| CONFIGURATION | CUSTOMER_CORE | 0.8 | | |

PFXTemplate_CustomerInsights_Configuration (Pricefx Parameter)
Value is cumulative revenue contribution of each customer

| Category | Key Name | Value | Order | Key Label |
|---------------------------------|----------|-------|-------|-----------|
| CUSTOMER_CLASSIFICATION_REVENUE | A | 20 | 1 | A |
| CUSTOMER_CLASSIFICATION_REVENUE | B | 50 | 2 | B |
| CUSTOMER_CLASSIFICATION_REVENUE | C | 80 | 3 | C |
| CUSTOMER_CLASSIFICATION_REVENUE | D | 100 | 4 | D |

PFXTemplate_CustomerInsights_Configuration (Pricefx Parameter)
Value is product health score

| Category | Key Name | Value | Order | Key Label |
|-------------------------------------|-------------|-------|-------|-------------|
| PRODUCT_CLASSIFICATION_HEALTH_SCORE | EXCELLENT | 75 | 1 | Excellent |
| PRODUCT_CLASSIFICATION_HEALTH_SCORE | GOOD | 50 | 2 | Good |
| PRODUCT_CLASSIFICATION_HEALTH_SCORE | NORMAL | 25 | 3 | Normal |
| PRODUCT_CLASSIFICATION_HEALTH_SCORE | PROBLEMATIC | 0 | 4 | Problematic |

PFXTemplate_CustomerInsights_Configuration (Pricefx Parameter)
Value is cumulative volume contribution of each product

| Category | Key Name | Value | Order | Key Label |
|---------------------------------|-----------|-------|-------|-----------|
| PRODUCT_CLASSIFICATION_QUANTITY | VERY_HIGH | 10 | 1 | Very High |
| PRODUCT_CLASSIFICATION_QUANTITY | HIGH | 20 | 2 | High |
| PRODUCT_CLASSIFICATION_QUANTITY | NORMAL | 75 | 3 | Normal |
| PRODUCT_CLASSIFICATION_QUANTITY | LOW | 100 | 4 | Low |

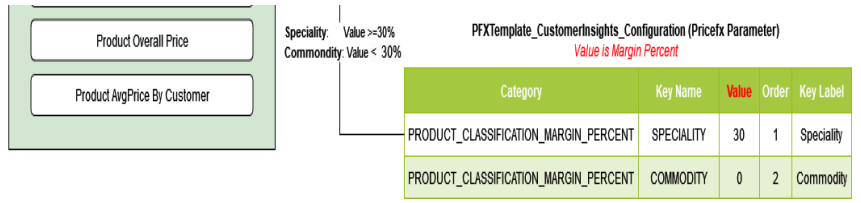
Excellent: Value >= 75
Good: Value >= 50
Normal: Value >= 25
Problematic: Value < 25

Y: Value >=80%
N: Value <80%

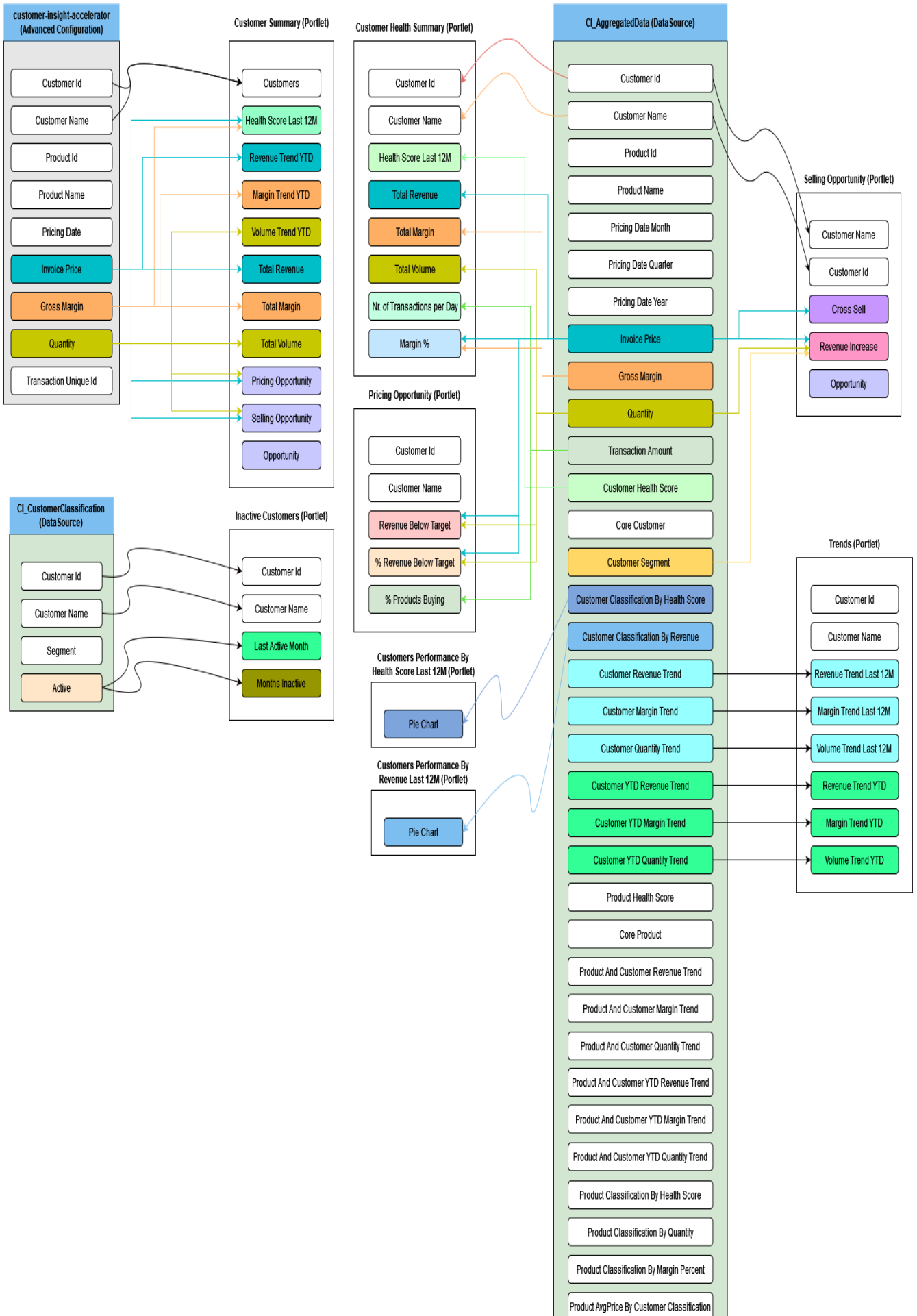
A: Value <= 20%
B: Value <= 50%
C: Value <= 80%
D: Value <= 100%

