

Improve price effectiveness by monitoring market feedback via realization analytics KPIs

As a Pricing Manager/ Product Manager, I want to understand the impact of costs, market changes, competition, and other factors on price changes. I want to make decisions based on review and long-term tracking.

Functional Requirements

In-depth documentation:

<https://pricefx.atlassian.net/wiki/spaces/ACC/pages/4453597252/Dashboards+Description+CIP>

Complications:

- Lack of visibility into impact of price changes
- Lack of visibility into category and SKU/customer basis
- Lack of clarity about direction of business
- Lack of understanding of customer success

Capability Needed:

- High level customer success - score and trend
- Detailed understanding of customer level waterfall
- Price changes realization impact
- Long-term tracking of volume, price, margin

Benefit:

- Real-time visibility into price action results
- Customer level / category level insights

Non-Functional Requirements

- This solution is designed to support ~500 customers, ~10,000 products and <20MM transactions.
- Customer master data must be available.
- Product master data must be available.
- Transactional data mart must be available.

Reporting and Dashboards

3 Dashboards:

- 1. Customer Insights – Global View
 - 8 portlets:
 - 1 widget
 - 2 charts
 - 5 tables

- 2. Customer Insights – Customer Detail View
 - 8 portlets:
 - 1 widget
 - 7 charts
- 3. Customer Insights – Customer Products Portfolio
 - 9 portlets:
 - 1 widget
 - 4 charts
 - 5 tables

Measures, Calculation and Decision-Making Key Performance Indicators

KPI:

- Contribution margin change
- Gross margin change
- Measured at the account level
- Measured at higher levels in the enterprise: product, market, geography, or total business
- Customer and Product health scores
- Revenue, Margin and Volume trends
- Pricing and Sales opportunities

Calculations:

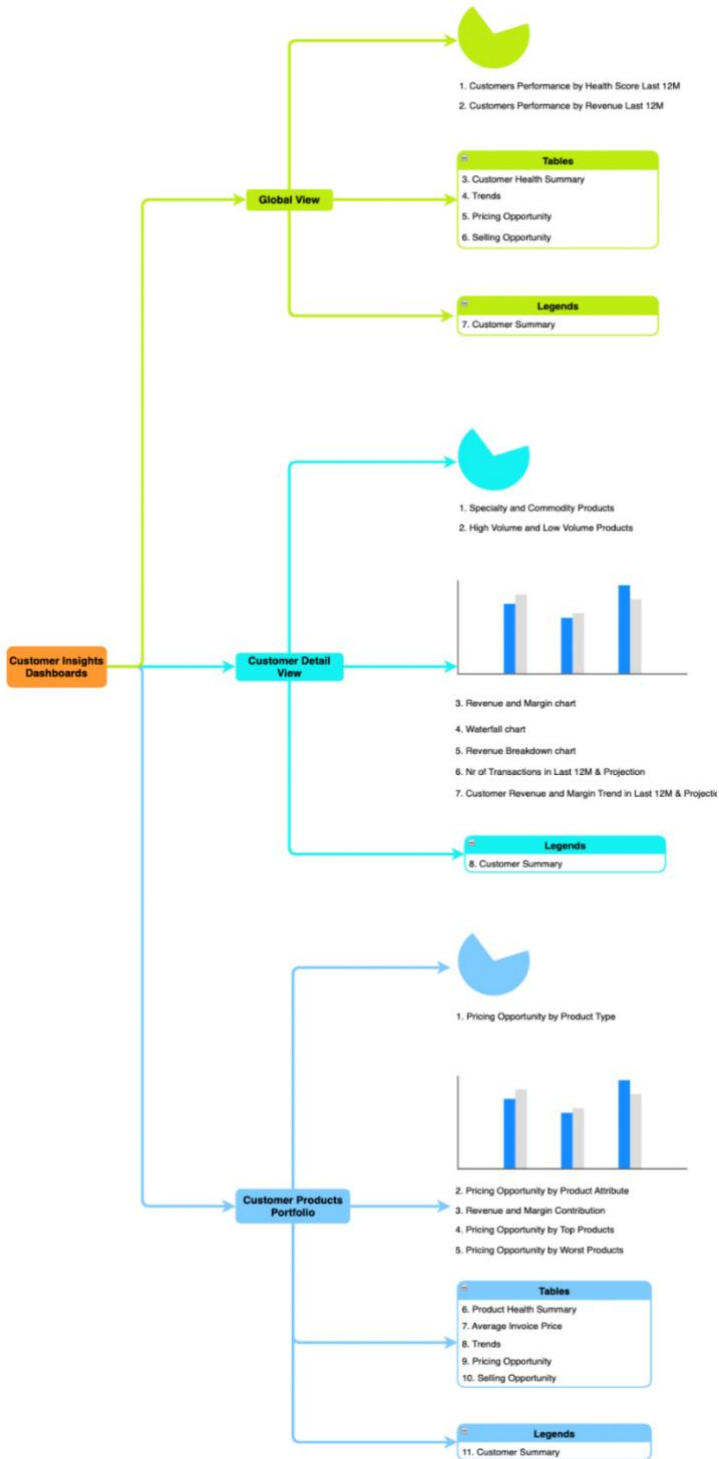
- Contribution margin = revenue – variable cost of goods sold
- Gross margin = revenue – total cost of goods sold
- Health Score = Revenue Score * Revenue Weight + Margin Score * Margin Weight
- Pricing Opportunity = \sum Revenue below targe
- Selling Opportunity = \sum Up Sell + \sum Cross Sell

For detailed formula explanations see [Glossary](#)

Solution Design

This solution is implemented using the Accelerate Customer Insights Package (CIP).

Customer Insights Accelerator Dashboards:



1. Customer Insights – Global View

User inputs:

DATA FILTER

Customer(s)
Select Customer(s) Q

Time Filter *
YTD

Customer Rank *
All

Customer Rank Bucket *
5

KPI *
Health Score

Customer Class

Customer Health Score

Customer Base

Name	Values
Customer(s)	
Time Filter	MTD, QTD, YTD, L12M, L6M, L3M
Customer Rank	All, Top, Worst
Customer Rank Bucket	5,10, 50, 100
KPI	Revenue, Margin %, Volume, Health Score
Customer Class	A, B, C, D (Multiselect is enabled)
Customer Health Score	Excellent, Normal, Low, Problematic (Multiselect is enabled)

Time filter 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

Time filter 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/Product Rank Bucket

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.

Customers/Products columns show top/worst aggregation of data, driven by inputs on the left-hand side of the dashboard.

Columns with Trends show increase/constant/decrease metrics based on Data Load calculation results. There is no direct relation between these two types of metrics and columns.

Dashboard Settings

Select Dashboard
Customer Insights - Global View

DATA FILTER

Customer(s) "Customer Type" e...

* Time Filter YTD

* Customer Rank Buc... **10**

* KPI Health Score

Customer Class

Customer Health Score

Apply Settings

Customer Insights - Global View

+ Add Portlet (13) Export to Excel

Customer Health Summary

Customer Name	Customer Id	Health Score Last 12M	Total Revenue	Total Margin
▲ Appetito Mz	CD-00001	▲ +100	189,261	81,902
▲ BioMérieux	CD-00038	▲ +100	357,829	235,685
▲ CD GmbH	CD-00042	▲ +100	354,843	238,231
▲ Döhner Bar	CD-00053	▲ +100	113,439	45,399
▲ Fischer Fleisch	CD-00061	▲ +100	31,490	19,899
▲ Spagetti M	CD-00002	▲ +80	464,840	288,911
▲ Pastapusta	CD-00017	▲ +80	453,717	283,343
▲ Appetito KA	CD-00021	▲ +80	457,707	285,649
▲ Frutto Inc	CD-00026	▲ +80	440,629	272,324
▲ Nobel Hobel AG	CD-00027	▲ +80	447,616	277,977
▼ Hydra SAS	CD-00077	▶ +68	31,090	19,765
▼ Lindo Healthball	CD-00085	▶ +55	28,234	18,349

12 rows

Customer classification

This category should be calculated based on the last 12 months.

Calculation:

- 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:

A ≤ 20%

B ≤ 50%

C ≤ 95%

D rest

Thresholds are configurable.

Example:

A	B	C	D	E
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

This category should be calculated based on the last 12 months.

Calculation:

- 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:

Very High Volume $\leq 10\%$

High Volume $\leq 20\%$

Normal Volume $\leq 75\%$

Low Volume rest

Thresholds are configurable.

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

Customer Health Score, Product Health Score

Calculated based on fields *Revenue Trend Last 12 months* and *Margin Trend Last 12 months*.

