How to Work with Pervasive Analytics

SAP Business One 9.2 PL04 and later, version for SAP HANA

SAP

Typographic Conventions

Type Style	Description
Example	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options.
	Textual cross-references to other documents.
Example	Emphasized words or expressions.
`EXAMPLE`	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
`Example`	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
`Example`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example>`	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
`EXAMPLE`	Keys on the keyboard, for example, F2 or ENTER.

Document History

Version	Date	Change

2.0	2015-11-12	Guide updated for SAP Business One 9.2, version for SAP HANA. Changes are as follows:
		
		• The referenced guide *SAP HANA Predictive Analysis Library (PAL) Reference* was updated.
		
		• Pervasive analytics provide the following new predefined KPIs and pervasive dashboard:
		   o Weighted Amount of All Open Opportunities (LC) (KPI)
		   o Average Fulfillment Days of Sales Order (KPI)
		   o Average Delivery Variance Days (KPI)
		   o Average Fulfillment Days of Purchase Order (KPI)
		   o Average Receipt Variance Days (KPI)
		   o Top 5 Sales Employees by Sales Amount (pervasive dashboard)
		
		For more information about the new KPIs and pervasive dashboard, see Predefined KPIs and Predefined Pervasive Dashboards, respectively.
		
		• In pervasive dashboards, using the new function of legend color, you can now slice corresponding measure values from the measure axis in comparison to the existing dimension that slices corresponding measure values from the dimension axis. For more information about legend color, see Using Legend Color.
		
		• In pervasive dashboards with one date-type dimension, you can now use the new function of time slider for a clearer view of trends. For more information about the time slider, see Using the Time Slider.
		
		• Pervasive dashboard now supports more calculation types: *Cumulative Sum*, *Minimum*, *Maximum*, and *Count*. For more information, see Basic Settings Tab.

2.1	2016-02-04	Guide updated for SAP Business One 9.2 PL01, version for SAP HANA. Changes are as follows: • In KPIs and pervasive dashboards, you can use *-Current User-* as a filtering value for string type dimensions. If you choose this value, the code of the logged-on user will be used as the filtering value. For more information about using filters in KPIs and pervasive dashboards, see Filter & Parameter Tab for KPIs and Filter & Parameter Tab for pervasive dashboards. • In KPIs and pervasive dashboards, for date type dimensions, you can use the updated *Filter Editor* window to define a dynamic time range that can vary according to the time you run a KPI or pervasive dashboard. For more information about using filters in KPIs and pervasive dashboards,

Version	Date	Change
		see Filter & Parameter Tab for KPIs and Filter & Parameter Tab for pervasive dashboards.
		• For KPIs, you can add a new action type *Open Dashboard (For the SAP Business One Sales App).* In the SAP Business One Sales app, for a KPI to which you have added this type of action, you can tap the KPI to open the linked pervasive dashboard. For more information, see Action: Open Dashboard (For the SAP Business One Sales App).
		• For a pervasive dashboard, when you add only one dimension, the dimension is of date type, and the time unit is *Year*, *Year-Quarter*, or *Year-Month*, in the SAP Business One Sales app, this pervasive dashboard will have three time tabs at the bottom. For more information, see Basic Settings Tab.
		• Pervasive analytics provide the following new predefined KPIs, pervasive dashboards, and advanced dashboards, all of which appear in the SAP Business One Sales app by default:
		o Adv. Dashboard for SAP Business One Sales App - Curr. Sales EE
		o Potential Amt of Open Opportunities - Curr. User (KPI)
		o Potential Amt of Open Oppty by Stages - Curr. User (pervasive dashboard)
		o Sales Order Amount of This Month (LC) - Curr. User (KPI)
		o Sales Order Amount by Mo./Qty/Yr (LC) - Curr. User (pervasive dashboard)
		o Top 5 Customers by Sales Amount - Curr. User (pervasive dashboard)
		o Top 5 Best Selling Items by Sales Amt - Curr. User (pervasive dashboard)
		o Adv. Dashboard for SAP Business One Sales App - Customer
		o Sales Order Amount by Months (LC) (pervasive dashboard)
		o Total Amount of Open Deliveries (LC) (KPI)
		o Customer Balance (LC) (KPI)
		o Top 5 Best Selling Items by Sales Amount (Mobile) (pervasive dashboard)
		For more information about the new contents, see Predefined KPIs, Predefined Pervasive Dashboards, and Predefined Advanced Dashboards, respectively.
		• In the pervasive analytics designer, you cannot delete the predefined contents.
2.2	2016-05-06	Guide updated with the link to the guides *How to Work with SAP Business One Sales, mobile app for iOS* or *How to Work with SAP Business One Sales, mobile app for Android*.
2.3	2016-08-19	Guide updated for SAP Business One 9.2 PL04, version for SAP HANA. Changes are as follows:

Version	Date	Change
		• The *Filter Editor* window for a date type dimension was enhanced. For more information, see Filter and Parameter Tab for KPIs, and Filter and Parameter Tab for pervasive dashboards. • In the pervasive analytics designer, you can now search for your KPIs, dashboards, or advanced dashboards, and in the dashboard designer, you can now search for measures or dimensions. • In the KPI designer, you can add a minus sign in front of the KPI value. For more information, see Value Settings Tab. • In the KPI designer, you can customize the unit for the KPI value. For more information, see Value Settings Tab. • You can now use the recommendation feature in the sidebars of sales orders and sales quotations to view items recommended by SAP based on your historic data. For more information, see Viewing Recommendations in Sidebars. • You can now enjoy the Customer 360 feature to view customer-related analysis. For more information, see Working with Customer 360.

Table of Contents

1   Introduction

Pervasive analytics for SAP Business One, version for SAP HANA enables you to access and visualize your data in a customized way.

The application provides three analytic tools that can accelerate your decision making process, offering immediate and fact-based answers to business questions.

- Key Performance Indicators (KPIs): With queries and views, you can easily design KPIs and related actions that are customized to your specific needs. You can view the KPI and use its actions in the advanced dashboard or the cockpit.
- Pervasive dashboard: With queries and views, you can easily design pervasive dashboards and related actions that are customized to your specific needs. You can view the pervasive dashboard and use its actions in the advanced dashboard or the cockpit.
- Advanced dashboard: You can design advanced dashboards to contain various widgets. You can view the advanced dashboard in pages and retrieve specific data using filters.

2 Working with Key Performance Indicators (KPIs)

A KPI helps you evaluate the status of business in an easy-to-view way. The pervasive analytics designer enables you to design KPIs of your own based on the following:

- Queries in SAP Business One, version for SAP HANA
- Calculation views in the SAP HANA database

> **i** Note
>
> o For a newly created company in SAP Business One 9.2, version for SAP HANA, the compatibility mode is *Off*, and thus only calculation views are available.
>
> o SAP Business One 9.2, version for SAP HANA companies upgraded from versions that have the compatibility mode feature, will have the same settings for the compatibility mode as the previous versions.
>
> o The compatibility mode is *On* for SAP Business One 9.2, version for SAP HANA companies upgraded from versions that:
>
>   o Do not have the compatibility mode feature
>
>   o Are initialized
>
>   Thus, they will have the previously provided analytic and attribute views.
>
> o The compatibility mode is *Off* for SAP Business One 9.2, version for SAP HANA companies upgraded from versions that:
>
>   o Do not have the compatibility mode feature
>
>   o Are not initialized
>
>   Thus, only calculation views are available.
>
>   For more information about the compatibility mode, look for the *SAP Business One Administrator's Guide, version for SAP HANA* on sappartneredge.com.

In the pervasive analytics designer, you can also set up a link between your KPI and an advanced dashboard. Thus the linked advanced dashboard will appear when you click the KPI in the Fiori-style cockpit or in an advanced dashboard.

> **i** Note
>
> For more information about the semantic layer data sources, look for the *How to Work with Semantic Layers* guide on sappartneredge.com.

2.1 Designing KPIs Using the Pervasive Analytics Designer

Prerequisites

- You have installed the app framework for SAP Business One, version for SAP HANA. For more information about installing the app framework, look for the *Working with App Framework for SAP Business One, version for SAP HANA* guide on sappartneredge.com.
- You have authorizations for the pervasive analytics designer. To grant authorizations for the pervasive analytics designer to users, from the SAP Business One, version for SAP HANA *Main Menu*, choose *Administration → System Initialization → Authorizations → General Authorizations*. In the *Authorizations* window, select the user for whom you want to set authorizations, and under *Analytics,* in *Pervasive Analytics Designer* select *Full Authorization*.

Procedure

1. In the SAP Business One, version for SAP HANA toolbar, choose (*Pervasive Analytics*).
   Alternatively, in the SAP Business One, version for SAP HANA menu bar, choose *Tools → Pervasive Analytics*.
   The *Pervasive Analytics* window appears.

   > **i Note**
   >
   > Only users with authorizations for the pervasive analytics designer can access this window.

2. On the left side of the *Pervasive Analytics* window, choose *New KPI*.

The KPI designer appears. The data source section on the left displays the following:

o All the system and customized *SELECT* queries.

o All the deployed calculation views in the SAP HANA database.

i **Note**

o For a newly created company in SAP Business One 9.2, version for SAP HANA, the compatibility mode is *Off*, and thus only calculation views are available.

o SAP Business One 9.2, version for SAP HANA companies upgraded from versions that have the compatibility mode feature, will have the same settings for the compatibility mode as the previous versions.

o The compatibility mode is *On* for SAP Business One 9.2, version for SAP HANA companies upgraded from versions that:

　o Do not have the compatibility mode feature

　o Are initialized

Thus, they will have the previously provided analytic and attribute views.

o The compatibility mode is *Off* for SAP Business One 9.2, version for SAP HANA companies upgraded from versions that:

　o Do not have the compatibility mode feature

　o Are not initialized

Thus, only calculation views are available.

For more information about the compatibility mode, look for the *SAP Business One Administrator's Guide, version for SAP HANA* on sappartneredge.com.

3. On the left side of the KPI designer, in the data source section, select the query or view based on which you want to design a KPI.

   Its measures, dimensions, and parameters appear.

   o Measures appear with the ⚅ label.

   o String type dimensions appear with the 🏷 label.

   o Date type dimensions appear with the ⏱ label.

   o Parameters appear with the 🔧 label.

4. On the *Value Settings* tab, specify various settings. For more information, see Value Settings Tab.

5. [Optional] On the *Filter and Parameter* tab, specify filters and parameters. For more information, see Filter and Parameter Tab.

   ℹ Note

   If you selected a measure from the *KPI Balance Sheet Query*, *KPI Cash Flow Statement Query*, or *KPI Profit And Loss Query* view, you must add *P_TemplateInternalKey* as a parameter, and add the dimension *KPI Factor Internal Key* or *KPI Factor Name* as a filter. For more information, see Filter and Parameter Tab and Using Financial KPI Factors.
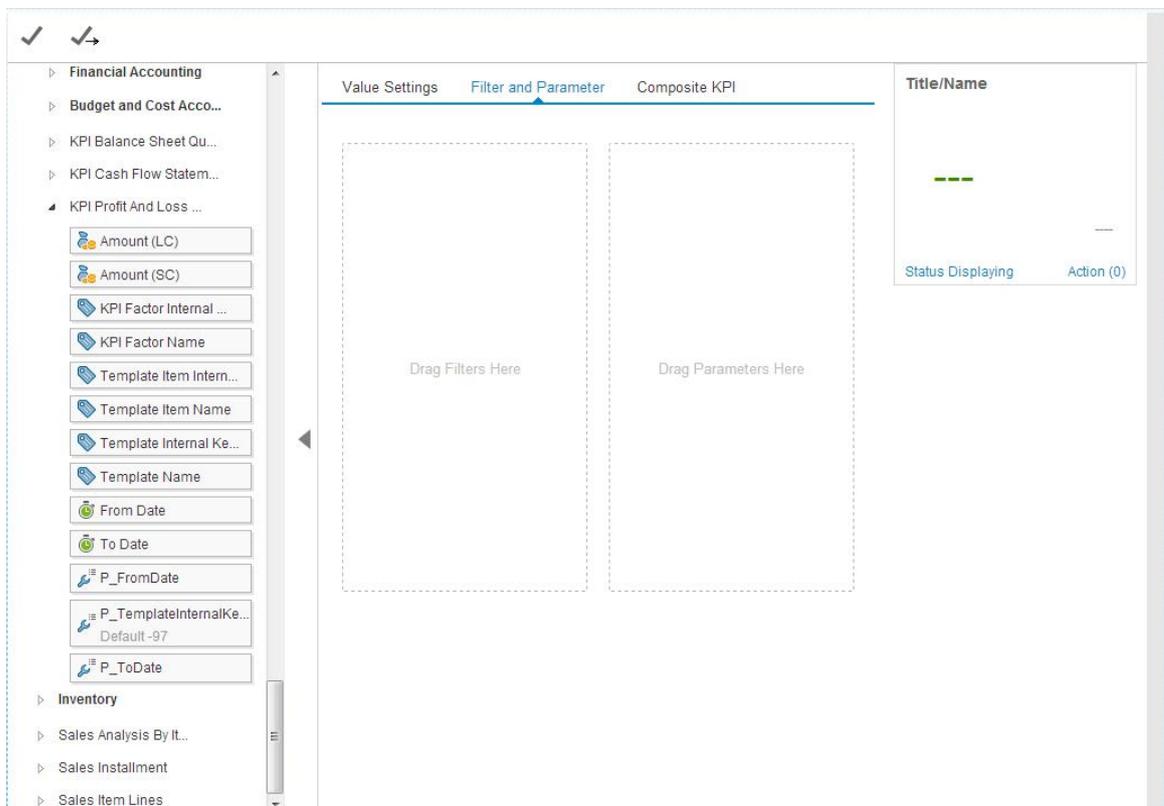
6. [Optional] If you are designing a KPI that consists of other KPIs, then on the *Composite KPI* tab, specify the variables. For more information, see Composite KPI Tab.