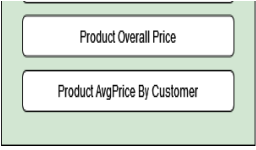
Excellent: Value >= 75
Good: Value >= 50
Normal: Value >= 25
Problematic: Value < 25

Very High: Value <= 10%
High: Value <= 20%
Normal: Value <= 75%
Low: Value > 75%

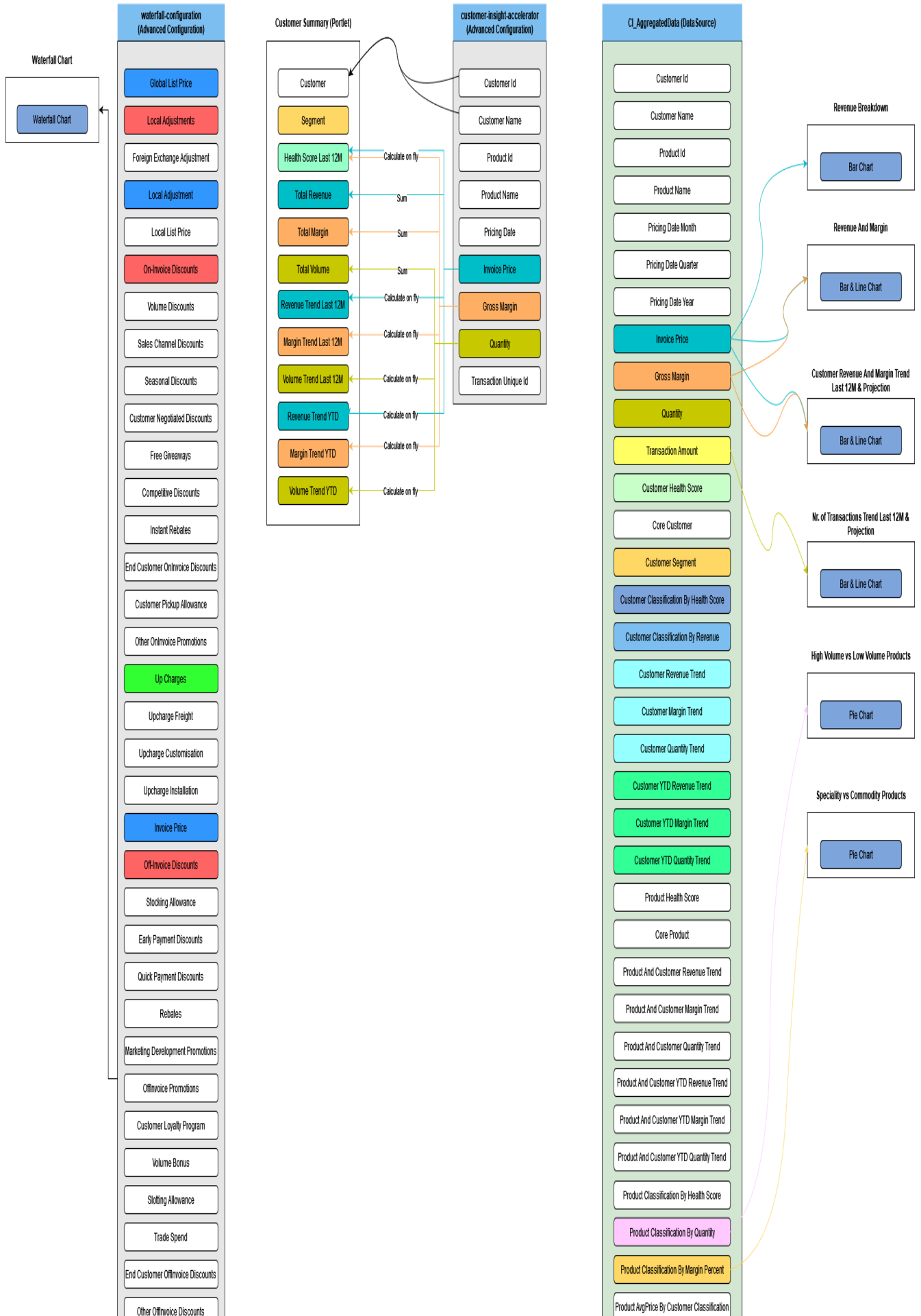


Customer Global View Dashboard





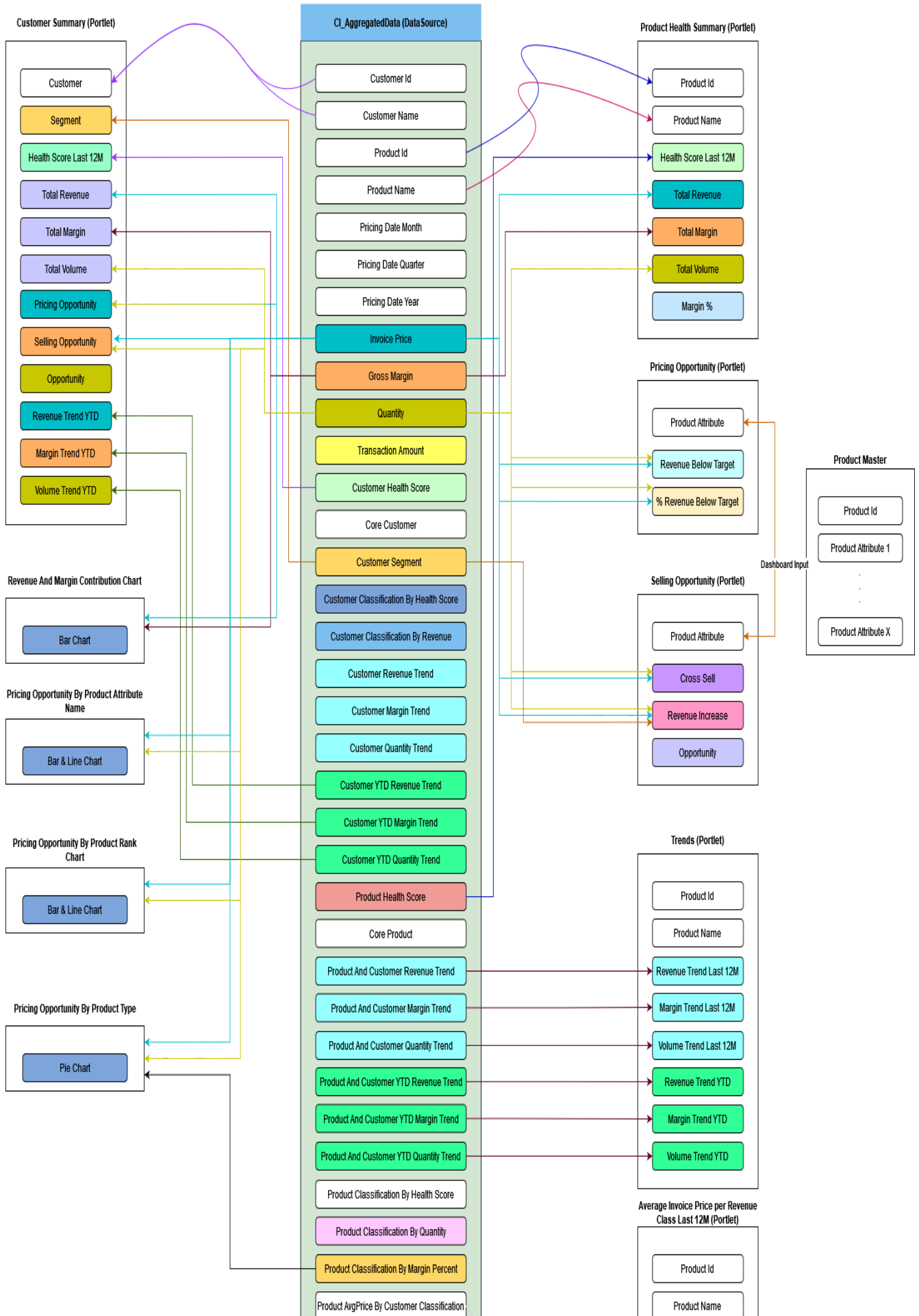
Customer Detail View Dashboard

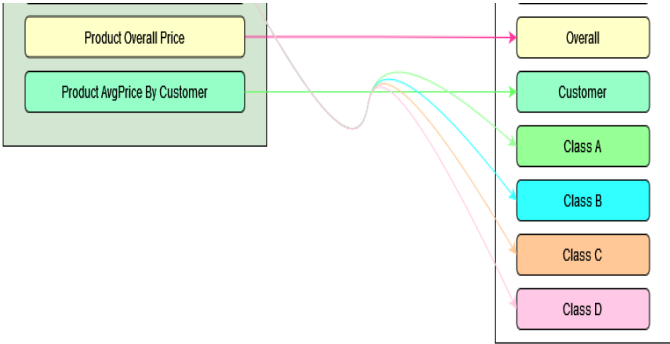


| |
|-------------------------|
| Net Price |
| Transaction Costs |
| Customization Costs |
| Consignment Cost |
| Corrections |
| Freight |
| Rush Orders |
| Expedited Shipping |
| Inventory Maintenance |
| Receivables Carrying |
| Installation Costs |
| Support Cost |
| Warranty |
| Other Transaction Costs |
| Realized Price |
| Cost Of Goods Sold |
| Raw Materials |
| Labor |
| Production |
| Other COGS |
| Gross Margin |

| |
|------------------------------|
| Product Overall Price |
| Product AvgPrice By Customer |