Revenue Health Score and Margin Health Score are set in accordance with

Revenue and Margin monthly or quarterly change (trend) in the last 12 months

(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

Example:

Revenue Trend Last 12M = -19.23% => Revenue score = 25

Margin Trend Last 12M = -18.84% => Margin score = 25

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

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)

Portlet 1

Customer Summary

Customers:

Health Score ▲+88
Last 12M:

Revenue Trend YTD: ▼-27.60%	Total Revenue: 93,888,880	Pricing Opportunity: 6,308,360
Margin Trend YTD: ▼-31.35%	Total Margin: 13,311,626	Selling Opportunity: 26,771,662
Volume Trend YTD: ▼-30.61%	Total Volume: 835,959	Opportunity: 33,080,022

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

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.

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 Revenue below target
 Selling Opportunity = \sum Up Sell + \sum Cross Sell
 L12M trends are calculated on a monthly basis.
 Note: Data queried from Datamart

Portlet 2

This portlet shows a list of “inactive” Customers, so that user can identify Customers which there are no transactions in the chosen time period.

[Config Inactive-Customer-classification](#)

Applied filters: Customer(s), Time filter

Not applied filters: Customer Rank, Customer Rank Bucket, KPI, Customer Class, Customer Health Score

Months Inactive = Current Month - Last Active Month

Inactive Customers

Customer Name	Customer Id	Last Active Month	Months Inactive
Luxchare	CH-0026	No data	No data
Hirose	CH-0028	No data	No data
Magna International	CH-0012	No data	No data
Ignition Distributor	SUB-0001	No data	No data
Sanofi	CH-0037	No data	No data
Huhtamaki	CH-0044	No data	No data
Johnson Electric Group	CH-0004	No data	No data

55 rows

300 / page

< 1 >

Dashboard Settings

Select Dashboard

1. Customer Insights - Global View

DATA FILTER

Customer(s)

* Time Filter

* Customer Rank

* Customer Rank Bucket

* KPI no effect

Customer Class

Customer Health Score

Customer Base

1. Customer Insights - Global View

+ Add Portlet (13)

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 Wurcekso	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
2PQ Ltd.	CD-00151	2018-M11	32

Portlet 3

The pie chart shows relative sizes of customer classification based on Revenue in the last 12 months.

Ability to see data as a table. Ability to drill down.

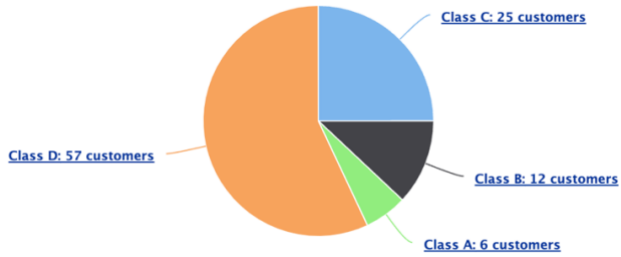
When hovering over an individual customer pie share, detailed information is displayed.

Customers Performance By Revenue Last 12M

Chart Data

Customers Performance By Revenue Last 12M

From 2022-06-01 To 2023-05-31



Customers Performance By Revenue Last 12M

Chart Data

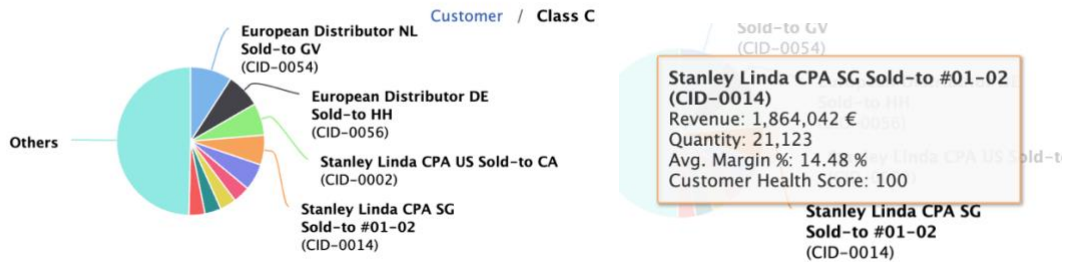
Category	Customer
Class C	25
Class B	12
Class A	6
Class D	57

Customers Performance By Revenue Last 12M

Chart Data

Customers Performance By Revenue Last 12M

From 2022-06-01 To 2023-05-31



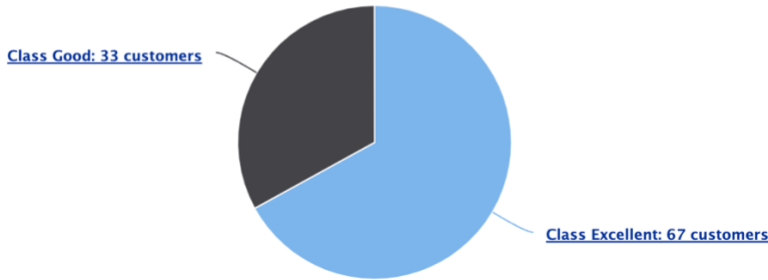
Portlet 4

Customers Performance By Health Score Last 12M

Chart Data

Customers Performance By Health Score Last 12M

From 2022-06-01 To 2023-05-31



The pie chart shows relative sizes of customer classification based on Revenue in the last 12 months. Ability to see data as a table. Ability to drill down. When hovering over an individual customer share, detailed information is displayed.

Portlet 5

Selling Opportunity

<input type="radio"/>	Customer Name	Customer Id	Cross Sell	Revenue Increase
<input type="radio"/>	▲ SO Company Inc U...	CID-0033	0	1,621,5
<input type="radio"/>	▲ SO Company Inc U...	CID-0031	0	1,607,2
<input type="radio"/>	▲ SO Company Inc U...	CID-0034	0	1,576,8
<input type="radio"/>	▲ SO Company Inc U...	CID-0035	0	1,532,1
<input type="radio"/>	▲ SO Company Inc U...	CID-0032	0	1,494,6
<input type="radio"/>	▼ Stanley Linda CPA ...	CID-0010	0	

10 rows

Table shows the total value which can be gained for products that customer bought and did not buy in the given period.

- 1) Cross Sell (Evaluate non-purchased products)
 - a) The value that customers should spend by purchasing products which they did not buy in the past, but other customers did buy.
 - b) If value = 0, customer bought full products set presented in the given period.
- 2) Up Sell (Evaluate purchased products)
 - a) Value that a customer should spend by purchasing a product which they already bought in the past.
 - b) If value = 0, customer purchased products that all are above average point in the customer set.
- 3) Opportunity: Total additional value that can be obtained for customer, evaluated for both purchased and non-purchased products.

Portlet 6

Pricing Opportunity

<input type="radio"/>	Customer Name	Customer Id	Revenue Below Target	% Revenue Below Target	% Products Buying
<input type="radio"/>	▲ European Distributor C...	CID-0062	2,582,570	2,257.06%	100.00%
<input type="radio"/>	▲ Pesat Electro	CID-0047	1,011,594	2,158.13%	100.00%
<input type="radio"/>	▲ Stanley Linda CPA CN ...	CID-0015	464,402	144.10%	100.00%
<input type="radio"/>	▲ Stanley Linda CPA CN ...	CID-0016	389,893	130.32%	100.00%
<input type="radio"/>	▲ Pricefx AG CZ Sold-to ...	CID-0027	350,806	2,213.39%	100.00%
<input type="radio"/>	▼ Garth Corp	CID-0076	0	0.00%	100.00%
<input type="radio"/>	▼ Lukas Z4 Ltd	CID-0077	0	0.00%	100.00%

The table shows a list of customers that can be targeted to sell more products at bigger volume. Top of the list represents the highest opportunity - these customers are under the average point in the customers set.

Bottom of the list represents the lowest opportunity. (hidden)

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

Portlet 7

Calculation granularity: monthly

Trends

<input type="radio"/>	Customer Name	Customer Id	Revenue Trend Last 1...	Margin Trend Last 12M	Volume Trend Last 12...	Revenue Trend YTD	Margin Trend YTD	Volume Trend YTD
<input type="radio"/>	▲ Stanley Linda CPA ...	CID-0002	▷ +33.82%	▷ +31.82%	▷ +28.54%	▼ -11.87%	▼ -6.33%	▼ -17.52%
<input type="radio"/>	▲ Stanley Linda CPA ...	CID-0006	▷ +26.11%	▷ +32.98%	▷ +28.11%	▼ -15.01%	▼ -12.61%	▼ -8.38%
<input type="radio"/>	▲ Stanley Linda CPA ...	CID-0007	▷ +28.02%	▷ +34.25%	▷ +22.22%	▼ -12.70%	▼ -31.13%	▼ -4.39%
<input type="radio"/>	▲ Stanley Linda CPA ...	CID-0011	▷ +34.88%	▷ +35.95%	▷ +24.83%	▼ -10.35%	▼ -25.18%	▼ -22.02%
<input type="radio"/>	▲ Stanley Linda CPA ...	CID-0012	▷ +36.00%	▲ +57.54%	▷ +27.33%	▼ +6.10%	▼ -51.83%	▼ -7.08%
<input type="radio"/>	▼ Burdillat Ltd	CID-0092	▼ +7.96%	▷ +11.06%	▼ +8.68%	▼ -45.67%	▼ -52.93%	▼ -17.81%
<input type="radio"/>	▼ China Distributor	CID-0097	▼ +6.29%	▼ +7.94%	▼ +7.83%	▼ -4.09%	▼ -30.95%	▼ +6.38%

2. Customer Insights – Customer Detail View

User inputs:

Name	Values
Customer	
Time Filter	MTD, QTD, YTD, L12M, L6M, L3M
Category (+ Value)	E.g.: Product ID, Product Group
Product Class	Very High, High, Normal, Low (Multiselect is enabled)
Product Health Score	Excellent, Normal, Low, Problematic (Multiselect is enabled)
Product Base	Core, LongTailed, All

DATA FILTER

Customer *

Time Filter *

Category

Value

Product Class

Product Health Score

Product Base

For details on user input see 1. Customer Insights – Global View.