i Note

A KPI value is taken either from the KPI value box on the *Value Settings* tab or from the expression result on the *Composite KPI* tab. Therefore, you cannot both specify a measure in the KPI value box on the *Value Settings* tab and design a composite KPI on the *Composite KPI* tab.
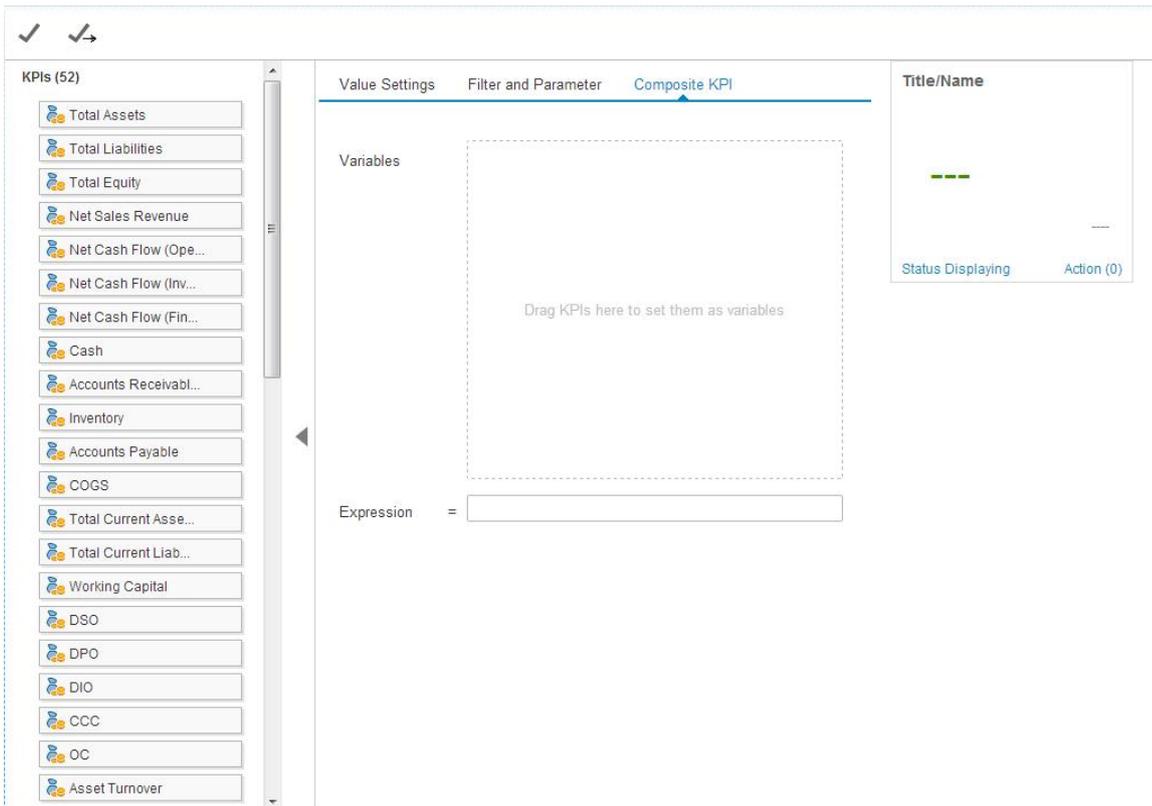
7. [Optional] In the preview area, choose *Status Displaying* and define the display settings. For more information, see Status Displaying Section.

8. [Optional] In the preview area, choose *Action* and add actions to the KPI. For more information, see Adding Actions to KPIs.
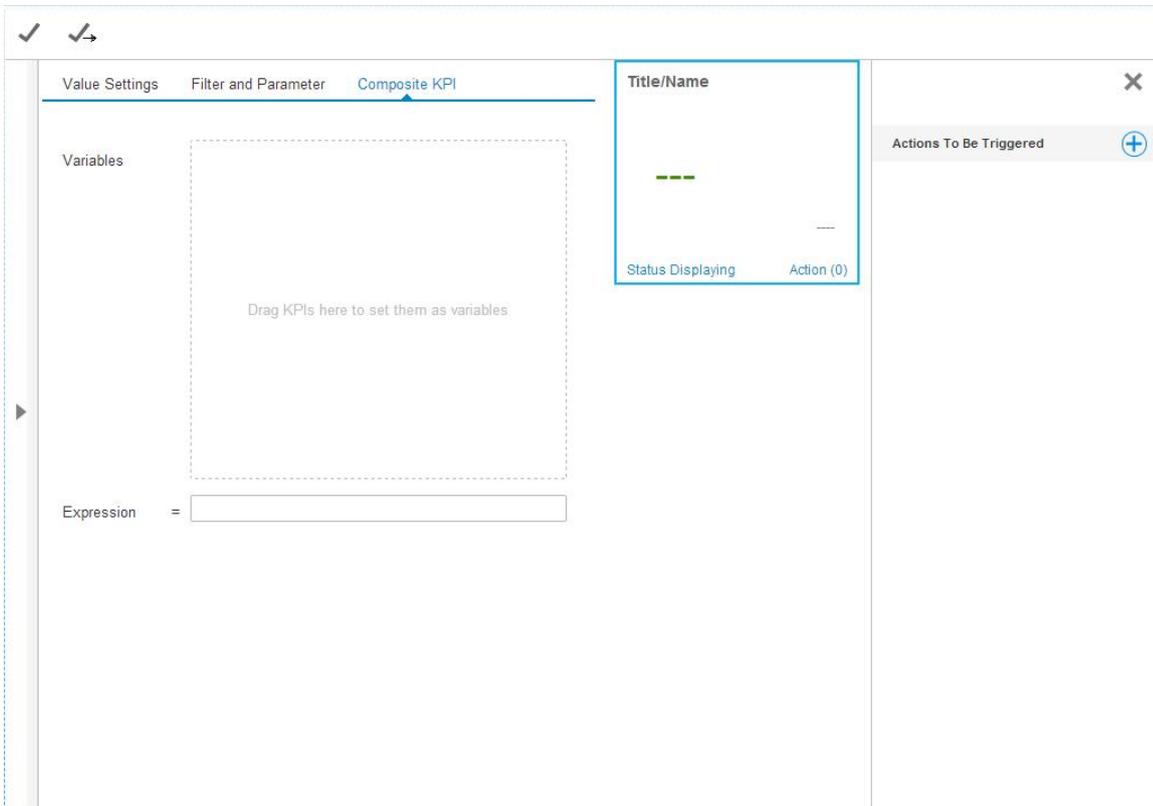
9. To save the KPI, in the upper left corner, choose ✓ (*Save*); to save the KPI as a new one, if you opened an existing KPI, in the upper left corner, choose ✓→ (*Save As*).

2.1.1   Value Settings Tab

Procedure

On the *Value Settings* tab, perform the following:

1.   Specify the KPI name and description.

The KPI name appears in the upper left corner of the preview area. The KPI description appears as a tooltip when your mouse cursor hovers over the KPI name.
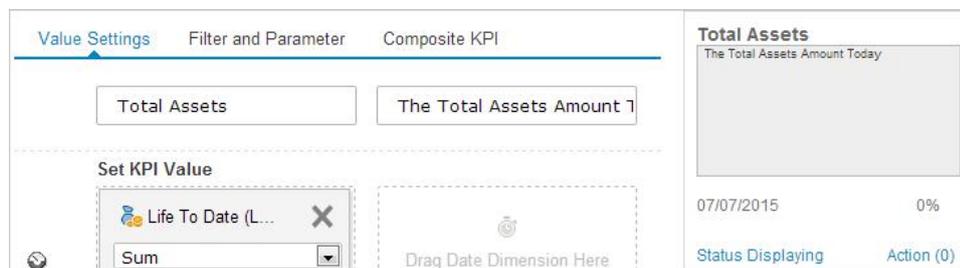
2.   In the data source section, in a query or view, select a measure and drag it to the value box of the *Set KPI Value* section.

The preview area is refreshed and the sum or average of the KPI value appears.

The name of the selected query or view appears in the *From Data Source* field at the bottom of the *Set KPI Value* section.
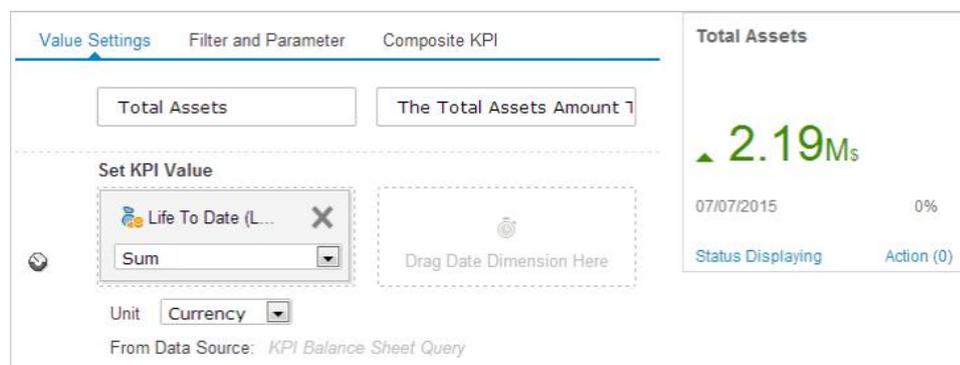
3.   [Optional] In the data source section, in the same query or view, select a date dimension, and drag it to the date dimension box of the *Set KPI Value* section.

The preview area is refreshed and the KPI value is calculated according to the date range you specified.

4. [Optional] In the *Unit* dropdown list of the *Set KPI Value* section, select the unit that you want to display under the KPI value.

The preview area is refreshed and the selected unit appears beside the KPI value. If you customized the unit, you must enter no more than five characters.
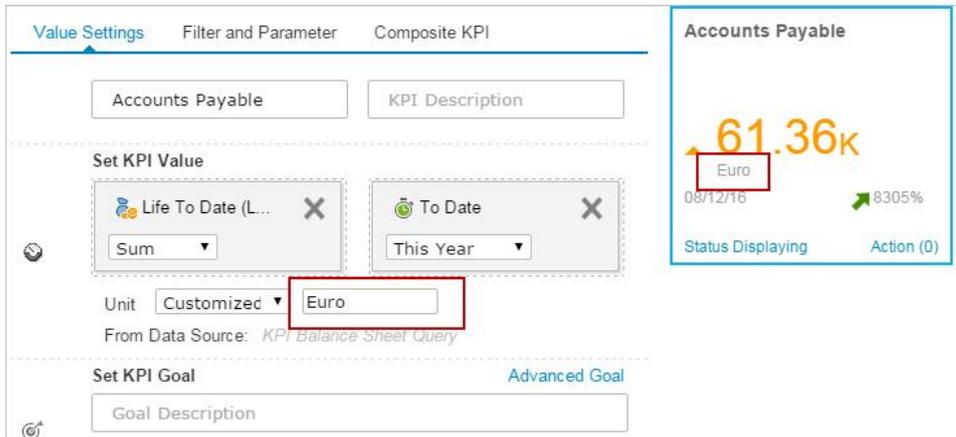
5. In the *Set KPI Goal* section, perform the following to define a basic goal or an advanced goal.

   o To define a basic goal, specify the name or description of the goal, and specify a number as the goal value.

   o To define an advanced goal, specify the name or description of the goal. If you selected a measure from a view as your KPI value, select a measure from any query as your goal value; if you selected a measure from a query as your KPI value, select a measure from any query in the same query category as your goal value.

   The first value of the measure will be the goal value.

   i **Note**

   For the advanced goal value, you cannot select a measure from queries with parameters.

   An arrow may appear before the KPI value in the preview area, based on the KPI value and goal value:

   o If the KPI value is greater than the goal value, an up arrow appears.

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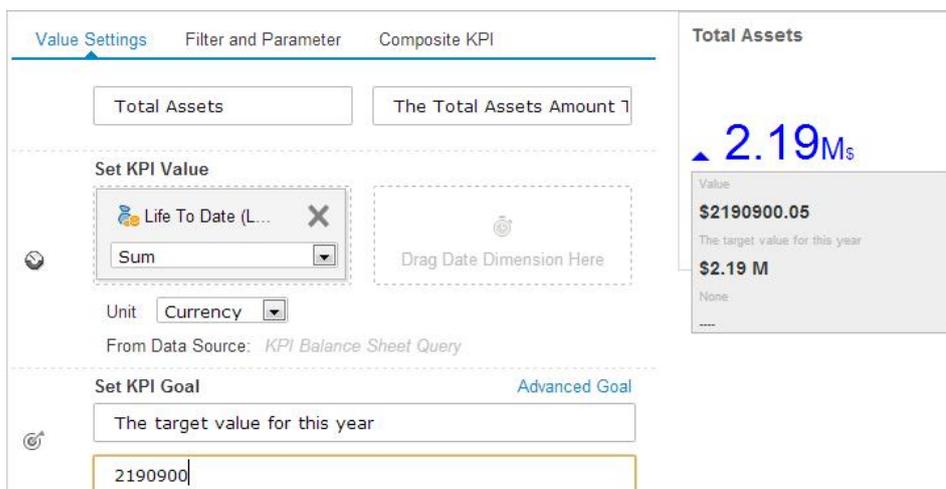
o   If the KPI value is equal to the goal value, nothing appears.

o   If the KPI value is smaller than the goal value, a down arrow appears.