Customer Product Portfolio Dashboard





Common Errors (Customer Insights)

It is possible to encounter the following errors:

- [Cannot invoke method size \(\) on null object](#)
 - [Where Error Occurs](#)
 - [Troubleshooting](#)
- [Load failed](#)
 - [Where Error Occurs](#)
 - [Troubleshooting](#)
- [Deployment fail with error "Cannot sync data source with DataMart in PriceFx core!"](#)
 - [Where Error Occurs](#)
 - [Troubleshooting](#)
 - [Example](#)
- [Use Cases Related to Data Loads \(high transactions\)](#)

Cannot invoke method size () on null object

Where Error Occurs

CustomerInsights_DL_Aggregation

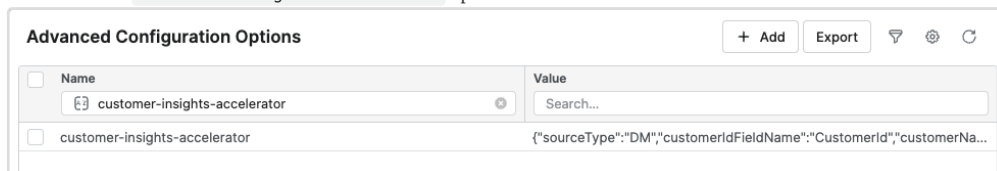
```
Message

Target has 0 rows before calculation,Load failed: java.lang.RuntimeException: Formula
CustomerInsights_DL_Aggregation[41] error: CreatingBatches : ERROR(@28): Cannot invoke method size() on null
object
```

Error Message: Cannot invoke method size () on null object

Troubleshooting

1. Make sure the mapping fields are correct.
2. Go to **Administration > Configuration > System Configuration > Advanced Configuration Options**.
3. Search for the `customer-insights-accelerator` option.



4. The columns `DateMonth`, `DateQuarter`, and `DateYear` must have data. They must not be empty because the logic reads data from these columns.

Load failed

Where Error Occurs

CustomerInsights_DL_Aggregation

Job Details (171)

Messages & Results

DL incremental mode, last load date: Mon Aug 01 09:38:07 UTC 2022

Target has 0 rows before calculation

Calculation is DISTRIBUTED

ImportAction-mVdIG: READY

ImportAction-MfXKe: READY

ImportAction-88v63: READY

ImportAction-u0hsy: READY

Load failed: 12 unsuccessful CalcItems

Parameters

| Label | Calculation Result |
|------------------|--------------------|
| Creating Batches | Created 16 batches |

Error Message: Load Failed

Troubleshooting

Increase the query thread pool in the partition which uses Customer Insights Accelerator (because data load type = distributed_calculation is used and the logic does some queries).

i For more details see the [internal Pricefx Teams channel](#).

Deployment fail with error “Cannot sync data source with DataMart in PriceFx core!”

Where Error Occurs

Deployment result of Platform Manager

Error Logs

▼ Partition Error Log

Copy

```
2024-08-19 09:53:27 INFO IP:18.202.11.132,34.120.214.11 URI:/pricefx/demofx-dm-dev/fetch/AP
Param:dataLocale=default&onConflict=validationError&isc_dataFormat=json - Payload:
[{"operationType":"fetch","startRow":0,"endRow":0,"data":
{"operator":"and","_constructor":"AdvancedCriteria","criteria":
[{"fieldName":"uniqueName","operator":"equals","value":"customer-insights-
accelerator"}]},{"outType":"JSON","omitNullFields":true,"noEvent":false,"distinctResults":false,"asyncRespon
se":false}]
2024-08-19 09:53:27 INFO IP:18.202.11.132,34.120.214.11 URI:/pricefx/demofx-dm-dev/login
Param:null - Payload:
```

[partition-error-log-19641.txt](#)

▼ Accelerator Error Log

Copy

```
2024-08-19T09:53:27.666493932Z - Deployment started
2024-08-19T09:53:27.73718927Z - Step ::Datamart Mapping is being processed.
2024-08-19T09:53:27.773937636Z - Step ::Datamart Mapping is waiting for information from UI.
2024-08-19T09:54:10.042256463Z - Step ::Datamart Mapping is being processed.
2024-08-19T09:54:10.852669014Z -
Step ::Datamart Mapping processed successfully.
2024-08-19T09:54:10.863674311Z - Step ::restore-customer-datasource-fields is being processed.
2024-08-19T09:54:12.215188746Z -
Step ::restore-customer-datasource-fields processed successfully.
```

[accelerator-error-log-19641.txt](#)

Error messages

Cannot sync data source with DataMart in PriceFx core!. Cannot sync data source with DataMart in PriceFx core!

Close

Error Logs

Troubleshooting

1. Check the **Product** and **Customer** master metadata in your partition.
2. Ensure that Product/Customer master columns (attributes) are not duplicated. An attribute name should not be the same as another attribute's name.