Portlet 1

Customer Summary

Customer:	CID-0085 (Schmidt GmbH)		
Segment:	Europe-Industry		
Health Score	▲+100		
Last 12M:			
Revenue Trend	▼-12.12%	Revenue Trend	▲+87.95%
YTD:		(last 12M):	
Margin Trend	▼-10.64%	Margin Trend	▲+87.19%
YTD:		(last 12M):	
Volume Trend	▼-32.67%	Volume Trend	▶+32.75%
YTD:		(last 12M):	
		Total Revenue:	420,535
		Total Margin:	68,011
		Total Volume:	2,663

Displays some typical figures regarding the chosen customer.
 All values are aggregated on the Customer(s) and Category levels.
 If Category value is not selected, it is hidden in the portlet.
 Click "View Customer Products Portfolio" - opens new tab "Customer Products Portfolio" dashboard.
 L12M trends are calculated on a monthly basis.
 Note: Data queried from Datamart

Dashboard Settings

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

DATA FILTER

Customer: 🔍

* Product Attribu...: ▾

* Time Filter: ▾

* Product Rank: ▾

* Product Rank ...: ▾

Product Class: ▾

Product Health S...: ▾

Product Base: ▾

3. Customer Insights - Customer Products Portfolio

+ Add Portlet (13) ▾
Export to Excel
⚙️
🔄

Customer Summary

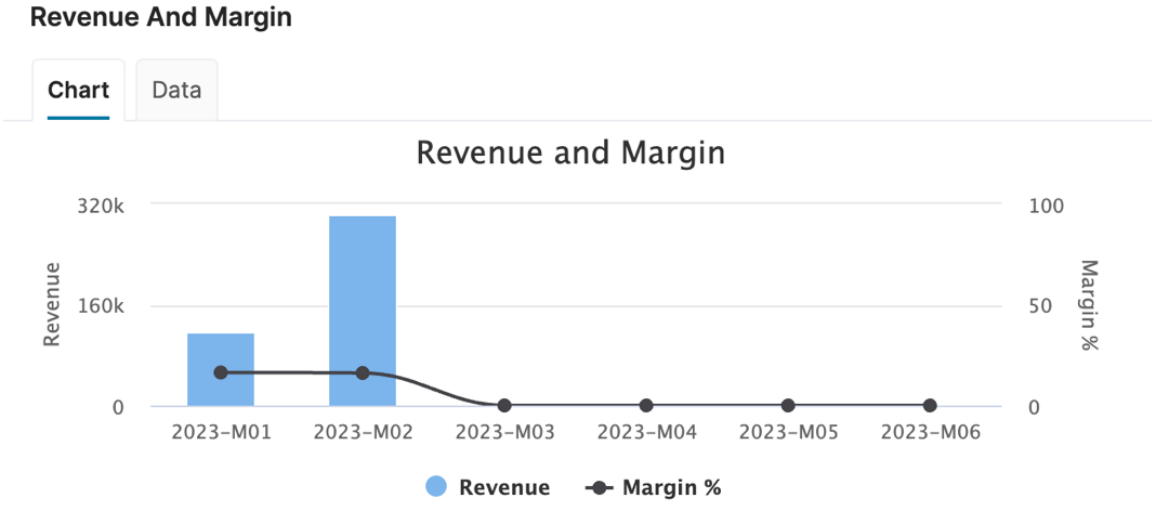
Customer: CD-00001 (Appetito Mz)
 Segment: Restaurant-Europe
 Health Score Last 12M: ▲+100

Revenue Trend YTD:	▼-54.18%	Total Revenue:	232,656	Pricing Opportunity:	68,813
Margin Trend YTD:	▼-61.21%	Total Margin:	102,795	Selling Opportunity:	26,063
Volume Trend YTD:	▼-54.88%	Total Volume:	79,229	Opportunity:	94,876

For more information on Customer Health score, see page 6.

Portlet 2

Shows Revenue and Margin values over several months in the given period.



Portlet 3

Waterfall chart is used for understanding all the components of the final price and margin. Initial and the final values are represented by whole columns, while the intermediate values are denoted by floating columns.

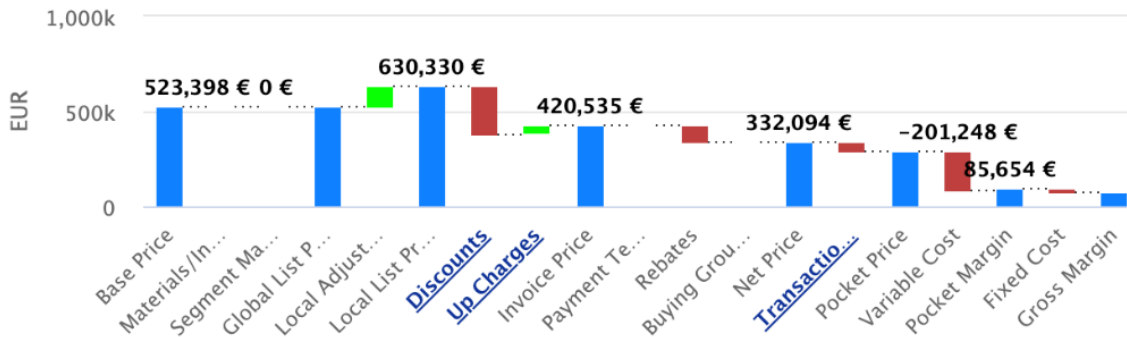
For more details see [Waterfall Dashboard](#).

Waterfall Chart

Chart

Data

Waterfall With Absolute Value



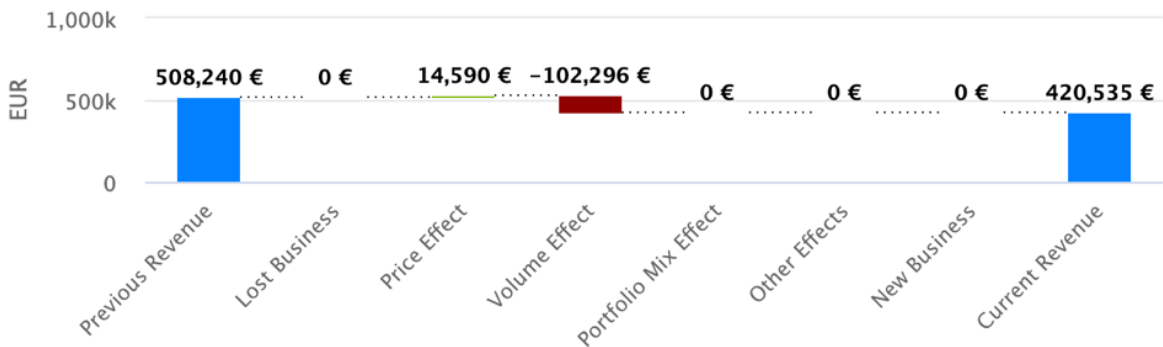
Portlet 4

Revenue Breakdown

Chart

Data

Revenue Breakdown



This chart helps users identify the reason for the gap in revenue for 2 time periods.

Allows to compare two years or quarters + optionally filter for on product(s) and/or customer(s).

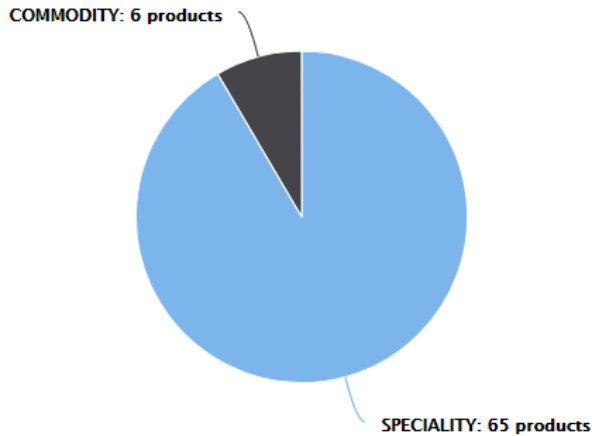
For more details see [Revenue Breakdown Dashboard - Fields Definition](#).