The preview area is refreshed as follows:
o   The goal name and goal value appear in a tooltip when your mouse cursor hovers over the KPI value.
o   The appropriate arrow appears before the KPI value.
o   The color of the arrow and KPI value is updated. The color of the arrow and the KPI value are determined by the settings in the *Status Displaying* section and the status of the *Smaller Value Is Better* checkbox.

You can see the color change in the following screenshots when the settings in the *Status Displaying* section are the same and the status of the *Smaller Value Is Better* checkbox is different.

> **i Note**
>
> If you have changed any default settings in the *Status Displaying* section since starting work on the KPI, the status change of the *Smaller Value Is Better* checkbox will NOT determine the color of the arrow and the KPI value. If you want to change the color of the KPI arrow and the KPI value, change the settings in the *Status Displaying* section.

6. [Optional] In the *Set KPI Trend* section, perform the following to define a basic trend or an advanced trend.

   o To define a basic trend, select the trend type.

> **Example**
>
> For the month-over-month basis, the trend value will be the compared percentage between the KPI value of this month and that of last month. For the month-over-same-month basis, the trend value will be the compared percentage between the KPI value of this month and that of the same month last year.

   o For an advanced trend, if you selected a measure from a view as your KPI value, select a measure from any query as your trend value; if you selected a measure from a query as your KPI value, select a measure from any query in the same query category as your trend value.

   The first value of the measure will be the trend value.

> **i Note**
>
> For the advanced trend value, you cannot select a measure from queries with parameters.

   An arrow may appear before the trend value in the preview area based on the trend value:

> **i Note**
>
> When the denominator in the trend calculation is not a positive number, the following appears in the trend area.

o   If the trend value is greater than zero, an up arrow appears.

o   If the trend value is equal to zero, nothing appears.

o If the trend value is less than zero, a down arrow appears.

The preview area is refreshed as follows:

o The trend name and trend value appear in a tooltip when your mouse cursor hovers over the KPI value.

o The trend value appears in the lower right corner of the preview area.

o The arrow appears before the trend value.

o The color of the arrow is updated. The color of the arrow is determined by the status of the *Smaller Value Is Better* checkbox.

You can see the color change in the following screenshots when the status of the *Smaller Value Is Better* checkbox is different.

ℹ **Note**

> If you have changed any default settings in the *Status Displaying* section since starting work on the KPI, the status change of the *Smaller Value Is Better* checkbox will not immediately refresh the preview area. The color of the trend arrow will be refreshed the next time you open this KPI.

7. [Optional] To make this KPI unavailable for display in the cockpit, select the *Interim* checkbox. This means that the KPI will only be the component of other KPIs, and will not be available for display in the cockpit.

8. [Optional] Select the *Smaller Value Is Better* checkbox to indicate that the smaller the value than the goal value, the better the result, or that if the trend value is less than zero, the result is good. This checkbox determines the color settings in the *Status Displaying* section, thus affecting the following:

   o Color of the arrow before the trend value.
   o Color of the following:
      o Arrow before the KPI value (if the KPI value is not equal to the goal value)
      o KPI value

ℹ **Note**

> If you have changed any default settings in the *Status Displaying* section since starting work on the KPI, the following will happen:
>
> o The status change of the *Smaller Value Is Better* checkbox will not immediately refresh the color of the trend arrow. The color of the trend arrow will be refreshed the next time you open this KPI.
>
> o The status change of the *Smaller Value Is Better* checkbox will NOT determine the color of the KPI arrow and the KPI value. If you want to change the color of the KPI arrow and the KPI value, change the settings in the *Status Displaying* section.

9. [Optional] Select the *Minus Sign* checkbox to add a minus sign in front of the KPI value. The status of this checkbox, together with the settings in the *Status Displaying* section, determines the color of the following:

   o Arrow before the KPI value (if the KPI value is not equal to the goal value)
   o KPI value

2.1.2 Filter and Parameter Tab

Prerequisite

On the *Value Settings* tab, you have dragged a measure from a query or view to the value box of the *Set KPI Value* section.

Procedure

- For filters, perform the following:
   1. In the data source section, in the same query or view from which you dragged the KPI value, select a dimension and drag it to the filter box.

      The *Filter Editor* window appears.

2. In the *Filter Editor* window, perform the following based on the type of the dimension:
   - For a string type dimension, select a filtering value, or enter a filtering value and choose the *Add Value* button.

     The filtering value is added to the *Active Filters* section.

     For string type dimensions, *-Current User-* appears as a filtering value. If you choose this value, the code of the logged-on user will be used as the filtering value.
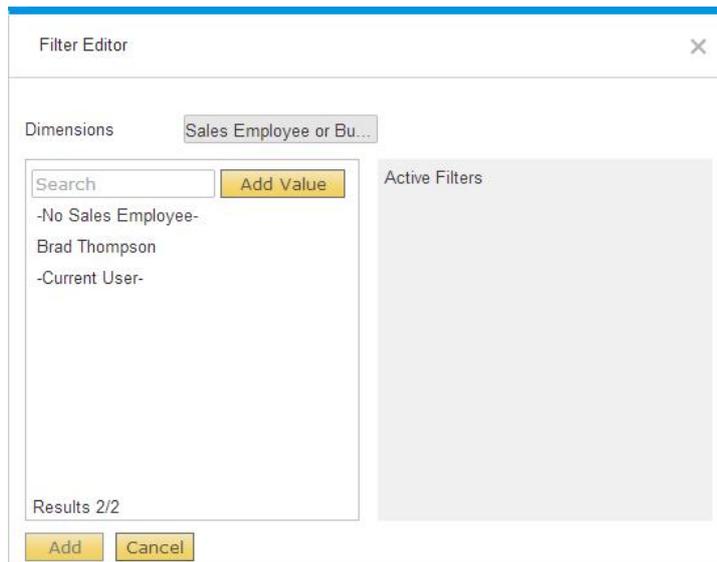
i Note

When the KPI value filtered by certain filtering values has records in the database, then such and only such filtering values appear in the list. If you want to use other filtering values, you need to enter them and choose the *Add Value* button.

   - For a date type dimension, define a time range.
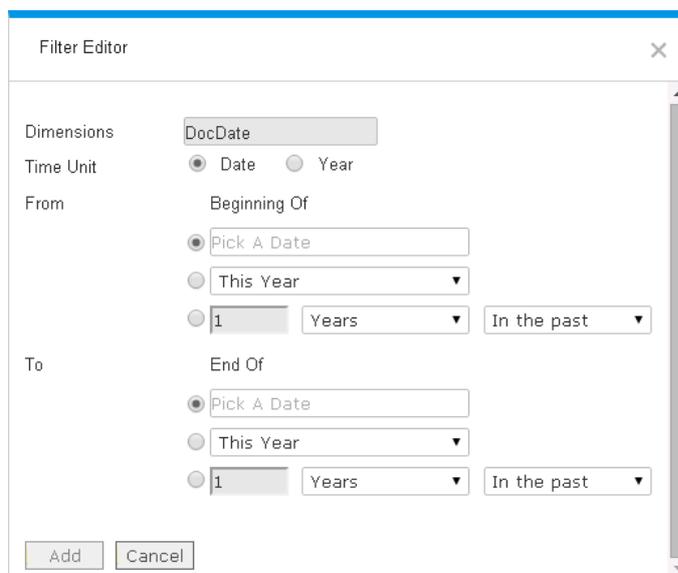
3. To save the filter settings, in the *Filter Editor* window, choose the *Add* button.

   The preview area is refreshed according to the added filters.

   ### i Note

   If you selected a measure from views *KPI Balance Sheet Query*, *KPI Cash Flow Statement Query*, or *KPI Profit And Loss Query* view, you must add *P_TemplateInternalKey* as a parameter, and add the dimension *KPI Factor Internal Key* or *KPI Factor Name* as a filter. For more information, see Using Financial KPI Factors.

- For parameters, perform the following:

  1. In the data source section, in the same query or view from which you dragged the KPI value, select a parameter and drag it to the parameter box.

     The *Parameter Editor* window appears.

  2. In the *Parameter Editor* window, perform the following based on the type of the parameter:

     o For a date type parameter, specify a default date.

     o For a number type parameter, specify a default number.

     o For a string type parameter, specify a default value.

  3. To save the parameter settings, choose the *Add* button.

     The preview area is refreshed according to the added parameters.

i **Note**

Some parameters are labeled with a red rectangle. To get a meaningful KPI value, you must drag those parameters to the parameter box.
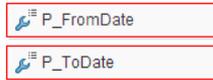
2.1.2.1 Using Financial KPI Factors

A financial KPI factor links a KPI and an item in the financial report templates. You define financial KPI factors in the *Financial KPI Factor - Setup* window. To open this window, from the SAP Business One, version for SAP HANA *Main Menu*, choose *Administration → Setup → Financials →Financial KPI Factors*.

SAP Business One, version for SAP HANA provides 28 predefined financial KPI factors.

In the *KPI Balance Sheet Query*, *KPI Cash Flow Statement Query*, and *KPI Profit And Loss Query* views, the measures that are defined as the KPI values do not retrieve data directly from the database. Only after you identify the financial report template in the KPI designer and set the dimension *KPI Factor Internal Key* or *KPI Factor Name* as a filter, does the KPI value retrieve data from the financial report template item that is linked to the financial KPI factor.

Using the financial KPI factors in KPIs consists of the following procedures:

1. Link a financial KPI factor to an item in the financial report template.
2. Identify the financial report template in the KPI designer.

3. Set the dimension *KPI Factor Internal Key* or *KPI Factor Name* as a filter.

Prerequisite

Linked items of the financial report template contain values, and the values belong to the current year.

Procedure

To link a financial KPI factor to an item in the financial report template, follow the procedure below:

1. From the SAP Business One, version for SAP HANA *Main Menu*, choose *Financials → Financial Report Templates*.

   The *Financial Report Templates* window appears.

2. In the *Financial Report Templates* window, select a template from the *Balance Sheet*, *Profit and Loss*, or *Statement of Cash Flows* report.

   The template appears on the right.

3. In the template, select an item whose data you want to use in the KPI.

4. In the *Financial KPI Factors* section, in the *Factor* field, enter the factor code, or press ⟦Tab⟧ to select a factor.
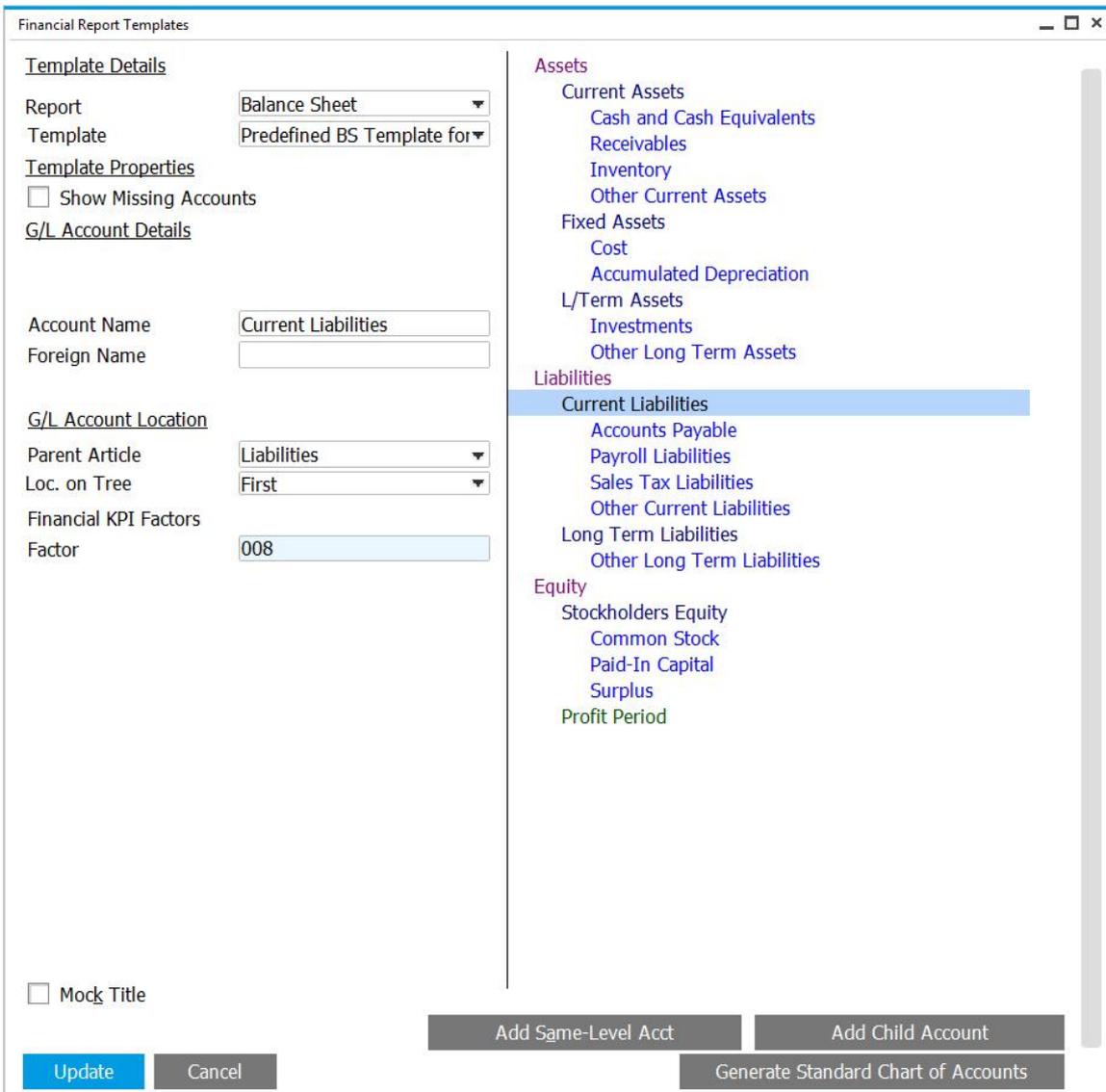
5. To save the link, in the *Financial Report Templates* window, choose the *Update* button.