Example

`attribute2` (of Product master) has `name="attribute5"` and `attribute5` has a name (e.g: “Product class”), you should update name of `attribute2` to be different with `"attribute5"` .

You can reproduce the error in the partition by going to the Product/Customer Data Source and clicking the **Sync Meta Data** button.

If successful, you should not see this error in the PlatformManager anymore.

Use Cases Related to Data Loads (high transactions)

It may help to check out the following discussions in the **internal Pricefx Teams** channel:

- [Customer Insights Aggregation DL fails with a streamQuery time out](#)
- [Accelerators, we have installed Customer Insights Package for Sullivan and...](#)
- [Error during DL_Aggregation calculation](#)

Glossary (Customer Insights)

This glossary summarizes various terms used in Customer Insights Accelerator.

| Term | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--------------|---------------------|------------------|------------|------------------|----------|---------|--------|--------|---|----------|---------|--------|--------|---|----------|---------|--------|--------|---|----------|---------|--------|--------|---|----------|---------|--------|--------|---|----------|---------|--------|---------|---|
| Customer Health Score Product Health Score | <p>The Health Score summarizes the revenue and margin trend for the last 12 months, ranging from 0 (low performance) to 100 (high growth).</p> <p>Calculated based on the fields Revenue Trend Last 12 months and Margin Trend Last 12 months.</p> <p>The Revenue Health Score and Margin Health Score are set according to the Revenue and Margin monthly or quarterly change (trend) in the last 12 months (the maximum value is 100, the minimum value is 0) and to this Customer or Product Health Classification.</p> <p>Example</p> <p>Revenue Trend Last 12M = -19.23% => Revenue score = 25 Margin Trend Last 12M = -18.84% => Margin score = 25</p> <div style="background-color: #f0f0f0; padding: 5px;"> $1 \text{ Health Score} = \text{Revenue Score} * \text{Revenue Weight} + \text{Margin Score} * \text{Margin Weight}$ </div> <p>The weight value can be set (in the configuration in Price Parameters) between 0 and 1 for each (the default value is 0.5 for each); the summary of these two has to be equal to 1 (e.g. Revenue Weight = 0.5, Margin Weight = 0.5 => 0.5 + 0.5 = 1).</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Customer Classification by Revenue | <p>This category should be calculated based on last 12 months.</p> <p>Calculation</p> <ul style="list-style-type: none"> Get sorted (Descending) sum of revenue per customer. Calculate contribution value of each customer = $\frac{\sum \text{Revenue of customer}}{\sum \text{Revenue of all customers}}$ Calculate cumulative revenue contribution per customer. Assigns Customers into different classes based on cumulative revenue contribution for the last 12 months: <p>A ≤ 20% B ≤ 50% C ≤ 95% D rest</p> <p>The thresholds are configurable.</p> <p>Example</p> <div style="background-color: #f0f0f0; padding: 5px;"> <p>Example Customer Classification by Revenue Example Table</p> <table border="1"> <thead> <tr> <th>Customer Id</th> <th>Invoice Price (SUM)</th> <th>Contribution</th> <th>Cumulative</th> <th>Class by Revenue</th> </tr> </thead> <tbody> <tr> <td>CD-00016</td> <td>523,655</td> <td>16.92%</td> <td>16.92%</td> <td>A</td> </tr> <tr> <td>CD-00007</td> <td>522,656</td> <td>16.89%</td> <td>33.81%</td> <td>B</td> </tr> <tr> <td>CD-00026</td> <td>512,354</td> <td>16.56%</td> <td>=D3+C4</td> <td>C</td> </tr> <tr> <td>CD-00020</td> <td>512,179</td> <td>16.55%</td> <td>66.92%</td> <td>C</td> </tr> <tr> <td>CD-00019</td> <td>512,147</td> <td>16.55%</td> <td>83.46%</td> <td>C</td> </tr> <tr> <td>CD-00015</td> <td>511,736</td> <td>16.54%</td> <td>100.00%</td> <td>D</td> </tr> </tbody> </table> </div> | Customer Id | Invoice Price (SUM) | Contribution | Cumulative | Class by Revenue | CD-00016 | 523,655 | 16.92% | 16.92% | A | CD-00007 | 522,656 | 16.89% | 33.81% | B | CD-00026 | 512,354 | 16.56% | =D3+C4 | C | CD-00020 | 512,179 | 16.55% | 66.92% | C | CD-00019 | 512,147 | 16.55% | 83.46% | C | CD-00015 | 511,736 | 16.54% | 100.00% | D |
| Customer Id | Invoice Price (SUM) | Contribution | Cumulative | Class by Revenue | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD-00016 | 523,655 | 16.92% | 16.92% | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD-00007 | 522,656 | 16.89% | 33.81% | B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD-00026 | 512,354 | 16.56% | =D3+C4 | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD-00020 | 512,179 | 16.55% | 66.92% | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD-00019 | 512,147 | 16.55% | 83.46% | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD-00015 | 511,736 | 16.54% | 100.00% | D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Product Classification by Volume | <p>This category should be calculated based on last 12 months.</p> <p>Calculation</p> <ul style="list-style-type: none"> Get sorted (Descending) sum of volume per product Calculate contribution value per product = $\frac{\sum \text{Volume per product}}{\sum \text{Volume per all products}}$ Calculate cumulative volume contribution per product. Assigns Products into different classes based on cumulative volume contribution for the last 12 months: <p>Very High Volume ≤ 10% High Volume ≤ 20% Normal Volume ≤ 75% Low Volume rest</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

The thresholds are configurable.