Portlet 5

Shows relative sizes of product classification based on the margin %.
 Specialty Products: Higher than the defined margin %
 Commodity Products: Lower than the defined margin %
 Based on an average margin achieved by the product during the last 12 months
 (The thresholds are configurable).

Speciality vs Commodity Products

From 2020-01-01 To 2020-07-06



Class	Threshold
Commodity	<=40%
Specialty	> 40%

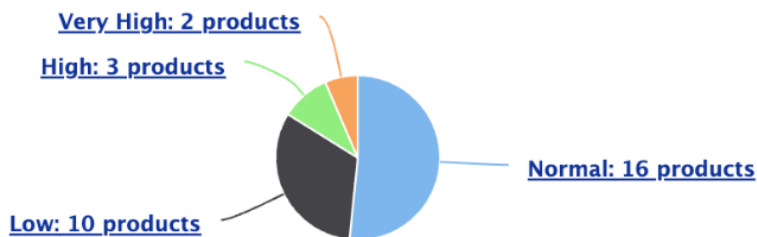
Portlet 6

High Volume vs Low Volume Products

Chart Data

High Volume vs Low Volume Products

From 2023-01-01 To 2023-06-11



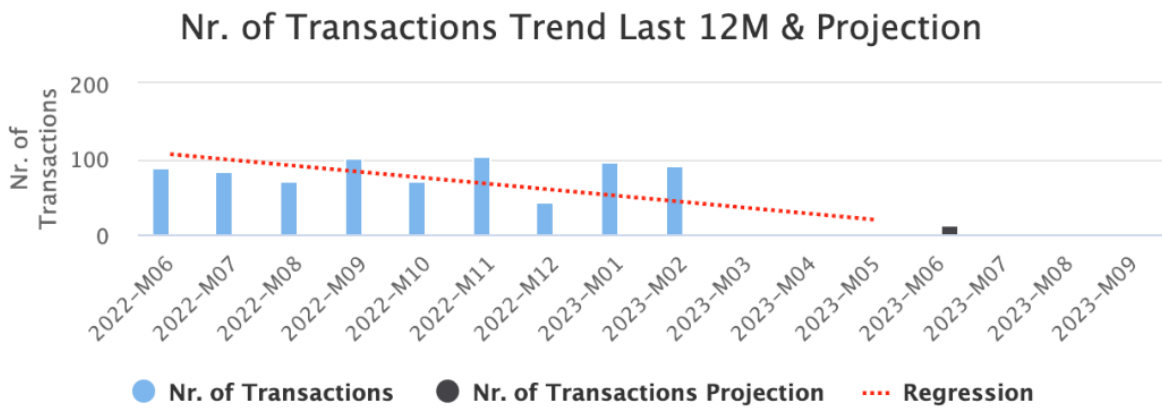
Portlet 7

Bar & line chart shows the number of transactions for the last 12 months + estimation for the next 3 months. Current month is viewed as a future month (as it has not ended yet).

Nr. of Transactions Trend Last 12M & Projection

Chart

Data



Portlet 8

Bar & line chart shows Revenue and Margin for the last 12 months + estimation for the next 3 months. Current month is viewed as a future month (as it has not ended yet).

Customer Revenue And Margin Trend Last 12M & Projecti...



3. Customer Insights – Customer Products Portfolio

User inputs:

Name	Values
Customer	
Product Attribute	Relevant product related dimensions, by default it is Product Group.
Time Filter	MTD, YTD, L12M, L6M, L3M
Customer Rank	All, Top, Worst
Customer Rank Bucket	5, 10, 50, 100
Product Class	Very High, High, Normal, Low (Multiselect is enabled)
Product Health Score	Excellent, Normal, Low, Problematic (Multiselect is enabled)

DATA FILTER

Customer *

Select Customer

Product Attribute *

Product Group

Time Filter *

YTD

Product Rank *

All

Product Rank Bucket *

5

Product Class

Product Health Score

Product Base

Portlet 1

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

L12M trends are calculated on a monthly basis.

Note:

Data queried from Aggregated Data source:

Trend YTD value here is the "Customer YTD [revenue/margin/quantity] trend".

In Customer Detail View dashboard, data is queried from Transactional Datamart:

Trend YTD value to be recalculated dynamically if product filter is selected.

Meanwhile, in Customer Products Portfolio dashboard:

Trend YTD value does not change regardless of any product filter.

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:

Product Health S...:

Product Base:

3. Customer Insights - Customer Products Portfolio

+ Add Portlet (13) Export to Excel

Customer Summary

Customer: CD-00001 (Appetito Mz)
 Segment: Restaurant-Europe
 Health Score Last 12M: ▲+100

Revenue Trend YTD: ▼-54.18%	Total Revenue: 232,656	Pricing Opportunity: 68,813
Margin Trend YTD: ▼-61.21%	Total Margin: 102,795	Selling Opportunity: 26,063
Volume Trend YTD: ▼-54.88%	Total Volume: 79,229	Opportunity: 94,876

Dashboard Settings

Select Dashboard
2. Customer Insights - Customer Detail...

DATA FILTER

Customer: Appetito Mz (C... Q

* Time Filter: YTD

Category:

Value:

Product Class: Very High x

Product Health S...:

Product Base:

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 (l
Volume Trend YTD: ▼-50.66%	Volume Trend (l

[View Customer Products Portfolio](#)

Dashboard Settings

Select Dashboard
3. Customer Insights - Customer Products Portfolio

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

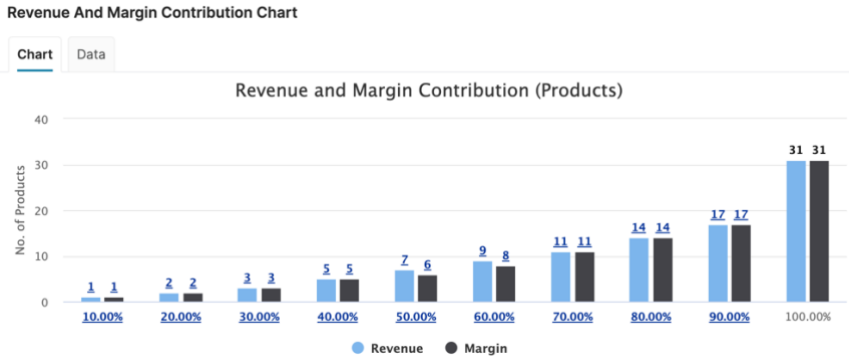
Customer Summary

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:

Portlet 2

Bar chart shows Revenue and Margin split into ten buckets to visualize the number of products needed to cover each bucket (cumulative contribution).



Portlet 3

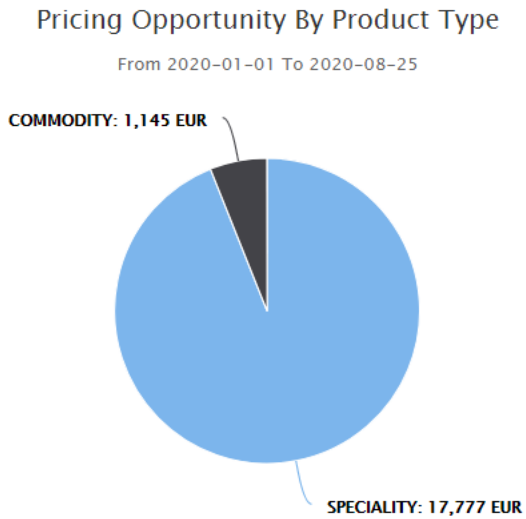
Pie chart shows relative sizes of product classification based on the margin %

Specialty Products: Higher than the defined margin %

Commodity Products: Lower than the defined margin %

Based on an average margin achieved by the product during the last 12 months
(Thresholds are configurable).

Pricing Opportunity By Product Type Chart



Class	Threshold
Commodity	<=40%
Specialty	> 40%

Portlet 4

Bar chart shows products (bars) by Revenue below target descending + cumulative Revenue below target (line).

Grouped by product ID.