Procedure

To identify the financial report template in the KPI designer, follow the procedure below:

1. In the SAP Business One, version for SAP HANA menu bar, choose *View → System Information.*

   When you hover your mouse over fields in windows, you can view system information in the left-hand corner of the status bar.

2. From the SAP Business One, version for SAP HANA *Main Menu*, choose *Financials → Financial Report Templates*. From the *Report* dropdown list, select the required financial report.

3. From the *Template* dropdown list, select the template.

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4. Hover your mouse over the template name.
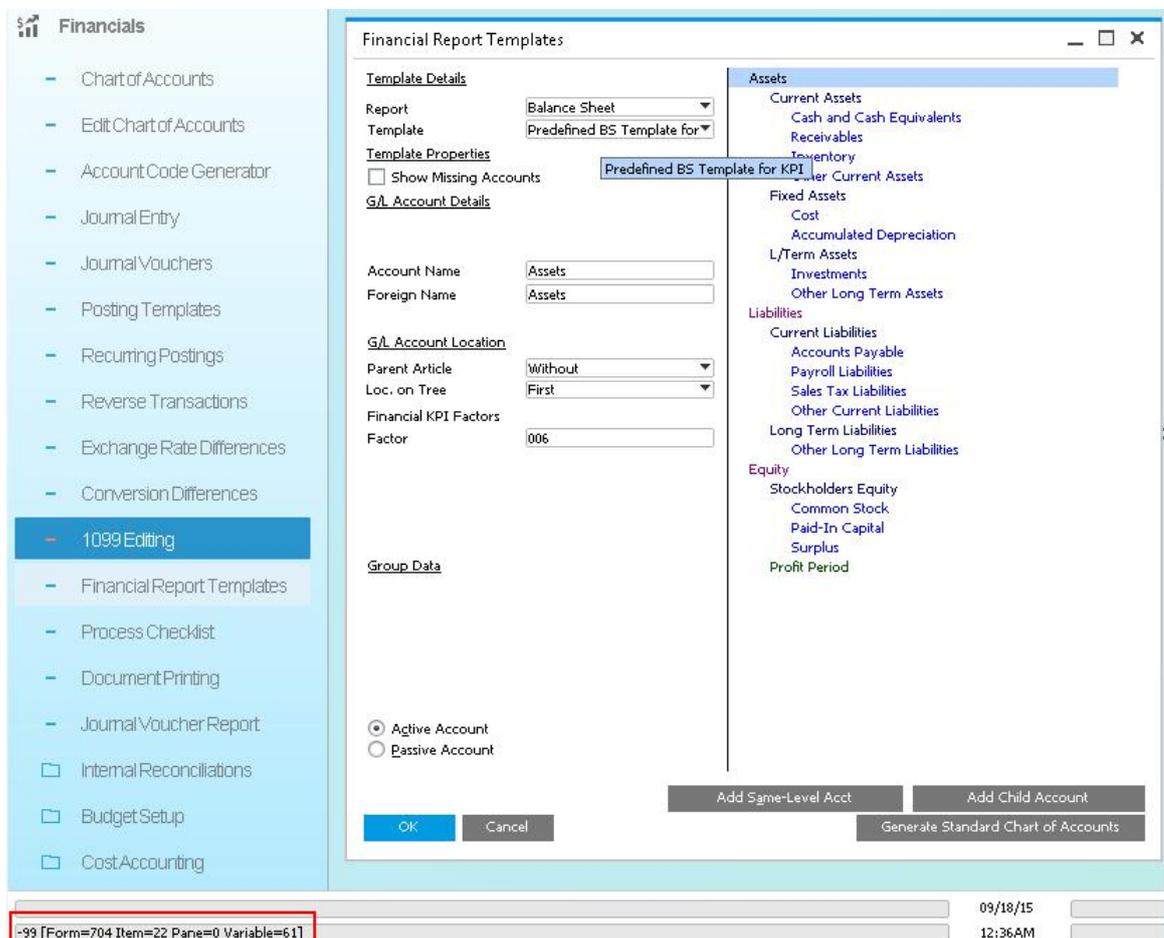
The system information appears in the status bar, and the first number is the template code.

5. In the data source section of the KPI designer, in the same query or view from which you dragged the KPI value, select *P_TemplateInternalKey*, and drag it to the parameter box.

6. In the *Parameter Editor* window, enter the template code that you got from the system information of the template.
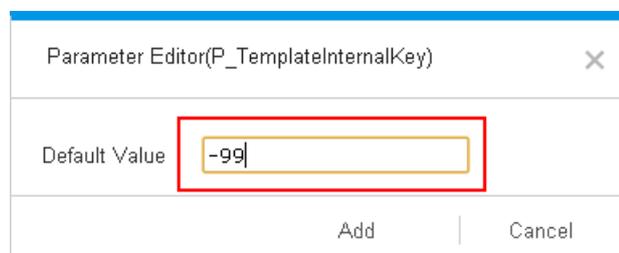
7. To identify the financial report template in the KPI designer, choose the *Add* button.

Procedure

To set the dimension *KPI Factor Internal Key* or *KPI Factor Name* as a filter, follow the procedure below:

1. In the data source section, in the same query or view from which you dragged the KPI value, select *KPI Factor Internal Key* or *KPI Factor Name*, and drag it to the filter box.

   The *Filter Editor* window appears, displaying all the financial KPI factors that contain values.

2. In the *Filter Editor* window, select the available financial KPI factor, or enter a financial KPI factor code (if you dragged the *KPI Factor Internal Key* dimension) or financial KPI factor name (if you dragged the *KPI Factor Name* dimension), and choose the *Add Value* button.

   The financial KPI factor is added to the *Active Filters* section.
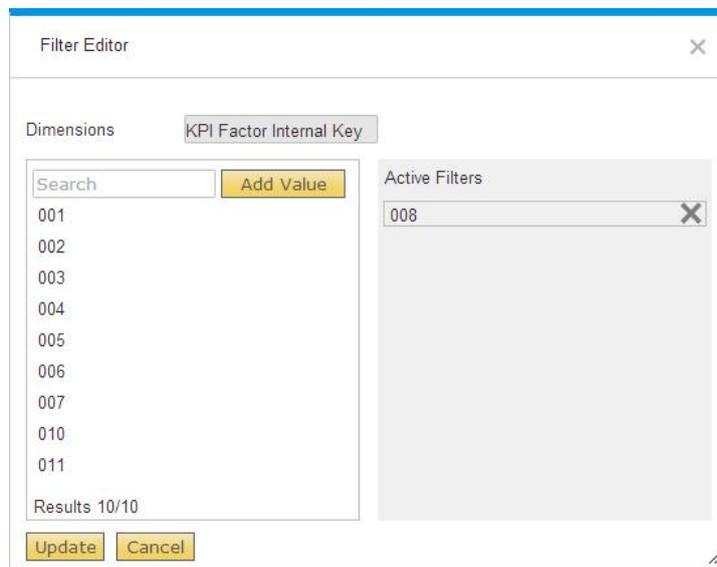
3. To save the filter settings, choose the *Add* button.

   The preview area is refreshed and the KPI value is retrieved from the financial report template item.

2.1.3　Composite KPI Tab

The data source section of the *Composite KPI* tab displays all the KPIs in the database, including interim KPIs.

ⓘ Note

Nested composite KPI is not supported. Example of a nested composite KPI is as follows: *Expression=K01+KO2, KO2=KO3+O4*. You can use the following instead: *Expression= K01+K03+K04*.

The following expressions are supported: "+" (plus sign), "-" (minus sign), "*" (multiply sign), "/" (divide sign), "()" (bracket).

Procedure

On the *Composite KPI* tab, perform the following:

1. From the KPI list section, drag a KPI to the variable box.

   The dragged KPI is labeled as a variable.

2. In the *Expression* field, specify the expression using the variables.

   The preview area is refreshed and the result of the calculated expression appears as the KPI value.
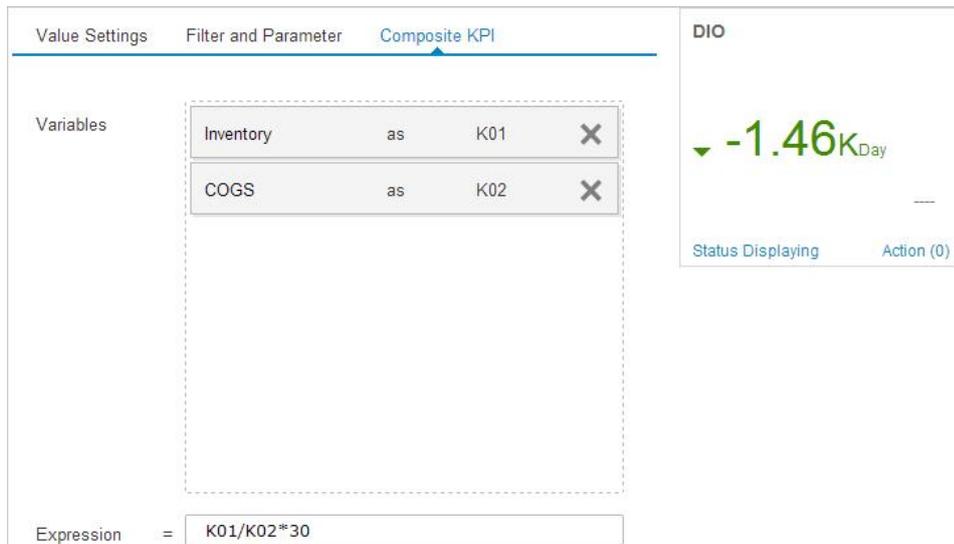
2.1.4   Status Displaying Section

Procedure

In the *Status Displaying* section, perform the following:

1. Select the separator type.
2. In the two value boxes, perform the following based on the separator type you selected:
   o If you selected *Specific Value*, enter specific values to act as the separators for different colors.
   o If you selected *Ratio of KPI to Goal*, enter numbers with percentage symbols to act as the separators for different colors.
3. In the three colored dropdown lists, select the colors to represent the three separated parts.
4. You can click the color bar to add a separator.
5. To delete the separator, choose 🗑 (*Delete*) beside the value box; to save the display settings, choose the *OK* button.

   The preview area is refreshed. The color of the KPI and the arrow before the KPI value (if the KPI value is not equal to the goal value) is updated.

2.1.5 Adding Actions to KPIs

To access the action section of a KPI, in the lower right corner of the preview area, choose *Action*. The action section displays the action that you have defined.

> **i** Note
>
> You can add only one action for one KPI.

Procedure

To add actions to KPIs, follow the procedure below.

1. In the action section of a KPI, choose ⊕ (*Add a New Action*) beside *Actions To Be Triggered*.
    The edit window appears.
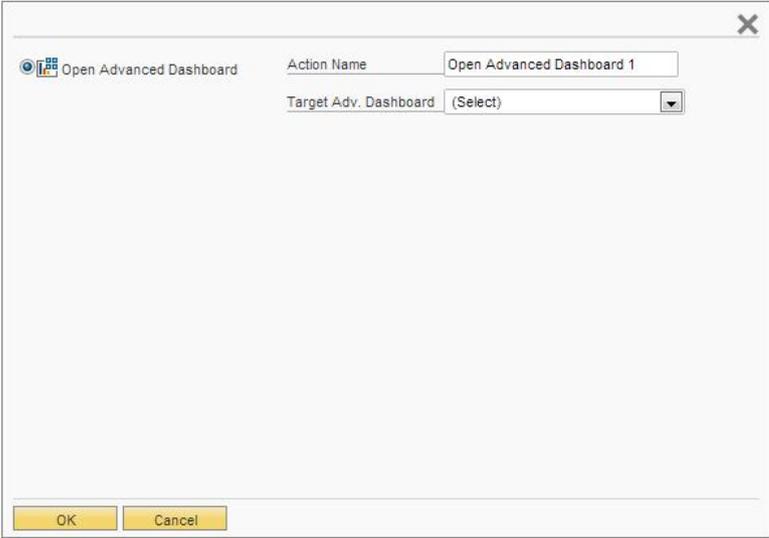
2. You can add one type of action. For more information, see the following section.
3. To save the action, in the edit window, choose the *OK* button; to delete the action, in the action section, choose ✖ (*Remove*) beside the action.

2.1.5.1   Action: Open Advanced Dashboard

In the Fiori-style cockpit or an advanced dashboard, for a KPI to which you have added this type of action, click the KPI to open the linked advanced dashboard.

Procedure

To add action type *Open Advanced Dashboard*, follow the procedure below:

1. In the edit window of actions, select the *Open Advanced Dashboard* radio button.
2. In the *Action Name* field, specify the action name.
3. In the *Target Adv. Dashboard* dropdown list, select the advanced dashboard that you want to open. You can link the KPI to only one advanced dashboard with one action, and you can add only one action to one KPI.
4. To save the action, choose the *OK* button.