Example

Example Product Classification by Volume | Example Table

| Customer Id | Volume (SUM) | Contribution | Cumulative | Class by Volume |
|-------------|--------------|--------------|------------|-----------------|
| CD-00016 | 710 | 19.51% | 19.51% | High Volume |
| CD-00007 | 650 | 17.86% | =D2+C3 | Normal Volume |
| CD-00026 | 600 | 16.48% | 53.85% | Normal Volume |
| CD-00020 | 590 | 16.21% | 70.05% | Normal Volume |
| CD-00019 | 550 | 15.11% | 85.16% | Low Volume |
| CD-00015 | 540 | 14.84% | 100.00% | Low Volume |

Product Type

Classification whether the product belongs to Commodity or Specialty, is based on Margin % = Margin Value / Invoice Price value (Margin field depends on your mapping field.)

Commodity ≤ 40%
Specialty > 40%

The thresholds are configurable in the PP table.

Make sure the value = ∑ Value of a product per all customers in the last 12 months (not per one customer).

=> We will have only one record to for Commodity, Specialty products based on the data for the last 12M.

When select YTD, MTD etc., the chart will sort out products that have transactions in that period; if a product does not exist in that period of a customer, it will not count.

E.g.: We have 30 products Commodity, 70 products Specialty in the last 12M.

For customer X in YTD, only 50 products have transactions, 20 of them is Commodity, the rest is Specialty, so the chart will show this accordingly.

Pricing Opportunity

Meaning selling at a higher price identified from customers within the same segment

Average Invoice Price = Average Unit Invoice Price for the particular Product ID and particular Customer Segment

Below Average Price = the particular Unit Invoice Price - Average Unit Invoice Price

Pricing Opportunity = Pricing Uplift = if Below Average Price < 0 then Below Average Price * Quantity * (-1) else 0

Cross Sell Opportunity

Meaning selling products that are not sold yet to that customer but to customers within the same segment

1 Formula = Average (Invoice) Price per Customer Segment and per period and for Products not bought by Customer

Example

Segment buys Product A, Product C and Product E, Customer A bought only Product A and Product E => cross-sell would be an average Invoice Price of Product C per Customer Segment.

Customer Segment is defined in the configuration (Price Parameters) – a list of fields the segment consists of.

Revenue Increase

Meaning selling more of a product based on customers within the same segment


If Quantity per Product and Customer < average Quantity per Product and per Customer Segment, then:


1 Formula = (average Quantity per Product and per Customer Segment - Quantity per Product and Customer) * average Price per Product and Customer

If Quantity per Product and Customer > average Quantity per Product and per Customer Segment, then:


Formula

Revenue Increase = 0

| | |
|---|---|
| | <p>Example</p> <p>Customer Segment buys Product A in Average 500 quantity and Customer bought 350 quantity, then Revenue Increase = (500 – 350) * average Price per Customer. If Customer bought more than 500 quantity, then Revenue Increase = 0.</p> <p>Customer Segment is defined in the configuration (Price Parameters) – a list of fields the segment consists of.</p> |
| <p>Selling Opportunity</p> | <p>1 Selling Opportunity = Cross Sell Opportunity + Revenue Increase</p> |
| <p>% Products buying</p> | <p>1 Formula = Number of Products buying in this period of a customer / Total of Products traded in this period * 100</p> <p>Example</p> <p>With YTD, total 200 products are traded. Among of them, customer A buys 50 products.</p> <p>% Products buying of customer A in YTD = 50/200 * 100 = 25 %</p> |
| <p>Revenue, Margin and Volume Trend Last 12 Months</p> | <p>First, the respective metric (revenue, margin or volume) is calculated for every single time unit. Customer level: time unit = month Product level: time unit = month</p> <p>The least-square approach is used to compute the trend. See the <i>Fitting a trend: Least-squares</i> section in the Linear trend estimation Wikipedia article.</p> <p>Formula</p> $\hat{a} = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sum_{i=1}^n (x_i - \bar{x})^2}$ <ul style="list-style-type: none"> • x is the month number (like month 1 would be the first month in scope) • \bar{x} is the average month number • y is the metric to consider, like margin • \bar{y} is the average metric to consider, like average margin <p>To convert the trend value \hat{a} back to a percentage, the following formula is used: $\hat{a} / \text{average(metric)}$</p> <p>Periods with no transactions are considered to have zero revenue, margin, and volume, and are included in the trend computation.</p> <p>Find the example in the the following attachment:</p>  <p>Trend Value with... e.xlsx 10 Jan 2025, 11:25 AM</p> <p>This calculation is used in the following portlets:</p> <p>Portlets affected by this trend calculation change:</p> <ol style="list-style-type: none"> 1. Global View: <ul style="list-style-type: none"> Customer Summary (Trends, Health Score) Customer Health Summary (Health Score) Trends (Trends) 2. Customer Detail View: <ul style="list-style-type: none"> Customer Summary (Trends, Health Score) 3. Customer Products Portfolio <ul style="list-style-type: none"> Customer Summary (Trends, Health Score) Trends (Trends) Product Health Summary (Health Score) Average Invoice Price per Customer Revenue Class Last 12M (Product Classification) |
| <p>Revenue, Margin and Volume Trend YTD</p> | <p>Formula</p> <p>The least-square approach is used (see the Last 12 Months computation above).</p> <p>This calculation is used in the following portlets:</p> <p>Portlets affected by this trend calculation change:</p> <ol style="list-style-type: none"> 1. Global View: <ul style="list-style-type: none"> Customer Summary (Trends, Health Score) Customer Health Summary (Health Score) Trends (Trends) 2. Customer Detail View: <ul style="list-style-type: none"> Customer Summary (Trends, Health Score) 3. Customer Products Portfolio <ul style="list-style-type: none"> Customer Summary (Trends, Health Score) |