Pricing Opportunity By Product Rank Chart



Portlet 5

Hidden

Portlet 6

Calculation granularity: quarterly

Trends

Customer Name	Customer Id	Revenue Trend Last 1...	Margin Trend Last 12M	Volume Trend Last 12...	Revenue Trend YTD	Margin Trend YTD	Volume Trend YTD
▲ Stanley Linda CPA ...	CID-0002	▷ +33.62%	▷ +31.82%	▷ +28.54%	▼ -11.87%	▼ -6.33%	▼ -17.52%
▲ Stanley Linda CPA ...	CID-0006	▷ +26.11%	▷ +32.98%	▷ +28.11%	▼ -15.01%	▼ -12.61%	▼ -8.38%
▲ Stanley Linda CPA ...	CID-0007	▷ +28.02%	▷ +34.25%	▷ +22.22%	▼ -12.70%	▼ -31.13%	▼ -4.39%
▲ Stanley Linda CPA ...	CID-0011	▷ +34.68%	▷ +35.95%	▷ +24.83%	▼ -10.35%	▼ -25.18%	▼ -22.02%
▲ Stanley Linda CPA ...	CID-0012	▷ +36.00%	▲ +57.54%	▷ +27.33%	▼ +6.10%	▼ -51.83%	▼ -7.08%
▼ Burdillat Ltd	CID-0092	▼ +7.96%	▷ +11.06%	▼ +8.68%	▼ -45.67%	▼ -52.93%	▼ -17.81%
▼ China Distributor	CID-0097	▼ +6.29%	▼ +7.94%	▼ +7.83%	▼ -4.09%	▼ -30.95%	▼ +6.38%

Portlet 7

Table 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 over the last 12 months.

Time filter has no effect in this table.

Average Invoice Price per Customer Revenue Class Last 12M

Product Name	Product Id	Class A	Class B	Class C	Class D	Overall	Customer
▲ Back UPS Pro BR 16...	BR1600SI	524.73	493.74	494.90	426.24	484.91	487.12
▲ Back UPS PRO BN 1...	BN1350M2	343.57	321.17	319.76	279.84	316.08	314.96
▲ Wiser Energy - IP m...	EER31800	262.27	242.49	242.87	212.26	239.98	237.71
▲ Build Your Own Min...	CCTFR6901	254.58	235.51	239.26	208.27	234.40	249.68
▲ APC RS 550VA Sine...	BR550S-JP	225.72	212.70	214.27	184.89	209.39	218.79
▼ Rocker for 2-gang ...	MEG5220-6035	8.25	7.66	7.83	6.74	7.62	7.66
▼ Rocker for 2-gang ...	MEG5220-6033	7.91	7.40	7.55	6.44	7.33	7.67

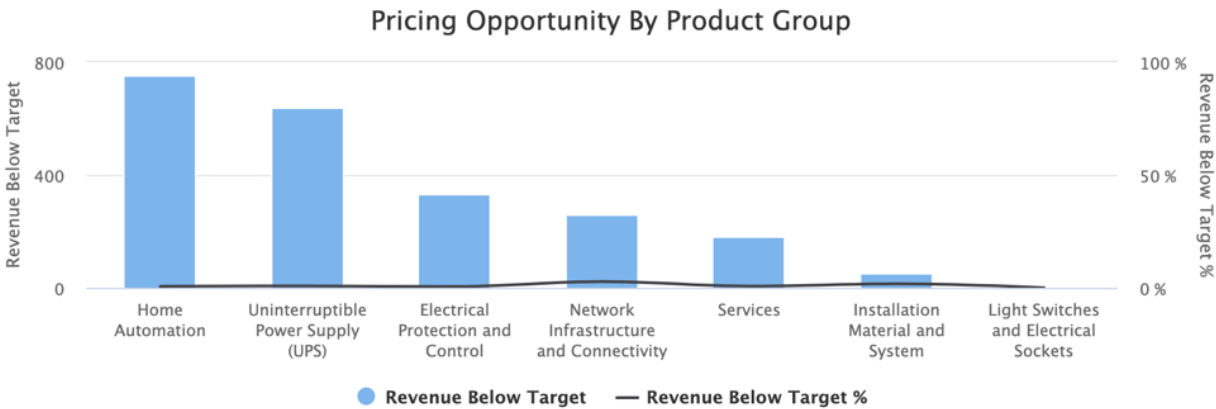
Portlet 8

Sum Revenue below target by input value in product attribute filter.

Chart label reflects input value in product attribute filter.

Pricing Opportunity By Product Attribute Chart

Chart Data



Portlet 9

Table shows total value to be gained from products customer bought and not bought in given time period. Grouped by the input value in product attribute filter.

Selling Opportunity

Product Group	Cross Sell	Revenue Increase	Opportunity
▲ Uninterruptible Po...	0	47,630	47,630
▲ Services	0	19,092	19,092
▲ Electrical Protectio...	0	14,058	14,058
▲ Network Infrastruc...	0	6,914	6,914
▲ Home Automation	0	3,096	3,096
▼ Installation Materi...	0	715	715
▼ Light Switches and...	0	650	650

Portlet 10

Table shows Revenue below target value and % Revenue below target. Grouped by input value in product attribute filter.

Pricing Opportunity

Product Group	Revenue Below Target	% Revenue Below Target
▲ Home Automation	753	0.62%
▲ Uninterruptible Power Supp...	638	0.80%
▲ Electrical Protection and C...	331	0.56%
▲ Network Infrastructure and ...	261	2.75%
▲ Services	182	0.75%
▼ Installation Material and Sy...	49	1.75%
▼ Light Switches and Electric...	0	0.00%

Portlet 11

Table shows Revenue and margin for top/worst Products

Note: Green/red color in the Product column does not correspond to the Health score.

See how the [coloring](#) works.

Product Health Summary

Product Name	Product Id	Total Revenue	Total Margin	To
▲ Wiser Energy - IP ...	EER31800	51,761	7,310	
▲ Multifix Air, appara...	IMT35000	2,078	454	
▲ Multifix Air, appara...	IMT35031	2,254	543	
▲ Mureva FIX, instac...	IMT47207	282	55	
▲ Merten - Wiser Ho...	MEG5050-0000	41,619	4,724	
▼ Energy Efficiency ...	CN9789	23,582	6,448	

Create a Quote from CI Dashboard

You can create a quote from the Customer Insights - Customer Products Portfolio dashboard, specifically from these portlets: Trends, Pricing Opportunity, and Selling Opportunity.

Dashboard Settings

Select Dashboard
3. Customer Insights - Customer Products Port...

DATA FILTER

Customer*
M. Becker (CD-00005)

Product Attribute*
Product Id

Time Filter*
L12M

Product Rank*
All

Product Rank Bucket*
5

Product Class

Apply Settings

3. Customer Insights - Customer Products Portfolio

+ Add Portlet (13) Export to Excel

Trends

Product Name	Product Id	Revenue Trend Last ...	Margin Trend Last 12M	Volume Trend Last 1...	Revenue Trend YTD
▲ Sausage PS	MB-0031	▶ +41.74%	▲ +78.90%	▶ +39.35%	▼ 0.00%
▲ Sausage PM	MB-0032	▲ +161.66%	▲ +162.08%	▲ +134.89%	▼ 0.00%
▼ Meal L	Meal-C092	▼ -29.89%	▼ -27.32%	▼ -29.13%	▼ 0.00%
▼ NyChem 075	NC-0075	▼ -100.00%	▼ -100.00%	▼ -100.00%	▼ 0.00%
▼ NyChem 90	NC-0090	▼ -100.00%	▼ -100.00%	▼ -100.00%	▼ 0.00%

2 selected item(s) Create Quote Clear selection

10 rows

Selling Opportunity

Product Id	Cross Sell	Revenue Inc
▲ MB-0031	0	
▼ NC-0075	0	
▼ NC-nnan	0	

Create Quote Clear selection

Pricing Opportunity

Product Id	Revenue Below Target	% Revenue ...
▼ BV-0008	741	5.80%
▼ Meal-C090	0	0.00%

Create Quote Clear selection

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 ...

<input type="checkbox"/> 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) o Draft Submit Recalculate Export Email Quote Duplicate

Header **Items** Attachments Workflow Messages

Items + Add Items + Add Folder ... ⚙

<input type="checkbox"/> Label	Product Id	Date Added	Default Inputs	Color
<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 Qu

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

CIP Architecture

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.
SharedLib	Groovy library to provide common functions.
HighchartsLibrary	Groovy library to provide functions to build high charts shown on the dashboard. Use version 1.1.2 and higher. Accelerate Dashboards Library
SIP_Dashboards_Commons	Groovy library of SIP, 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_DS_CustomerClassification	Fills data into Data Source CI_CustomerClassification.
CustomerInsights_CF_Sequencer	CF logic. Keeps the data (DS, DM) synchronized by filling the DS CI_CustomerClassification before the DS CI_AggregatedData is filled.