2.1.5.2   Action: Open Dashboard (For the SAP Business One Sales App)

In the SAP Business One Sales app, for a KPI to which you have added this type of action, tap the KPI to open the linked pervasive dashboard.

For more information about customizing the advanced dashboard to be displayed in the SAP Business One Sales app, see Predefined Advanced Dashboards.

For more information about the mobile app, look for the guides *How to Work with SAP Business One Sales, mobile app for iOS* or *How to Work with SAP Business One Sales, mobile app for Android* on sappartneredge.com.

> ℹ **Note**
>
> This action takes effect only in the SAP Business One Sales app.

Procedure

To add the action type *Open Dashboard (For the SAP Business One Sales App),* follow the procedure below:

1. In the edit window of actions, select the *Open Dashboard (For the SAP Business One Sales App)* radio button.
2. In the *Action Name* field, specify the action name.
3. In the *Target. Dashboard* dropdown list, select the pervasive dashboard that you want to open. You can link the KPI to only one pervasive dashboard with one action, and you can add only one action to one KPI.
4. To save the action, choose the *OK* button.

2.2   Viewing KPIs in the Cockpit

In the cockpit, you can view predefined KPIs as well as the KPIs that are designed using the pervasive analytics designer.

Prerequisites

- Your system administrator or key user has done the following:
    - Enabled the cockpit at company level by selecting the *Cockpit* radio button on the *Cockpit* tab of the *General Settings* window. To open this window, from the SAP Business One, version for SAP HANA *Main Menu*, choose *Administration → System Initialization → General Settings*.
    - Assigned the user authorizations for *Cockpit & Widget*. To grant the *Cockpit & Widget* authorizations to users, from the SAP Business One, version for SAP HANA *Main Menu*, choose *Administration → System Initialization → Authorizations → General Authorizations*. In the *Authorizations* window, select the user to whom you want to grant the authorizations, and in *Cockpit & Widget*, select *Full Authorization*.
- You have enabled the cockpit at user level by choosing *Tools →Cockpit →Enable My Cockpit* in the SAP Business One, version for SAP HANA menu bar.
- You have authorizations for the KPI that you want to view. To set authorizations for KPIs to users, from the SAP Business One, version for SAP HANA *Main Menu*, choose *Administration → System Initialization → Authorizations → General Authorizations*. In the *Authorizations* window, select the user to whom you want to grant the authorization, and in *Analytics → Content → KPI*, select *Full Authorization* for the KPIs for which you want to grant authorization.

Procedure

1. From the SAP Business One, version for SAP HANA navigation panel on the left side of the window, under *My Cockpit*, select the cockpit you want to use.

    The cockpit appears.
2. In the navigation panel, choose *Widget Gallery → General Widgets*.
3. Select *KPI Widget* and drag it into the open cockpit area.

    A window appears.
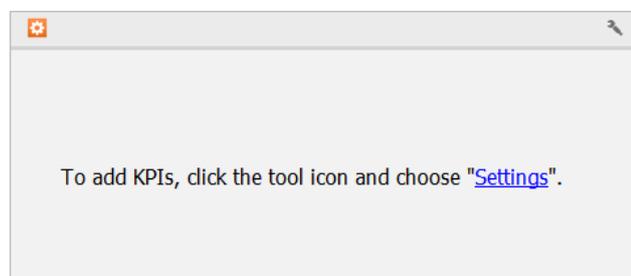
4. To add a KPI to your cockpit, in the upper right section of the window, choose ▧ (*Tools*).
5. From the dropdown list, choose *Settings*.

    The *Select KPI* window appears, listing all the KPIs for which you have authorizations.

6. To add one or more KPIs to the cockpit, select the appropriate checkbox.
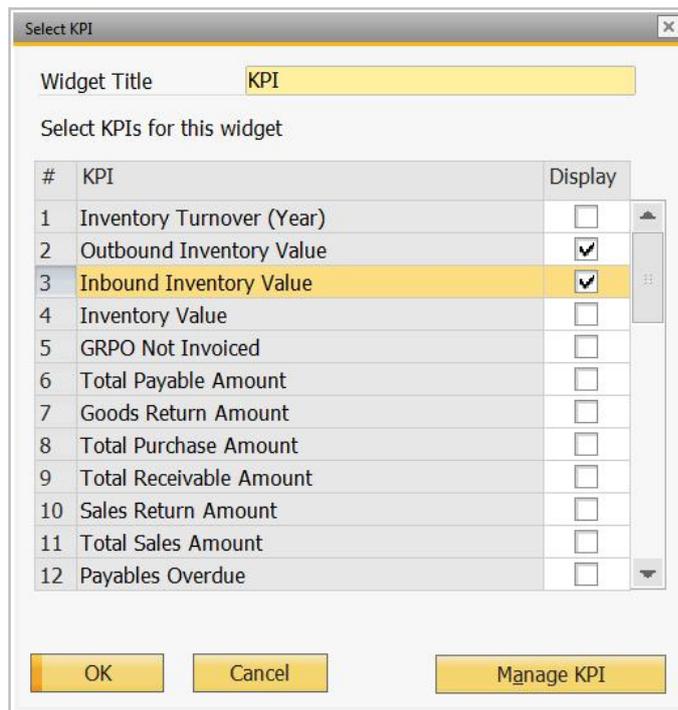
7. To confirm your choices, choose the *OK* button.

   The selected KPIs appear.

2.3 Viewing KPIs in the Fiori-Style Cockpit

For more information about viewing KPIs in the Fiori-style cockpit, look for the *How to Work with the Fiori-Style Cockpit* guide on sappartneredge.com.

2.4 Managing KPIs in the Pervasive Analytics Designer

Prerequisites

- You have installed the app framework for SAP Business One, version for SAP HANA. For more information about installing the app framework, look for the *Working with App Framework for SAP Business One, version for SAP HANA* guide on sappartneredge.com.
- You have authorizations for the pervasive analytics designer. To grant authorizations for the pervasive analytics designer to users, from the SAP Business One, version for SAP HANA *Main Menu*, choose *Administration → System Initialization → Authorizations → General Authorizations*. In the *Authorizations* window, select the user for whom you want to set authorizations, and under *Analytics,* in *Pervasive Analytics Designer,* select *Full Authorization*.

Procedure

1. In the SAP Business One, version for SAP HANA toolbar, choose ⿻ (*Pervasive Analytics*).

   Alternatively, in the SAP Business One, version for SAP HANA menu bar, choose *Tools → Pervasive Analytics*.

   The *Pervasive Analytics* window appears.

   > ℹ **Note**
   >
   > Only users with authorizations for the pervasive analytics designer can access this window.

2. In the *My KPIs* section, you can find all the KPIs, for which you can perform the following:
   o Select each KPI to view its contents.
   o To delete a KPI, hover your mouse over the relevant KPI, choose the ✖ icon, and choose the *Yes* button in the system message.
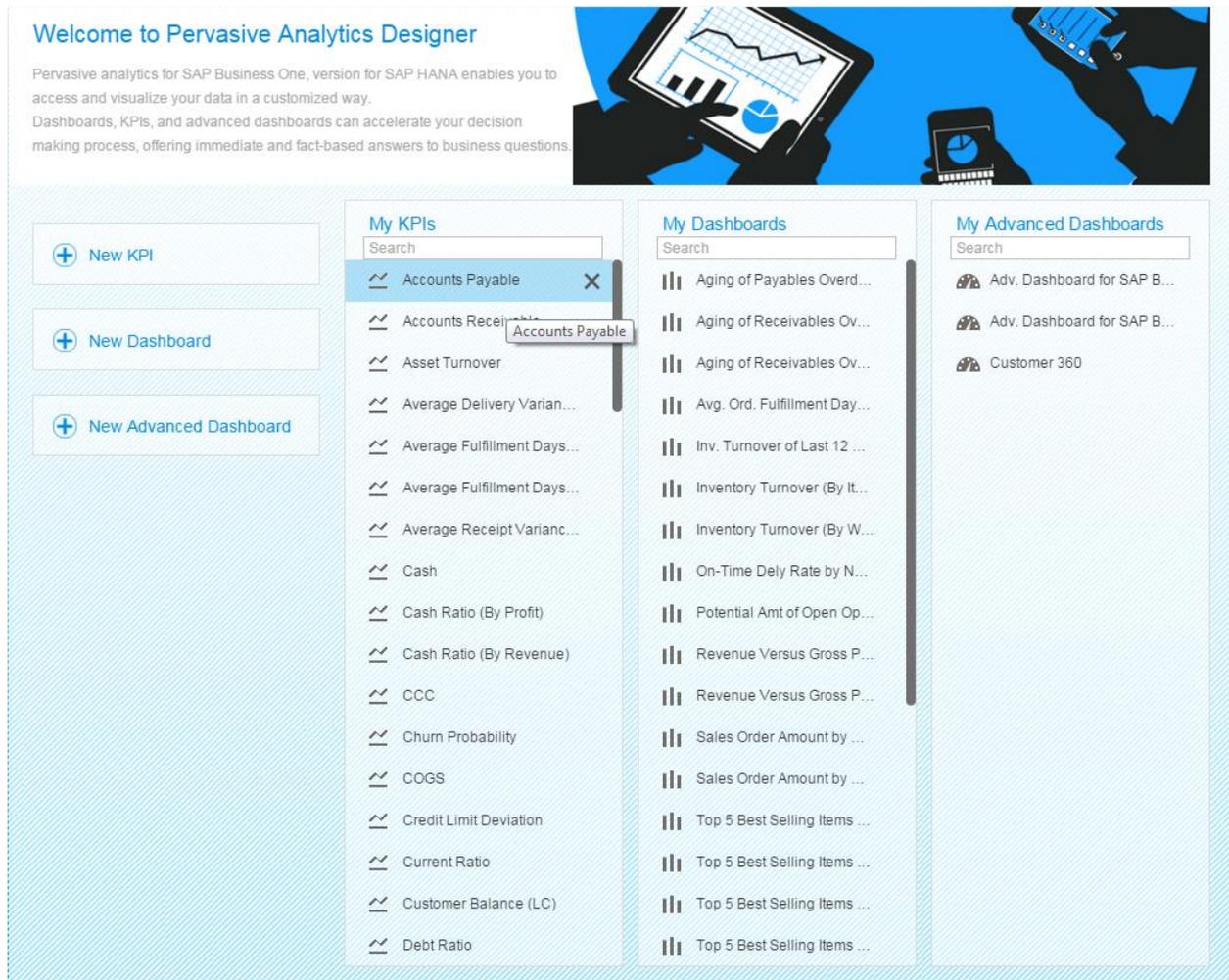
2.5   Predefined KPIs

ℹ **Note**

The predefined KPIs in the four localizations (CN, DE, GB, US) are available for the following charts of accounts:

Chart of Accounts	Local Settings
M - 股份有限公司会计制度	P.R.China/Hong-Kong
C - US_CoA	United States Of America/Puerto Rico

Chart of Accounts	Local Settings
N - SKRO3	Germany
G - GB_CoA	United Kingdom/Ireland

i **Note**

The predefined KPIs in the localization *All* are available for all charts of accounts in all localizations.

KPIs can differ among companies, depending on industries and company goals. The 57 predefined KPIs are the most commonly used ones that reflect a company's financial performances.

You can focus on individual KPIs to measure the performance at a specific requirement. You can also group the KPIs in a certain area to get a whole and comprehensive picture of your company's financial performances.

The predefined KPIs are in the following areas:

- Working capital management:

  Working capital is the amount of a company's current assets minus its current liabilities. The working capital ensures that the company is able to carry out its day-to-day operations, as well as to satisfy its maturing short-term debt and the upcoming operational expenses.

  The following predefined KPIs help you measure and monitor your company's working capital:

  o Accounts Payable (CN, DE, GB, US)
  o Accounts Receivable (CN, DE, GB, US)
  o Cash (CN, DE, GB, US)
  o CCC (CN, DE, GB, US)
  o Customer Balance (LC)
  o DIO (CN, DE, GB, US)
  o DPO (CN, DE, GB, US)
  o DSO (CN, DE, GB, US)
  o Inventory (CN, DE, GB, US)
  o Inventory Turnover (CN, DE, GB, US)
  o Inventory Turnover (Year)
  o OC (CN, DE, GB, US)
  o Total Amount of Open Deliveries (LC)
  o Working Capital (CN, DE, GB, US)

- Profitability ratios:

  Profitability measures a company's ability to generate earnings considering sales, assets and equity. It highlights a company's efficiency for gaining profits. It is important to company owners and investors.

  The following predefined KPIs help you define and measure your company's profitability:

  o Asset Turnover (CN, DE, GB, US)
  o Gearing Ratio (CN, DE, GB, US)
  o Gross Profit (CN, DE, GB, US)
  o Gross Profit (LTD)
  o Gross Profit (YTD)
  o Gross Profit Margin (CN, DE, GB, US)
  o Gross Profit Margin (YTD)

- o Net Profit Margin (CN, DE, GB, US)
- o Operating Margin (CN, DE, GB, US)
- o ROE (CN, DE, GB, US)
- Liquidity ratios:

Liquidity is a company's ability to pay off its short-term debts. It shows the proportion by which the current liabilities are covered by liquid assets. In general, the greater the coverage is, the more likely it is that the company is able to pay the debts when they fall due, and still be able to fund ongoing operations.

The following predefined KPIs reflect your company's liquidity:

- o Cash Ratio (By Profit) (CN, DE, GB, US)
- o Cash Ratio (By Revenue) (CN, DE, GB, US)
- o Current Ratio (CN, DE, GB, US)
- o Quick Ratio (CN, DE, GB, US)
- Debt Ratios (CN, DE, GB, US):

Debit ratio is calculated as a company's total debts to its total assets, which quantifies how leveraged a company is. It indicates how much a company relies on the debts to finance its assets.