| | <p>Trends (Trends)</p> <p>Product Health Summary (Health Score)</p> <p>Average Invoice Price per Customer Revenue Class Last 12M (Product Classification)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|------------------|--|--|--|--|--|-------|--------|--|--|--|--|--------------|--------|--|--|--|--|--|--|--|--|--|--|
| Number of Transactions | Total Transactions in a given period / Total days in a given period | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| % of Revenue below Target | <p>1 Formula = Revenue Below Target / \sum Revenue of Product ID of the customer</p> <p>(calculated for Products with Revenue Below Target above zero)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Customer Segment | <p>To group customers by common characteristics, the Customer Segment is defined in configuration (Company Parameters) – a list of fields the segment consists of, e.g. customer size, region, country etc.</p> <p>According to values aggregated on the Customer Segment level, certain KPIs for particular customers are calculated, e.g. cross sell.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Average Invoice Price per Customer Revenue Class Last 12M |  <ul style="list-style-type: none"> (1) = \sum Invoice Price of Product / \sum Qty of Product (per customer Last 12M) -> In <code>CI_AggregatedData</code> (Customer Insights Aggregated Data Data Source), this field is called "Product Avg Price By Customer" (<code>ProductAvgPriceByCustomer</code>) (2) = \sum (1) of Product Y of all customers in class A / Number of customers in class A that have product Y Do the same with class B, C, D. (6) Overall per product = Average { (2),(3),(4),(5) } | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Core Customers | <p>Core</p> <p>Customers having cumulative revenue contribution in the last 12M \leq 80% (or by a PP) .</p> <p>Long tailed</p> <p>The remaining Customers/Products having cumulative revenue contribution in the last 12M $>$ 80% (or by a PP).</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Core Products | <p>Core</p> <p>Products having cumulative revenue contribution in the last 12M \leq 80% (or by a PP).</p> <p>Long tailed</p> <p>The remaining Customers/Products having cumulative revenue contribution in the last 12M $>$ 80% (or by a PP).</p> <ul style="list-style-type: none"> For Products this is calculated per Customer Segment (as per the Segment definition). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Projected Nr. of Transactions, Margin and Revenue <i>(for the next 3 months)</i> | <p>Projected measure for the next 3 months (calculated as adjusted linear trend based on the first 3 months of the period).</p> <p>Calculation</p> <ul style="list-style-type: none"> Projected measure for the particular month = linear trend for the particular month * Seasonality Adjustment <ul style="list-style-type: none"> Seasonality Adjustment = (measure for the (particular month - 12 months)) / Average of the value for the last 12 months) If the projected value is negative, then we return 0 instead. <p><i>measure = Number of Transactions, Margin or Revenue</i></p> <p>Example</p> <p>Revenue Projection Calculation</p> <table border="1" data-bbox="389 1787 1455 2141"> <thead> <tr> <th colspan="6">Example Revenue Projection Calculation Example Table</th> </tr> <tr> <th>regressionFactor</th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Slope</td> <td>161.24</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>interception</td> <td>-310.7</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | Example Revenue Projection Calculation Example Table | | | | | | regressionFactor | | | | | | Slope | 161.24 | | | | | interception | -310.7 | | | | | | | | | | |
| Example Revenue Projection Calculation Example Table | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| regressionFactor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Slope | 161.24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| interception | -310.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |







| | Month | | Revenue | Seasonality Adjustment | regression | Projected Revenue |
|-----------------------------|--------|--|-----------------|------------------------|------------|-------------------|
| 1 | Jan-21 | | 100 | | | |
| 2 | Feb-21 | | 150 | | | |
| 3 | Mar-21 | | 200 | | | |
| 4 | Apr-21 | | 150 | | | |
| 5 | May-21 | | 300 | | | |
| 6 | Jun-21 | | 200 | | | |
| 7 | Jul-21 | | 100 | | | |
| 8 | Aug-21 | | 80 | | | |
| 9 | Sep-21 | | 350 | | | |
| 10 | Oct-21 | | 500 | | | |
| 11 | Nov-21 | | 600 | | | |
| 12 | Dec-21 | | 650 | | | |
| 13 | Jan-22 | | | 0.36 | 1,785.42 | 633.88 |
| 14 | Feb-22 | | | 0.53 | 1,946.66 | 1,036.68 |
| 15 | Mar-22 | | | 0.71 | 2,107.90 | 1,496.73 |
| | | | | | | |
| ==> Average Value | | | 281.6667 | | | |

 Always ensure your data is complete. For instance, if the revenue data is missing, the following events will occur:







1 Revenue value = 0 => Margin % = Margin/Revenue => Margin % = null

Null values may appear in the dashboards because the application cannot resolve missing data independently.