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

References:

Original design: [Customer Insights | CustomerInsights GlobalView](#)

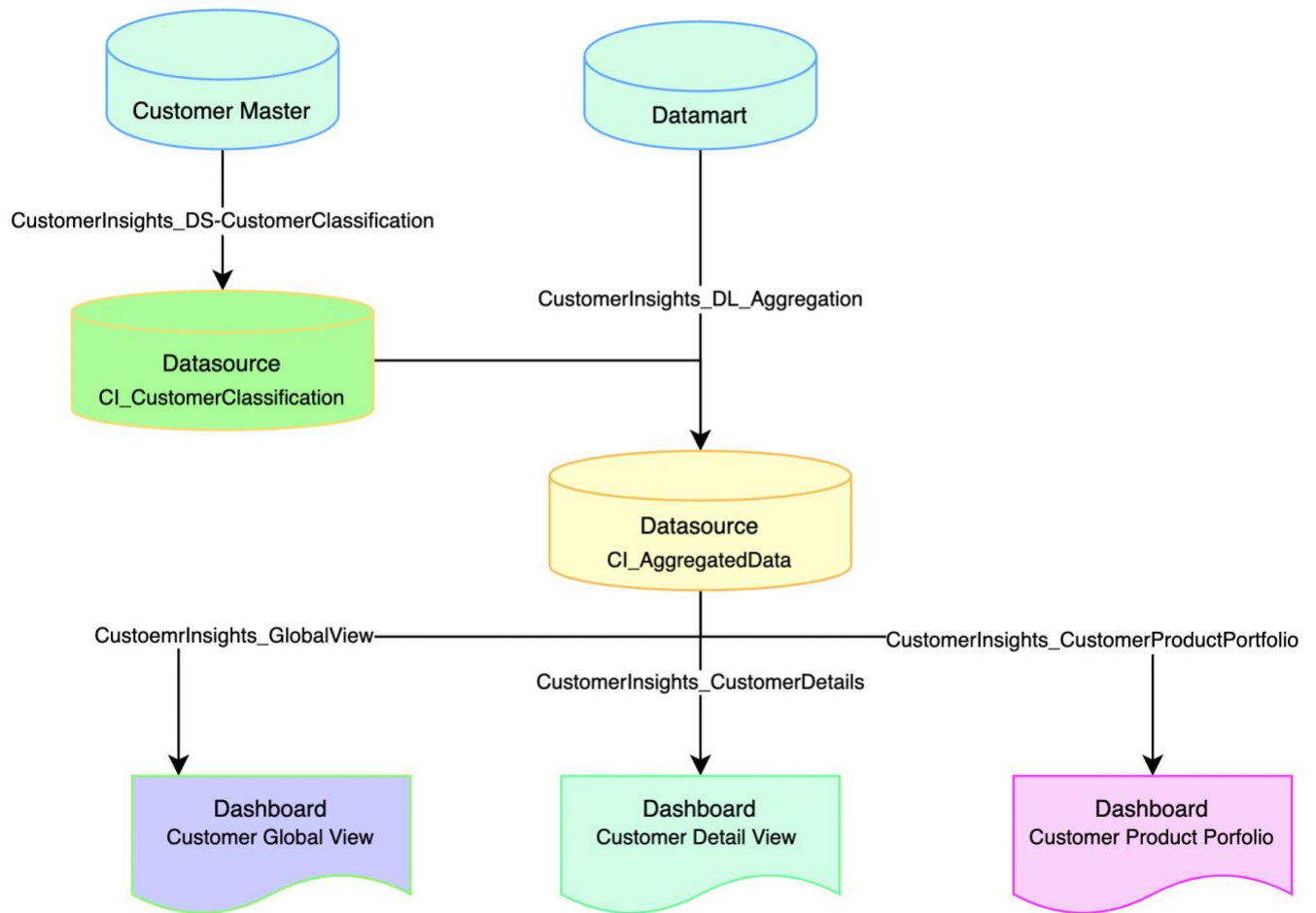
Calculations and formulas: [Glossary](#)

Deployment: [Deployment \(CIP\)](#)

How to configure: [Configuration \(CIP\)](#)

Architecture: [Technical Overview \(Customer Insights\)](#)

Input Data



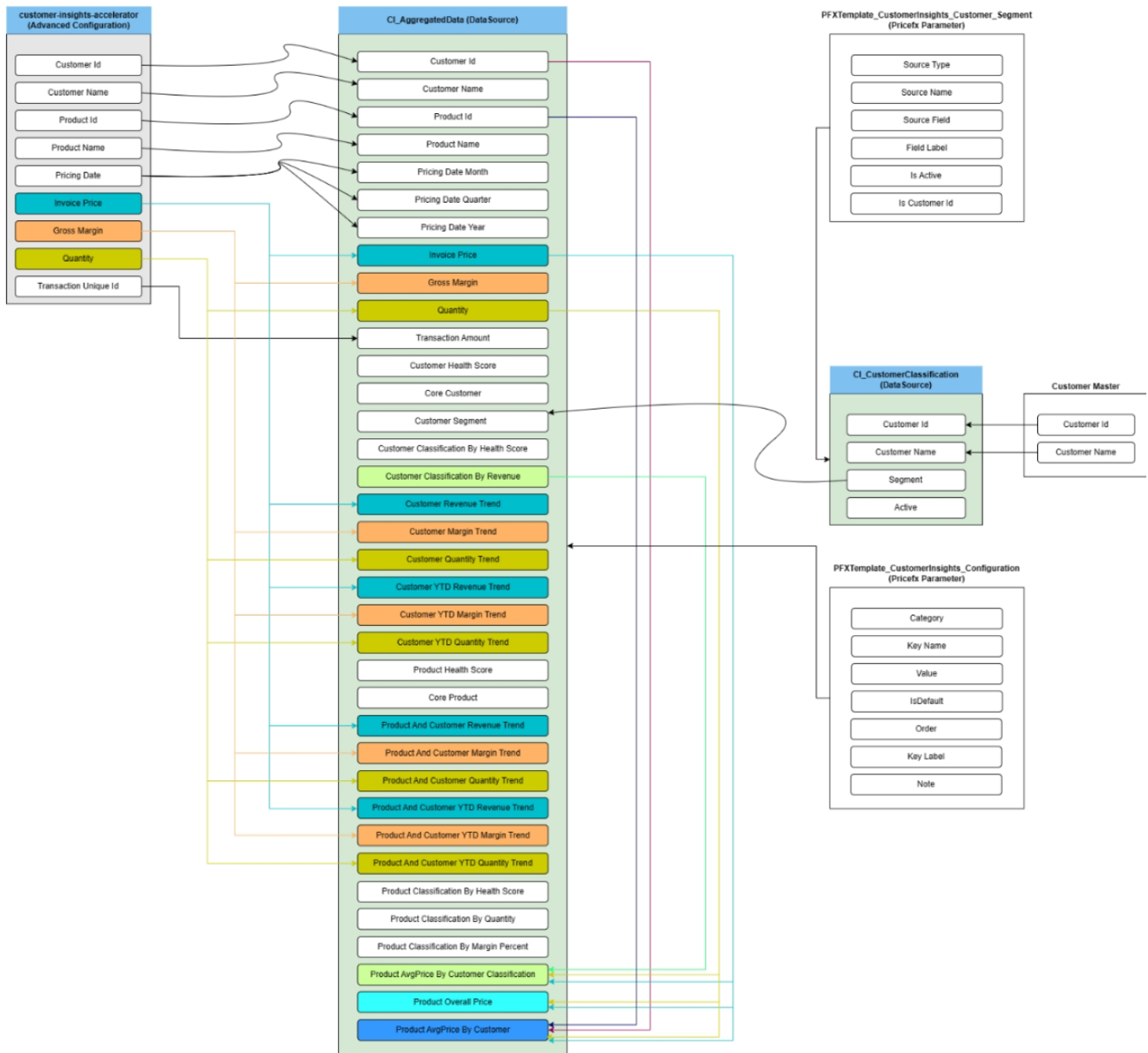
In Customer Insights Accelerator, we use Data Load to aggregate data from the Transactional Datamart by customer, product and pricing month and we store it in Aggregated Data source. It helps improve the dashboard performance because:

- 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 Transactional Datamart directly, not from Aggregated Data source, such as:

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

Aggregated Data Mappings



The required fields from the Transactional Data mart are Customer ID/Name, Product ID/Name, Pricing Date, Invoice Price, Gross Margin, Quantity and TX Unique ID. Each field should be mapped to the corresponding attribute using the *customer-insights-accelerator* Advanced Configuration.

1. Company Parameter PFXTemplate_CustomerInsights_Configuration

Category	Category of the configuration
----------	-------------------------------

Key Name	Key name of the configuration
Value	Defines the value corresponding to the keyset
Is Default	If set to Yes, the dashboard will use the value of this item as a default value
Order	Order of items in the same Category
Key Label	Label will be shown on the chart/input
Note	Which logic type is used

2. Company Parameter PFXTemplate_CustomerInsights_Customer_Segment

Source Type	Data Source types from which we get data for the customer segments. They include: 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. Not required for C or CX, only for DMDS.