The higher the debt ratio is, the more risky the operations are; this means that the company needs to bear a higher proportion of cash flow that is generated from operations to pay the interests on its debts.

- Financial statements:

Financial statements are formal records that reflect a company's financial activities and performances in a financial period. The information is presented in a manner that is easy to understand. Typically, the following statements are included:

- o Balance Sheet
- o Cash Flow Statement
- o Profit and Loss Statement

A company needs to prepare and show its financial statements to reveal its financial activities and performances. The public and stakeholders thus can make their financial decisions based on the financial statements.

The following predefined KPIs show the main and important statement items:

- o Accounts Payable (CN, DE, GB, US)
- o Accounts Receivable (CN, DE, GB, US)
- o Cash (CN, DE, GB, US)
- o COGS (CN, DE, GB, US)
- o Gross Profit (CN, DE, GB, US)
- o Inventory (CN, DE, GB, US)
- o Net Cash Flow (CN, DE, GB, US)
- o Net Cash Flow (Financial) (CN, DE, GB, US)
- o Net Cash Flow (Investment) (CN, DE, GB, US)
- o Net Cash Flow (Operating) (CN, DE, GB, US)
- o Net Profit (CN, DE, GB, US)
- o Total Assets (CN, DE, GB, US)
- o Total Current Assets (CN, DE, GB, US)
- o Total Current Liabilities (CN, DE, GB, US)

- o Total Equity (CN, DE, GB, US)
- o Total Liabilities (CN, DE, GB, US)
- Daily operation indexes:

  The following predefined KPIs help you monitor and evaluate some important parts or aspects of your company's daily operations:

  - o Expense 1 (DE, GB, US)
  - o Expense 2 (DE, GB, US)
  - o Inventory Value
  - o Operating Cost (DE, GB, US)
  - o Operating Income (CN, DE, GB, US)

  The following predefined KPIs help you monitor and evaluate the important parts or aspects from the sales side:

  - o Average Delivery Variance Days
  - o Average Fulfillment Days for a Sales Order
  - o Net Sales Revenue (CN, DE, GB, US)
  - o Number of Open Deliveries
  - o Number of Open Sales Orders
  - o Number of Open Sales Quotations
  - o Number of Open Service Calls
  - o On-Time Delivery Rate
  - o Open Amount of Deliveries
  - o Outbound Inventory Value
  - o Receivables Overdue
  - o Sales Order Amount of This Month (LC) - Curr. User
  - o Sales Return Amount
  - o Sales Return Amount for This Year
  - o Total Receivable Amount
  - o Total Receivable Amount YTD
  - o Total Sales Amount
  - o Total Sales Amount (LTD)
  - o Total Sales Amount (YTD)

  The following predefined KPIs help you monitor and evaluate the important parts or aspects from the purchasing side:

  - o Average Fulfillment Days for a Purchase Order
  - o Average Receipt Variance Days
  - o Goods Return Amount
  - o GRPO Not Invoiced
  - o Inbound Inventory Value
  - o Payables Overdue
  - o Total Payable Amount
  - o Total Purchase Amount

- Customer relationship management (CRM):
  - Churn Probability
  - Credit Limit Deviation
  - Opportunity Win Rate (LTD)
  - Potential Amt of Open Opportunities
  - Potential Amt of Open Opportunities - Curr. User
  - Weighted Amount of All Open Opportunities (LC)

For a complete list of predefined KPIs, see the table below.

> **i** Note
>
> For more information about financial KPI factors, see Using Financial KPI Factors.

> **i** Note
>
> To see a specific query, in the menu bar, choose *Tools → Queries → Query Manager*. For more information about the query manager, see *Query Manager* in the online help documentation.

KPI Name	KPI Description	Data Source	Interim or Not	Localization
Accounts Payable	Accounts payable amount on the current day	Financial KPI factor *Accounts Payable* (factor 007)	Yes	CN, DE, GB, US
Accounts Receivable	Accounts receivable amount on the current day	Financial KPI factor *Accounts Receivables* (factor 003)	Yes	CN, DE, GB, US
Asset Turnover	Asset turnover ratio up to today in the current month, reflecting the efficiency of a company's use of its assets in generating net sales revenue to the company	KPI *Net Sales Revenue* ÷ KPI *Total Assets*	No	CN, DE, GB, US
Average Delivery Variance Days	Average (YTD) number of days between the posting date of the delivery and the due date of the source sales order. The KPI covers orders within the current year according to their document dates.	Calculation view *Statistics of On-Time Delivery*	No	All
Average Fulfillment Days for a Purchase Order	Average (YTD) number of days it takes to receive products since the purchase order is created. The KPI covers orders within the current year according to their document dates. Fulfillment days per purchase order = posting date of GRPO - posting date of purchase order	Calculation view *Purchase Order Fulfillment Cycle Time Query*	No	All
Average Fulfillment	Average (YTD) number of days it takes to deliver products since the sales order is	Calculation view *Sales Order*	No	All

KPI Name	KPI Description	Data Source	Interim or Not	Localization
Days for a Sales Order	created. The KPI covers orders within the current year according to their document dates. Fulfillment days per sales order = posting date of delivery - posting date of sales order	*Fulfillment Cycle Time Analysis*		
Average Receipt Variance Days	Average (YTD) number of days between the posting date of goods receipt PO and the due date of the source purchase order. The KPI covers orders within the current year according to their document dates.	Calculation view *Statistics of On-Time Receipt*	No	All
Cash	Total amount of cash and monetary capital on the current day	Financial KPI factor *Cash* (factor 001)	Yes	CN, DE, GB, US
Cash Ratio (By Profit)	Net cash flow spent on operating activities as a percentage of the net profit gained. The value is up to today in the current month.	KPI *Net Cash flow (Operating)* ÷ KPI *Net Profit*	No	CN, DE, GB, US
Cash Ratio (By Revenue)	Net cash flow spent on operating activities as a percentage of the net sales revenue achieved. The value is up to today in the current month.	KPI *Net Cash flow (Operating)* ÷ KPI *Net Sales Revenue*	No	CN, DE, GB, US
CCC	Cash conversion cycle up to today in the current month. Cash conversion cycle, the average number of days it takes for a company to convert resource inputs into cash flows	KPI *DIO* + KPI *DSO* − KPI *DPO*	No	CN, DE, GB, US
Churn Probability	Average churn rate of all customers based on sales orders and A/R invoices. In Customer 360, this KPI displays the churn rate of the relevant customer. **i** Note To view the rate and to update it with the latest data in your company database, in a web browser, navigate to the following URL: `https://<Server Address>:<Port>/PredictiveAnalysis`, log on to the company you are working with, and choose the *Refresh Now* button.	Calculation view *Customer Churn Query*	No	All

KPI Name	KPI Description	Data Source	Interim or Not	Localization
	The URL supports the following Web browsers: Google Chrome, Microsoft Edge, Apple Safari, and Mozilla Firefox.			
COGS	Costs of goods sold up to today in the current month	Financial KPI factor COGS (factor 015)	Yes	CN, DE, GB, US
Credit Limit Deviation	Total of the following of all customers: In the Business Partner Master Data window, Credit Limit on the Payment Terms tab minus Account Balance minus Deliveries minus Orders. In Customer 360, this KPI displays the result for the relevant customer.	User-defined query Credit Limit Deviation	No	All
Current Ratio	The ratio between the total current assets and total current liabilities of a company on the current day	KPI Total Current Assets ÷ KPI Total Current Liabilities	No	CN, DE, GB, US
Customer Balance (LC)	The account balance of customers. The data is taken from the Account Balance field of the Business Partner Master Data window of customers. In the SAP Business One Sales app, this KPI appears on the General tab of customers by default, and displays the account balance of the specific customer. For more information about customizing the advanced dashboard to be displayed in the SAP Business One Sales app, see Predefined Advanced Dashboards.	User-defined query Balance Due	No	All
Debt Ratio	The percentage of a company's assets that are provided via debt on the current day	KPI Total Liabilities ÷ KPI Total Assets	No	CN, DE, GB, US
DIO	Days of inventory outstanding up to today in the current month. Days of inventory outstanding, the average number of days a company takes to sell its inventory.	KPI Inventory ÷ KPI COGS × 30	No	CN, DE, GB, US
DPO	Days of payable outstanding up to today in the current month. Days of payable outstanding, the average number of days a company takes to pay its suppliers.	KPI Accounts Payable ÷ KPI COGS × 30	No	CN, DE, GB, US

KPI Name	KPI Description	Data Source	Interim or Not	Localization
DSO	Days of sales outstanding up to today in the current month. Days of sales outstanding, the average number of days a company takes to collect its account receivables	KPI *Accounts Receivable* ÷ KPI *Net Sales Revenue* × 30	No	CN, DE, GB, US
Expense 1	Expense amount that needs to be deducted from operating income for generating net profit	Financial KPI factor *Expense 1* (factor 023)	Yes	DE, GB, US
Expense 2	Expense amount that needs to be deducted from operating income for generating net profit	Financial KPI factor *Expense 2* (factor 024)	Yes	DE, GB, US
Gearing Ratio	The proportion of debt to equity on the current day	KPI *Total Liabilities* ÷ KPI *Total Equity*	No	CN, DE, GB, US
Goods Return Amount	Goods return amount in the current month	User-defined query *Goods Return Amount*	No	All
Gross Profit	Gross profit amount gained up to today in the current month	Financial KPI factor *Gross Profit* (factor 016)	No	CN
		KPI *Net Sales Revenue* − KPI *COGS*		DE, GB, US
Gross Profit (LTD)	Gross profit amount gained until today	Calculation view *Profitability Analysis*	No	All
Gross Profit (YTD)	Gross profit amount gained in this year so far	Calculation view *Profitability Analysis*	No	All
Gross Profit Margin	Gross profit margin up to today in the current month	KPI *Gross Profit* ÷ KPI *Net Sales Revenue*	No	CN, DE, GB, US
Gross Profit Margin (YTD)	Gross profit amount divided by net sales amount in this year so far	Calculation view *Profitability Analysis*	No	All
GRPO Not Invoiced	Goods receipt of purchase order not invoiced in the current month	User-defined query *GRPO Not Invoiced*	No	All
Inbound Inventory Value	Inbound inventory value in the current month	User-defined query *Inbound Inventory Value*	No	All

KPI Name	KPI Description	Data Source	Interim or Not	Localization
Inventory	Inventory amount on the current day	Financial KPI factor *Inventory* (factor 002)	Yes	CN, DE, GB, US
Inventory Turnover	Inventory turnover ratio up to today in the current month	KPI *COGS* ÷ KPI *Inventory*	No	CN, DE, GB, US
Inventory Turnover (Year)	Inventory turnover of the last 12 months	User-defined query *Inventory Turnover*	No	All
Inventory Value	Inventory value on the current day	User-defined query *Inventory Value*	No	All
Net Cash Flow	Net cash flow amount up to today in the current month	Financial KPI factor *Net Cash Flow* (factor 028)	No	CN, DE, GB, US
Net Cash Flow (Financial)	Net cash flow amount spent on financing activities up to today in the current month	Financial KPI factor *Net Cash Flow (Financing)* (factor 027)	No	CN, DE, GB, US
Net Cash Flow (Investment)	Net cash flow amount spent on investing activities up to today in the current month	Financial KPI factor *Net Cash Flow (Investing)* (factor 026)	No	CN, DE, GB, US
Net Cash Flow (Operating)	Net cash flow amount spent on operating activities up to today in the current month	Financial KPI factor *Net Cash Flow (Operating)* (factor 025)	No	CN, DE, GB, US
Net Profit	Net profit amount gained up to today in the current month	Financial KPI factor *Net Profit* (factor 020)	No	CN
		KPI *Operating Income* – KPI *Expense 1* – KPI *Expense 2*		DE, GB, US
Net Profit Margin	Net profit margin up to today in the current month	KPI *Net Profit* ÷ KPI *Net Sales Revenue*	No	CN, DE, GB, US
Net Sales Revenue	Net sales revenue amount achieved up to today in the current month	Financial KPI factor *Net Sales Revenues* (factor 012)	No	CN, DE, GB, US

KPI Name	KPI Description	Data Source	Interim or Not	Localization
Number of Open Deliveries	Total number of deliveries whose status is *Open*. In Customer 360, this KPI displays the number for the relevant customer.	User-defined query *Number of Open Deliveries*	No	All
Number of Open Sales Orders	Total number of sales orders whose status is *Open*. In Customer 360, this KPI displays the number for the relevant customer.	User-defined query *Number of Open Sales Orders*	No	All
Number of Open Sales Quotations	Total number of sales quotations whose status is *Open*. In Customer 360, this KPI displays the number for the relevant customer.	User-defined query *Number of Open Sales Quotations*	No	All
Number of Open Service Calls	Total number of service calls whose status is not *Closed*. In Customer 360, this KPI displays the number for the relevant customer.	User-defined query *Number of Open Service Calls*	No	All
OC	Operating cycle up to today in the current month. Operating cycle, the average number of days a company takes in realizing its inventories in cash, equaling the time taken in selling inventories plus the time taken in recovering cash from trade receivables	KPI *DSO*+ KPI *DIO*	No	CN, DE, GB, US
On-Time Delivery Rate	The total of the following: The result of the number of on-time delivered sales orders divided by the number of all delivered sales orders to each business partner. This KPI covers sales orders within this year according to their document dates. The deliveries whose posting dates are earlier than or equal to the posting dates of sales orders are considered as on-time deliveries. In Customer 360, this KPI displays the rate for the relevant customer.	Calculation view *On-Time Delivery Analysis*	No	All
Open Amount of Deliveries	Total open amount of all deliveries	Calculation view *Delivery Header*	No	All