Example Customer Classification by Revenue

| Customer Id | Invoice Price (SUM) | Contribution | Cumulative | Class by Revenue |
|-------------|---|--------------|------------|------------------|
| CD-00016 | 523,655  | 16.92% | 16.92% | A |
| CD-00007 | 522,656  | 16.89% | 33.81% | B |
| CD-00026 | 512,354  | 16.56% | =D3+C4 | C |
| CD-00020 | 512,179  | 16.55% | 66.92% | C |
| CD-00019 | 512,147  | 16.55% | 83.46% | C |
| CD-00015 | 511,736  | 16.54% | 100.00% | D |

Example Product Classification by Volume

| Customer Id | Volume (SUM) | Contribution | Cumulative | Class by Volume |
|-------------|---|--------------|------------|-----------------|
| CD-00016 | 710  | 19.51% | 19.51% | High Volume |
| CD-00007 | 650  | 17.86% | =D2+C3 | Normal Volume |
| CD-00026 | 600  | 16.48% | 53.85% | Normal Volume |
| CD-00020 | 590  | 16.21% | 70.05% | Normal Volume |
| CD-00019 | 550  | 15.11% | 85.16% | Low Volume |
| CD-00015 | 540  | 14.84% | 100.00% | Low Volume |

Example Revenue Projection Calculation

| regressionFactor | | | | | | |
|------------------|-------------------|--------|----------|------------------------|------------|-------------------|
| Slope | 161.24 | | | | | |
| interception | -310.7 | | | | | |
| | | | | | | |
| | Month | | Revenue | Seasonality Adjustment | regression | Projected Revenue |
| | 1 | Jan-21 | 100 | | | |
| | 2 | Feb-21 | 150 | | | |
| | 3 | Mar-21 | 200 | | | |
| | 4 | Apr-21 | 150 | | | |
| | 5 | May-21 | 300 | | | |
| | 6 | Jun-21 | 200 | | | |
| | 7 | Jul-21 | 100 | | | |
| | 8 | Aug-21 | 80 | | | |
| | 9 | Sep-21 | 350 | | | |
| | 10 | Oct-21 | 500 | | | |
| | 11 | Nov-21 | 600 | | | |
| | 12 | Dec-21 | 650 | | | |
| | 13 | Jan-22 | | 0.36 | 1,785.42 | 633.88 |
| | 14 | Feb-22 | | 0.53 | 1,946.66 | 1,036.68 |
| | 15 | Mar-22 | | 0.71 | 2,107.90 | 1,496.73 |
| | | | | | | |
| | ==> Average Value | | 281.6667 | | | |

Customer Insights Dashboard 1.10

This document summarizes major improvements and fixes introduced in the Accelerate Customer Insights Package release version.

| | |
|---------------------|--------------|
| Version | 1.10.0 |
| Release Date | Oct 30, 2024 |

Table of contents:

- [New Features and Improvements](#)
- [Fixed Issues](#)

New Features and Improvements

| Description | ID |
|--|------------|
| Added data readability support for AI Assistant in the Customer Insights - Global View Dashboard portlets. | PFPCS-8693 |
| Added data readability support for the AI Assistant in the Customer Insights - Global View Dashboard's Inactive Customers portlet. | PFPCS-8709 |
| Added data readability support for AI Assistant in the Customer Insights - Customer Detail View Dashboard's Trend table portlets. | PFPCS-8715 |
| The trend calculations transitioned from Groovy to SQL to enhance performance. | PFPCS-8881 |
| The default values updated in the Company Parameters table (PFXTemplate_CustomerInsights_Configuration). | PFPCS-8893 |
| The preferences for the Customer Insights Dashboards were updated. | PFPCS-8898 |

Fixed Issues

| Description | ID |
|--|------------|
| The broken documentation link in the Datamart Mapping section. | PFPCS-6983 |
| In the Customer Insights - Customer Detail View Dashboard, the product group filter is incorrect. | PFPCS-8874 |
| In the Customer Insights - Global View and Detail View Dashboards, the Datetime format is incorrect. | PFPCS-8920 |

Customer Insights Dashboard 1.10.1

This document summarizes major improvements and fixes introduced in the Accelerate Customer Insights Package release version.

| | |
|---------------------|---------------|
| Version | 1.10.1 |
| Release Date | Jan 9, 2025 |

Fixed Issues

| Description | ID |
|---|------------|
| In the Customer Detail View Dashboard, incorrect value for Pricing Date Year Category. | PFPCS-8994 |
| In the Customer Products Portfolio Dashboard, zero values in the Cross Sell calculation scope. | PFPCS-8971 |
| In the distributed calculation, Batch Dimension selection affects the calculation results. | PFPCS-8973 |
| In the Customer Detail View Dashboard and in the Global View Dashboard, YTD Trend mismatch. | PFPCS-8996 |
| In the Global View and in the Customer Products Portfolio charts, inconsistent Opportunity Summary results. | PFPCS-9002 |
| Invalid Revenue Below Target Percent calculation. | PFPCS-9030 |
| The month name list is empty for SQL using the YTD_WCM period due to the invalid generated SQL. | PFPCS-9151 |