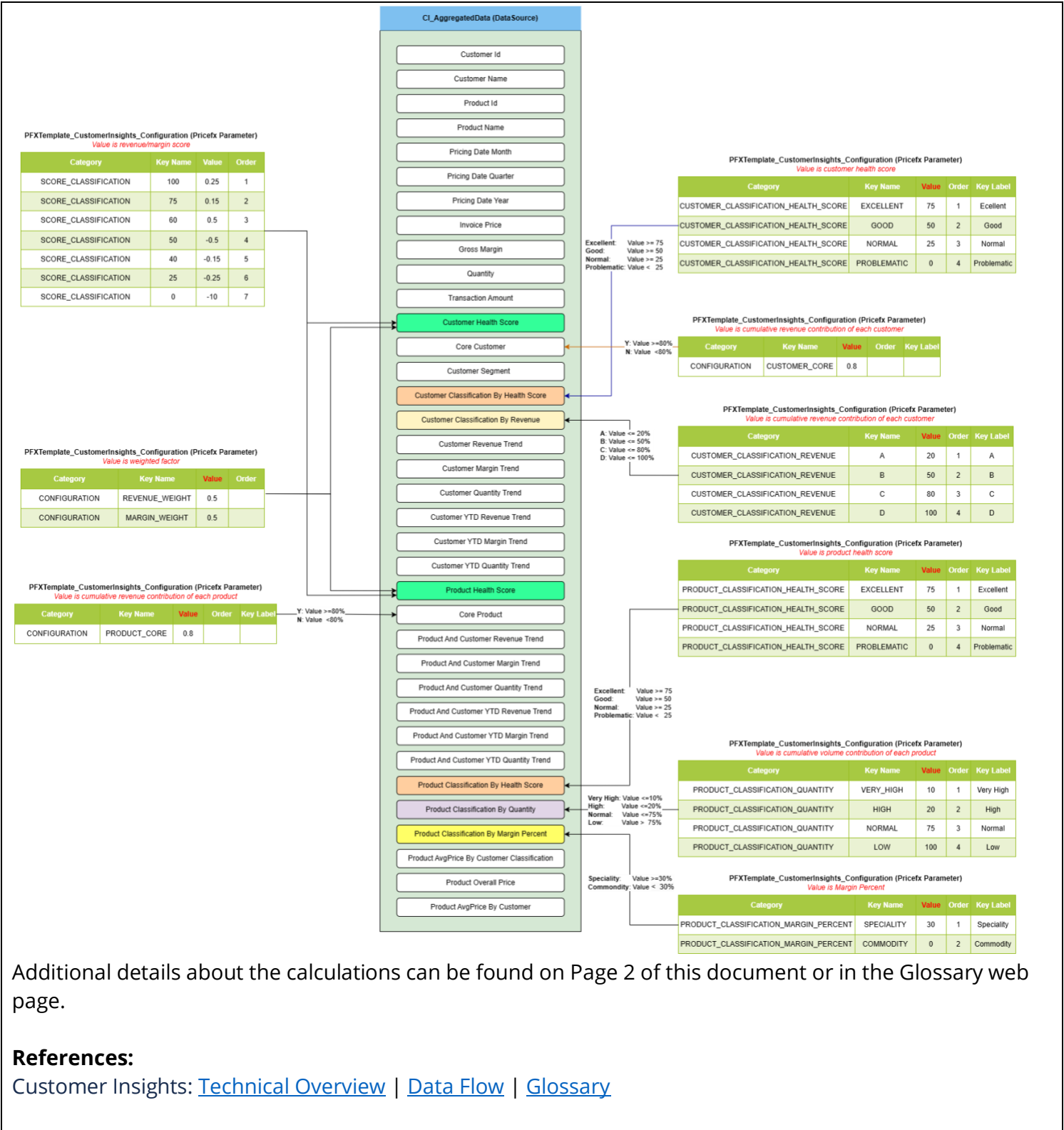
3. Company Parameter CurrencySymbols

Name	3 characters representation of the currency. I.e., USD
Symbol	The symbol to get displayed in the dashboards. I.e., \$. Defaults to the currency name.

4. CI_QuoteType_Mapping

Dashboard Name	Initial support only to CustomerInsights_CustomerProductsPortfolio
Portlet Name	Might be one of Trends, Pricing Opportunity or Selling Opportunity
Quote Type	Defaults to __DEFAULT__ and can be set to any other custom quote type.

Aggregated Data Calculations



Additional details about the calculations can be found on Page 2 of this document or in the Glossary web page.

References:
Customer Insights: [Technical Overview](#) | [Data Flow](#) | [Glossary](#)

Out-of-scope business functions and features (Can be configured, but not included in the Chemical Industry Catalog)

- PFX should not be seen as an ETL tool, data must be sent in accordance with the prescriptive data model, any required transformations will be considered custom configuration effort.

Implementation Level of Effort

1 sprint / 0.5 FTE CE

Base Line Projected Annual Impact*

Parameters (Value Case #2)		General Assumptions (sample)		Projected Annual Impact (for sample)																						
<table border="1"> <thead> <tr> <th>Calculations</th> <th>C-State</th> <th>F-State</th> </tr> </thead> <tbody> <tr> <td colspan="3">Assess / Evaluate the effect of price changes; Improve price effectiveness via realization</td> </tr> <tr> <td>Percent of Portfolio with price change exposure/investigation</td> <td>50.0%</td> <td></td> </tr> <tr> <td>Nr of weekly price price changes applied to that portion of portfolio</td> <td>20</td> <td></td> </tr> <tr> <td>High end of % price adjustment per activity</td> <td>3.00%</td> <td></td> </tr> <tr> <td>hours/min to execute contract adjustment/renewal</td> <td>0.50</td> <td>0.02</td> </tr> <tr> <td colspan="3">Margin retained due to faster/better execution</td> </tr> </tbody> </table>		Calculations	C-State	F-State	Assess / Evaluate the effect of price changes; Improve price effectiveness via realization			Percent of Portfolio with price change exposure/investigation	50.0%		Nr of weekly price price changes applied to that portion of portfolio	20		High end of % price adjustment per activity	3.00%		hours/min to execute contract adjustment/renewal	0.50	0.02	Margin retained due to faster/better execution			RUM	100M		
Calculations	C-State	F-State																								
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hours/min to execute contract adjustment/renewal	0.50	0.02																								
Margin retained due to faster/better execution																										
		Margin%	10%	Direct	151.2k																					

Prescribed User Stories

Use Story Name	I want to...	so I can ...	Acceptance criteria
Epic: Customer insights – Global view			
Datamart Setup	Set up an aggregated data mart	Perform analysis using Pfx PriceAnalyzer.	1. Product Datamart available. 2. Transactional data mart available. 3. Customer data mart available.
Global view – Customer Summary legend	See the customers performance based on the summary of relevant KPIs (revenue/ margin/volume trends and total values, Health Score calculated by revenue and margin trend, pricing/selling opportunity).	Understand the overall customer performance.	Portlet shows Revenue/margin/volume totals and YTD trends, pricing and selling opportunity, average Health Score. Data affected by these user inputs: Customer(s), Time Filter.
Global view – Customer Health Summary	See the best/worst customers (5,10, 20, 50 or 100) for the selected KPI (revenue, margin %, volume, health score) and their essential KPIs.	Understand the most/least performing customers by KPI and set relevant action steps.	Table shows Health Score and revenue/margin/margin %/volume/number of transactions totals. Data affected by these user inputs: Customer(s), Time Filter, Top/Worst Customers, KPI. Top/Worst filter is applied to the value of the KPI filter.
Global view – Trends table	See the best/worst customers (5,10, 20, 50 or 100) for the selected KPI (Revenue, Margin %, Volume, Health Score) and their essential KPIs.	Analyze the most/least performing Customers by KPI on the YTD/Last 12M basis and set relevant action steps.	Table shows revenue/margin/volume YTD and Last 12M trends. Data affected by these user inputs: Customer(s), Time Filter, Top/Worst Customers, KPI. Top/Worst filter is applied to the value of the KPI filter.
Global view – Customers Performance by Health Score Last 12M	See the customers' performance based on the Health Score, split into four classes (problematic, low, normal, excellent) with the possibility to see the number of customers, total revenue, and average margin % for each group.	Understand the overall proportions of customers portfolio by their health score.	Pie chart shows number of customers per classes by Health Score Last 12M. Number of customers, total revenue, and average margin % information is available for each class. Data affected by these user inputs: Customer(s), Time Filter.
Global view – Customers Performance by Revenue Last 12M	See the customers' performance based on the classification by cumulative revenue contribution, split into four classes (A, B, C, D) with the possibility to see the number of customers, total revenue, total volume, and average margin % for each class.	Understand the overall proportions of customers portfolio by their revenue.	Pie chart shows number of customers per class by Revenue Last 12M. Number of customers, total revenue, total volume, and average margin % information is available for each class. Data affected by these user inputs: Customer(s), Time Filter.
Global view – Pricing Opportunity table	See top (5, 10, 20, 50 or 100) customers with the highest pricing opportunity in terms of revenue/average prices compared to customer segment.	Do a deeper analysis (looking at the other, more detailed dashboard) and make a corrective action.	The table shows customers and their pricing opportunities. Data affected by these user inputs: Customer(s), Time Filter, Top/Worst Customers. Top/Worst filter is applied to the value of Pricing Opportunity.
Global view – Selling Opportunity table	See top (5, 10, 20, 50 or 100) customers with the highest selling opportunity considering	Do a deeper analysis (looking at the other, more detailed	The table shows customers and their selling opportunities. Data affected by these user inputs: Customer(s), Time Filter, Top/Worst Customers.