KPI Name	KPI Description	Data Source	Interim or Not	Localization
Operating Cost	Operating cost generated up to today in the current month	Financial KPI factor *Operating Costs* (factor 017)	Yes	DE, GB, US
Operating Income	Operating income gained up to today in the current month	Financial KPI factor *Operating Income* (factor 018)	No	CN
		KPI *Gross Profit* – KPI *Operating Cost*		DE, GB, US
Operating Margin	Operating margin up to today in the current month	KPI *Operating Income* ÷ KPI *Net Sales Revenue*	No	CN, DE, GB, US
Opportunity Win Rate (LTD)	The result of the number of won opportunities divided by the number of all opportunities until today	Calculation view *Opportunity Win Rate Analysis*	No	All
Outbound Inventory Value	Outbound inventory value in the current month	User-defined query *Outbound Inventory Value*	No	All
Payables Overdue	Payables overdue up to today	(total *Balance Due* – total *Future Remit*) in the *Vendor Liabilities Aging* report	No	All
Potential Amt of Open Opportunities	The total potential amount of all open opportunities whose start dates are within this year. The data is taken from the *Potential Amount* field on the *Potential* tab of the *Opportunity* window.	Calculation view *Opportunities*	No	All
Potential Amt of Open Opportunities - Curr. User	The total potential amount of all open opportunities of the currently logged-on sales employee. The data is taken from the *Potential Amount* field on the *Potential* tab of the *Opportunity* window of the currently logged-on sales employee. In the SAP Business One Sales app, this KPI appears in the KPI screen by default. For more information about customizing the advanced dashboard to be displayed in the SAP Business One Sales app, see Predefined Advanced Dashboards.	User-defined query *Opportunity*	No	All

KPI Name	KPI Description	Data Source	Interim or Not	Localization
Quick Ratio	An indication of a company's ability to use its near cash or quick assets to extinguish or retire its current liabilities immediately on the current day	(KPI *Cash* + KPI *Accounts Receivable*) ÷ KPI *Total Current Liabilities*	No	CN, DE, GB, US
Receivables Overdue	Receivables overdue up to today	(total *Balance Due* – total *Future Remit*) in the *Customer Receivables Aging* report	No	All
ROE	Return on equity, an indication of a company's efficiency at generating profits from every unit of its total equity up to today in the current month	KPI *Net Profit* ÷ KPI *Total Equity*	No	CN, DE, GB, US
Sales Order Amount of This Month (LC) - Curr. User	The total sales order amount of this month of the currently logged-on sales employee. The data is taken from the *Total* field of the *Sales Order* window whose posting date is within the current month of the currently logged-on sales employee. In the SAP Business One Sales app, this KPI appears in the KPI screen by default. For more information about customizing the advanced dashboard to be displayed in the SAP Business One Sales app, see Predefined Advanced Dashboards.	User-defined query *Sales Order*	No	All
Sales Return Amount	Sales return amount in the current month	User-defined query *Sales Return Amount*	No	All
Sales Return Amount for This Year	Total amount of sales returns whose posting dates are within this year	Calculation view *Return Header*	No	All
Total Amount of Open Deliveries (LC)	The total amount of all open deliveries. The data is taken from the *Total* field of the *Delivery* window whose status is *Open*. In the SAP Business One Sales app, this KPI appears on the *General* tab of customers by default, and displays the total amount of all open deliveries of the specific customer.	User-defined query *Sales Order*	No	All

KPI Name	KPI Description	Data Source	Interim or Not	Localization
	For more information about customizing the advanced dashboard to be displayed in the SAP Business One Sales app, see Predefined Advanced Dashboards.			
Total Assets	Total assets on the current day	Financial KPI factor *Total Assets* (factor 006)	No	CN, DE, GB, US
Total Current Assets	Total current assets amount on the current day	Financial KPI factor *Current Assets* (factor 005)	Yes	CN, DE, GB, US
Total Current Liabilities	Total current liabilities amount on the current day	Financial KPI factor *Current Liabilities* (factor 008)	Yes	CN, DE, GB, US
Total Equity	Total equity on the current day	Financial KPI factor *Total Equity* (factor 011)	No	CN, DE, GB, US
Total Liabilities	Total liabilities on the current day	Financial KPI factor *Total Liabilities* (factor 010)	No	CN, DE, GB, US
Total Payable Amount	Total payable amount in the current month	User-defined query *Total Payable Amount*	No	All
Total Purchase Amount	Total purchase amount in the current month	User-defined query *Total Purchase Amount*	No	All
Total Receivable Amount	Total receivable amount in the current month	User-defined query *Total Receivable Amount*	No	All
Total Receivable Amount YTD	Total receivable amount in this year so far	Calculation view *Customer Receivables Aging*	No	All
Total Sales Amount	Total sales amount in the current month	User-defined query *Total Sales Amount*	No	All
Total Sales Amount (LTD)	Total sales amount until today	Calculation view *Profitability Analysis*	No	All

KPI Name	KPI Description	Data Source	Interim or Not	Localization
Total Sales Amount (YTD)	Total sales amount in this year so far	Calculation view *Profitability Analysis*	No	All
Weighted Amount of All Open Opportunities (LC)	Total (YTD) weighted amount of all open sales opportunities displayed in the local currency. The KPI covers opportunities within the current year according to their start dates.	Calculation view *Opportunity Win Rate Analysis*	No	All
Working Capital	Total working capital up to the current day	KPI *Cash* + KPI *Accounts Receivable* + KPI *Inventory* − KPI *Accounts Payable*	No	CN, DE, GB, US

3 Working with Pervasive Dashboards

The pervasive analytics designer enables you to design pervasive dashboards of your own based on the following:

- Queries in SAP Business One, version for SAP HANA
- Calculation views in the SAP HANA database

> **i Note**
>
> o For a newly created company in SAP Business One 9.2, version for SAP HANA, the compatibility mode is *Off*, and thus only calculation views are available.
>
> o SAP Business One 9.2, version for SAP HANA companies upgraded from versions that have the compatibility mode feature, will have the same settings for the compatibility mode as the previous versions.
>
> o The compatibility mode is *On* for SAP Business One 9.2, version for SAP HANA companies upgraded from versions that:
>
> > o Do not have the compatibility mode feature
> >
> > o Are initialized
>
> Thus, they will have the previously provided analytic and attribute views.
>
> o The compatibility mode is *Off* for SAP Business One 9.2, version for SAP HANA companies upgraded from versions that:
>
> > o Do not have the compatibility mode feature
> >
> > o Are not initialized
>
> Thus, only calculation views are available.
>
> For more information about the compatibility mode, look for the *SAP Business One Administrator's Guide, version for SAP HANA* on sappartneredge.com.

In the pervasive analytics designer, you can also add the following types of actions to pervasive dashboards. For more information, see Adding Actions to Pervasive Dashboards.

- Link the pervasive dashboards to SAP Business One, version for SAP HANA windows, and the pervasive dashboards will appear in sidebars.
- Open SAP Business One, version for SAP HANA windows.
- Trigger enterprise search.
- Open advanced dashboards.

The actions will appear when you right-click the data of pervasive dashboards in the Fiori-style cockpit or an advanced dashboard.

> **i Note**
>
> For more information about the semantic layer data sources, look for the *How to Work with Semantic Layers* guide on sappartneredge.com.

3.1 Designing Pervasive Dashboards Using the Pervasive Analytics Designer

For more information about creating crystal dashboards for SAP Business One, version for SAP HANA using SAP Crystal Dashboard Design, look for the *How to Develop Your Own Dashboards* guide on sappartneredge.com.

Prerequisites

- You have installed the app framework for SAP Business One, version for SAP HANA. For more information about installing the app framework, look for the *Working with App Framework for SAP Business One, version for SAP HANA* guide on sappartneredge.com.
- You have authorizations for the pervasive analytics designer. To set authorizations for the pervasive analytics designer to users, from the SAP Business One, version for SAP HANA *Main Menu*, choose *Administration → System Initialization → Authorizations → General Authorizations*. In the *Authorizations* window, select the user for whom you want to set authorizations, and under *Analytics,* in *Pervasive Analytics Designer,* select *Full Authorization*.

Procedure

1. In the SAP Business One, version for SAP HANA toolbar, choose 🗗 (*Pervasive Analytics*).

   Alternatively, in the SAP Business One, version for SAP HANA menu bar, choose *Tools → Pervasive Analytics*.

   The *Pervasive Analytics* window appears.

   > **i** Note
   >
   > Only users with authorizations for the pervasive analytics designer can access the window.

2. On the left side of the *Pervasive Analytics* window, choose *New Dashboard*.

The dashboard designer appears.
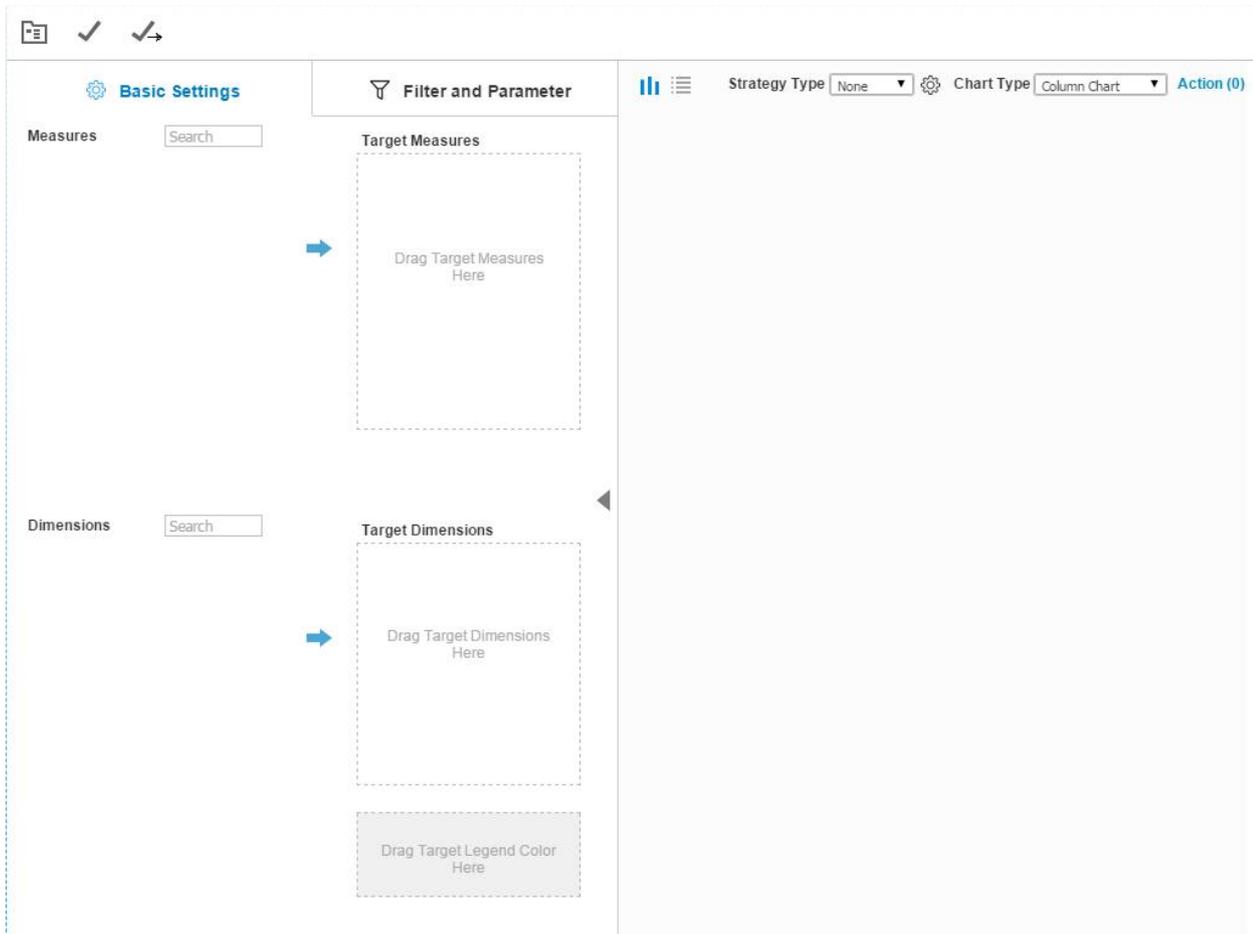
3. In the upper left corner of the dashboard designer, choose ▦ (*Select Base Data Source*).

The *Select Base Data Source* window appears, displaying the following:

o All the system and customized *SELECT* queries

o All the deployed calculation views in the SAP HANA database

ⓘ Note

o For a newly created company in SAP Business One 9.2, version for SAP HANA, the compatibility mode is *Off*, and thus only calculation views are available.

o SAP Business One 9.2, version for SAP HANA companies upgraded from versions that have the compatibility mode feature, will have the same settings for the compatibility mode as the previous versions.

o The compatibility mode is *On* for SAP Business One 9.2, version for SAP HANA companies upgraded from versions that:

   o Do not have the compatibility mode feature

   o Are initialized

   Thus, they will have the previously provided analytic and attribute views.

o The compatibility mode is *Off* for SAP Business One 9.2, version for SAP HANA companies upgraded from versions that:

   o Do not have the compatibility mode feature

   o Are not initialized

   Thus, only calculation views are available.