	buying behavior of the segment.	dashboard) and make a corrective action.	Top/Worst filter is applied to the value of Selling Opportunity.
Epic: Customer insights – Global view			
Customer Detail View – Customer Summary legend	See the Customer performance based on the summary of relevant KPIs (revenue/margin/volume trends and total values, Health Score (calculated by revenue and margin trend), pricing/selling opportunity).	Understand the total performance of particular Customer.	Portlet shows revenue/margin/volume YTD totals and YTD/Last 12 months trends, health score Last 12 months. Data affected by these user inputs: Customer(s), Time Filter, Category.
Customer Detail View – Waterfall chart	See a standardized Price waterfall chart.	Understand the product portfolio profitability for the particular customer and take corrective action.	The chart shows the waterfall analysis with grouped adjustments. Data affected by these user inputs: Customer(s), Time Filter, Category.
Customer Detail View – Revenue Breakdown chart	Analyze revenue causality for the relevant time period with a breakdown into several categories (Lost Business, New Business, Price Effect, Volume Effect, other effects)	Understand revenue drives and adjust strategy to improve performance in each bucket.	Revenue Breakdown waterfall chart - Show total revenue - Show breakdown of revenue by grouping the data into: "Lost Business" vs "New Business" *Change to revenue due to "Price Effect" Change to revenue due to "Volume Effect" Change to revenue due to "Portfolio Mix Effect" Change to revenue due to "Other Effect" Data listed per/aggregated by these user inputs: Customer(s), Time Filter, Category.
Customer Detail View – Specialty and Commodity Products chart	See the products categorization by their type with the possibility to see the number of products, total revenue, and average margin % for each type.	Understand the overall proportions of products by their product type.	Pie chart shows number of products per product type. Total revenue, and average margin % information is available for each product type. Data affected by these user inputs: Customer(s), Time Filter, Category.
Customer Detail View – High Volume and Low Volume Products chart	See the products performance based on the classification by cumulative volume contribution, split into four classes (low, normal, high, extremely high) with the possibility to see the number of products, total revenue, and average margin % for each class.	Understand the overall proportions of products by their volume.	Pie chart shows number of products per volume class. Total revenue, and average margin % information is available for each product volume class. Data affected by these user inputs: Customer(s), Time Filter, Category.
Customer Detail View – Nr of Transactions in Last 12M & Projection chart	See the number of transactions realized in particular months of a given period.	Understand the number of transactions progression for the particular customer and decide on corrective actions.	Bar and line chart shows number of transactions in time period (last 12 months). X-axis: time series on a monthly level Y-axis: number of transactions (bars), projection (bars) and regression (line) Data affected by these user inputs: Customer(s), Time Filter.
Customer Detail View – Customer Revenue and Margin Trend	See revenue and margin trends during a given period and projection of these for the following three months.	Understand the revenue and margin trends for the particular customer and decide on corrective actions.	Bar and line chart shows revenue and margin regression and projection in time period (last 12 months). X-axis: time series on a monthly level Y-axis: Revenue total (bars), regression (line) and projection (bars)

in Last 12M & Projection chart			Z-axis: Margin total (line), regression (line) and projection (line) Data affected by these user inputs: Customer(s), Time Filter.
Customer Detail View – Revenue and Margin chart	See revenue and margin achieved in particular months of a given period.	Understand the revenue and margin progression for the particular customer and decide on corrective actions.	Bar and line chart shows revenue and margin total values in a given time period (as per the user input). X-axis: time series on a monthly level Y-axis: Revenue total (bars) Z-axis: Margin total (line) Data affected by these user inputs: Customer(s), Time Filter, Category.
Epic: Customer insights – Customer Products Portfolio			
Customer Products Portfolio – Customer Summary legend	See the Products performance based on the summary of relevant KPIs (revenue/ margin/volume trends and total values, Health Score (calculated by revenue and margin trend), pricing/selling opportunity).	Understand the total performance of a particular customer.	Portlet shows Revenue/margin/volume totals and YTD trends, pricing and selling opportunity, average health score. Data affected by these user inputs: Customer(s), Time Filter, Product Attribute.
Customer Products Portfolio – Product Health Summary table	See the best/worst Products (5,10, 20, 50 or 100) for the Health Score value.	Understand the most/least performing Products by KPI and set relevant action steps.	Table shows Health Score and revenue/margin/volume/margin % totals per product. Data affected by these user inputs: Customer, Time Filter, Product Attribute, Top/Worst Products. Top/Worst Products filter is applied to the value of the Health Score.
Customer Products Portfolio – Trends table	See the best/worst Products (5,10, 20, 50 or 100) for the selected KPI (Revenue, Margin %, Volume, Health Score) and their essential KPIs.	Analyze the most/least performing Products by KPI on the YTD/Last 12M basis and set relevant action steps.	Table shows revenue/margin/volume YTD and Last 12M trends per product. Data affected by these user inputs: Customer, Time Filter, Product Attribute, Top/Worst Products. Top/Worst Products filter is applied to the value of (TBD).
Customer Products Portfolio – Revenue and Margin Contribution	Analyze contribution of products to the total revenue and margin split into 10 buckets (from 10% to 100%), with the option to drill down to see the top 10 contributing products in each bucket.	Understand the lowest performing products and decide on corrective actions if needed.	Bar chart shows Revenue and Margin split into ten buckets to visualize the number of products needed to cover each bucket (cumulative contribution). Each data point displays the number of products in the bucket, the total revenue/margin of the product in the bucket and the revenue/margin representing the bucket. Data affected by these user inputs: Customer, Time Filter, Product Attribute.
Customer Products Portfolio – Pricing Opportunity by Top Products chart	See products (first 5,10, 20, 50 or 100) with the highest pricing opportunity (considering the standards for correlative segment) and its cumulative value.	Do a deeper analysis, determine the least performing products considering the average prices for the segment.	The bar and line chart shows the revenue below target for the number of products (5,10,20,50 or 100) with the highest value. X-axis: revenue below target total (bars) Y-axis: cumulative revenue below target % (line) Data affected by these user inputs: Customer, Time Filter, Product Attribute, Top/Worst Products. Top/Worst Products filter is applied to the value of Pricing Opportunity.

Customer Products Portfolio – Pricing Opportunity by Product Type	See the pricing opportunity (considering the standards for correlative segment) by product types (commodity, specialty).	Understand the overall proportions of product types by pricing opportunity.	The bar and line chart shows the revenue below target by product type. X-axis: revenue below target total (bars) Y-axis: cumulative revenue below target % (line) Data affected by these user inputs: Customer, Time Filter, Product Attribute.
Customer Products Portfolio – Pricing Opportunity by Product Attribute chart	See the pricing opportunity (considering the standards for correlative segment) by defined product categories.	Understand the overall proportions of product categories by pricing opportunity.	The bar and line chart shows the revenue below target by a given product attribute. X-axis: revenue below target total (bars) Y-axis: cumulative revenue below target % (line) Data affected by these user inputs: Customer, Time Filter, Product Attribute.
Customer Products Portfolio – Pricing Opportunity table	See products by their pricing opportunity considering the standards for segment.	Do a deeper analysis, determine the least performing product categories, and make a corrective action.	Table shows pricing opportunity by products. Data affected by these user inputs: Customer, Time Filter, Product Attribute.
Customer Products Portfolio – Selling Opportunity table	See products by their selling opportunity considering buying behavior of the segment.	Do a deeper analysis, determine the least performing product categories, and make a corrective action.	Table shows selling opportunity by products. Data affected by these user inputs: Customer, Time Filter, Product Attribute.
Customer Products Portfolio – Average Invoice Price table	See the average invoice unit price per product, customer revenue class (A, B, C, D), overall average value per all customers and average value for the specific customer.	Understand the balance of prices across all products and customers and set relevant action steps.	The table shows average prices per customer revenue class, overall value, and average value for the specific customer. Data affected by these user inputs: Customer, Time Filter, Product Attribute

Scope Validation and Project Readiness Workshop – Validation Questions:

Questions		Answers	
Q1	What is the expected volume of Customers for Chem Industries?	A1	Hundreds
Q2	What is the estimated number of Products for Chem Industries?	A2	Thousands
Q3	What is the expected number of transactions for Chem Industries?	A3	<20MM / year
Q4		A4	
Q5		A5	
Q6		A6	
Q7		A7	
Q8		A8	
Q9		A9	
Q10		A10	
Q11		A11	
Q12		A12	
Q13		A13	
Q14		A14	