For more information about the compatibility mode, look for the *SAP Business One Administrator's Guide, version for SAP HANA* on sappartneredge.com.

4. In the *Select Base Data Source* window, select the query or view based on which you want to design a pervasive dashboard. The right side of the window displays the details and up to 20 results.

   [Optional] If you select a query, to open the query, choose the *Edit Data Source* button.

5. In the *Select Base Data Source* window, choose the *OK* button.
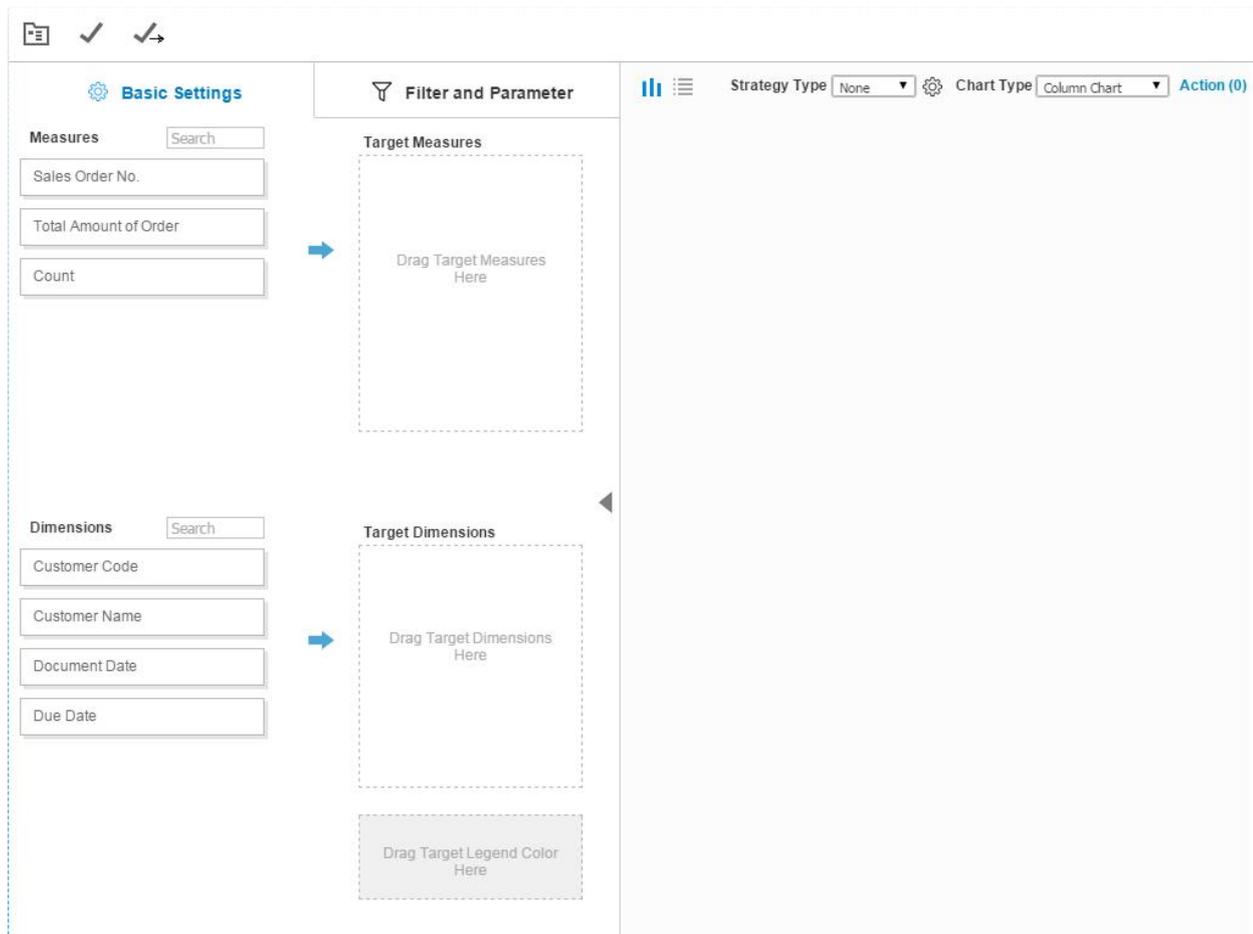
If you selected a query, the *Measures* area displays numerical columns of the query, and the *Dimensions* area displays non-numerical columns of the query.

If you selected a view, the *Measures* area displays the measures and calculated measures of analytic views, or measures of calculation views, and the *Dimensions* area displays the attributes of views.

6. On the *Basic Settings* tab, specify the basic settings of the pervasive dashboard. For more information, see Basic Settings Tab.

7. [Optional] On the *Filter and Parameter* tab, specify filters and parameters. For more information, see Filter and Parameter Tab .

8. [Optional] In the dashboard result area, you can perform the following:

   o Select a strategy type to perform data analysis. For more information, see Using Strategies in the Dashboard Designer.

   o Choose *Action* and add actions to the pervasive dashboard. For more information, see Adding Actions to Pervasive Dashboards.

   o Enable the time slider for displaying time-related data. For more information, see Using the Time Slider.
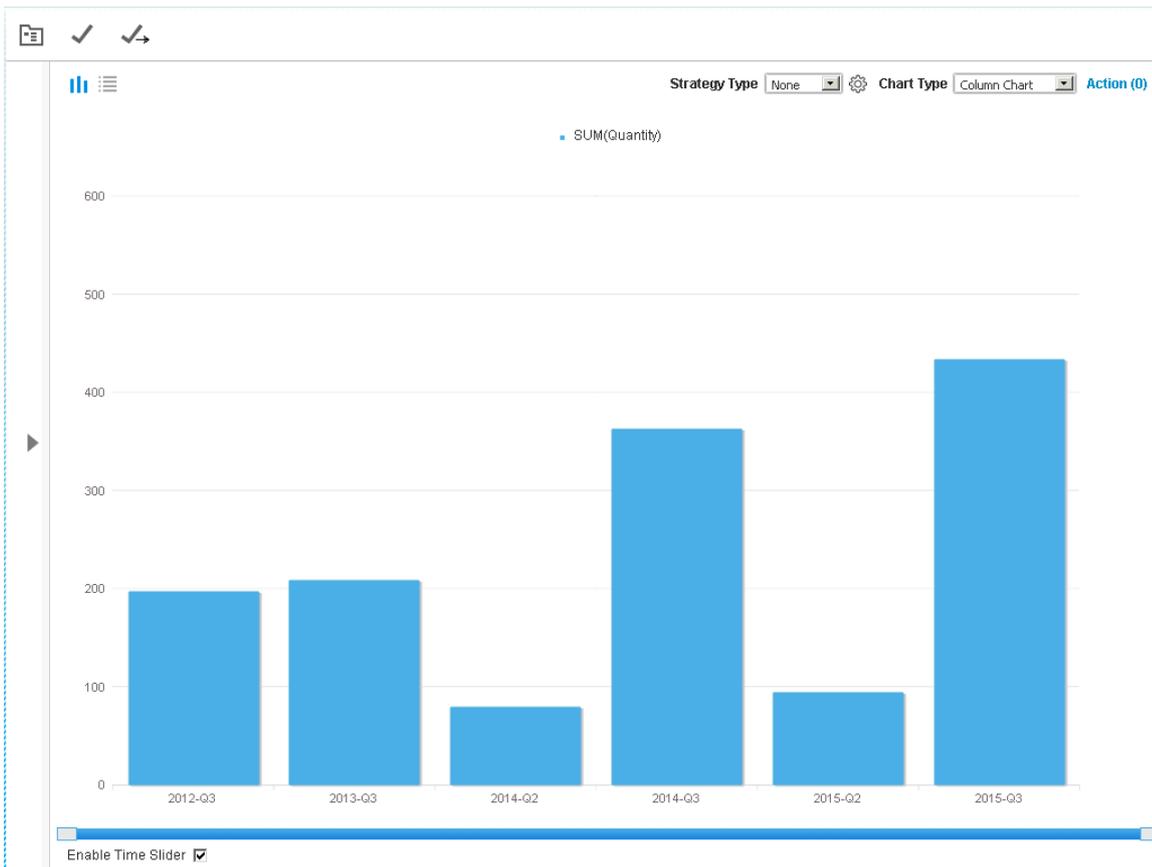
9. To save the dashboard, in the upper left corner, choose ✓ (*Save*); to save the dashboard as a new one, if you opened an existing dashboard, in the upper left corner, choose ✓→ (*Save As*).

3.1.1 Basic Settings Tab

On the *Basic Settings* tab of the dashboard designer, drag the required measures and dimensions to the target areas to design your own dashboard. During your design process, the dashboard on the right displays real-time results.

Procedure

On the *Basic Settings* tab, you can perform the following:

- For target measures, you can perform the following:
  - Select a calculation method for the measures: *Sum*, *Cumulative Sum*, *Minimum*, *Maximum*, *Average*, *Count*, or *Original*. To do this, click the measure, and select *Calculation*.

    i **Note**

    Calculation method *Original* is not supported when you define a legend color. For more information about legend colors, see Using Legend Color.

  - Sort the data of the measures: *Ascending*, *Descending*, or *No Sorting*. To do this, either click the measure, and select *Sort*, or click the sort icon ⬍ on the right of the measure.
  - Change the legend name in the dashboard. To do this, click the measure, select *Rename*, enter the name, and click anywhere else in the dashboard.
  - Drag measures up and down to change their display order in the legend.

- For target dimensions, you can perform the following:
  - Set the number of top values from 5 to 300 using the *Limit to Top* bar.

    i **Note**

    For strategies *K-Means Clustering* and *ABC Analysis*, the *Limit to Top* bar is not available.

    i **Note**

    When the time slider is enabled, the *Limit to Top* bar is not available. For more information about the time slider, see Using the Time Slider.

  - Drag dimensions up and down to change their display order on the dimension axis.
  - For dimensions of date type, select the time unit to display in the dashboard: *Year*, *Year-Quarter*, *Year-Month*, *Year-Week*, *Quarter*, *Month*, *Week*, and *Date*.

    i **Note**

    The *Enable Time Slider* checkbox is available only when you select *Year-Quarter, Year-Month, Year-Week,* and *Date*. For more information about the time slider, see Using the Time Slider.

i **Note**

When you add only one dimension, the dimension is of date type, and the time unit is only one of the following, in the SAP Business One Sales app, this pervasive dashboard will have three time tabs at the bottom.

- o If the time unit of the only dimension is *Year*, the default time tab in the pervasive dashboard in the SAP Business One Sales app is *Year*.

- o If the time unit of the only dimension is *Year-Quarter*, the default time tab in the pervasive dashboard in the SAP Business One Sales app is *Quarter*.

- o If the time unit of the only dimension is *Year-Month*, the default time tab in the pervasive dashboard in the SAP Business One Sales app is *Month*.
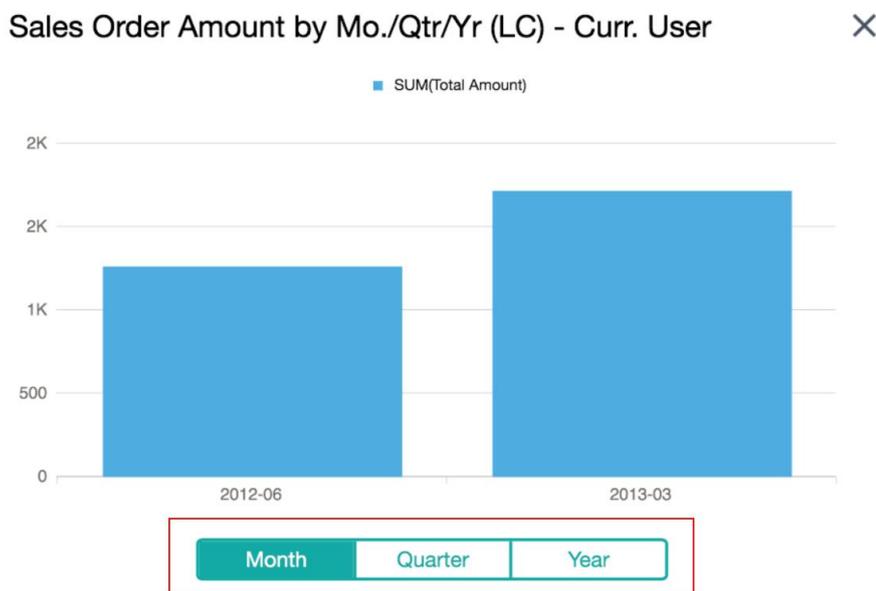
For more information about customizing the advanced dashboard to be displayed in the SAP Business One Sales app, see Predefined Advanced Dashboards.

For more information about the mobile app, look for the guides *How to Work with SAP Business One Sales, mobile app for iOS* or *How to Work with SAP Business One Sales, mobile app for Android* on sappartneredge.com.

- For legend color, you can slice corresponding measure values from the measure axis in comparison to the dimension that slices corresponding measure values from the dimension axis. For more information, see Using Legend Color.

3.1.1.1 Using Legend Color

i **Note**

You cannot use strategies if you are using the legend color function.

Prerequisites

- You have added only one measure, and its calculation method is not *Original*.
- You have added only one dimension.
- You are using the following chart types:
  - Column chart
  - Line chart
  - Stacked column chart
  - Multiple bar chart
  - Stacked bar chart

Procedure

1. In the *Select Base Data Source* window of the dashboard designer, select the query or view based on which you want to design a pervasive dashboard.

2. On the *Basic Settings* tab, drag required measures and dimensions to the target area.

   The screenshot displays the sales quantities of each customer.
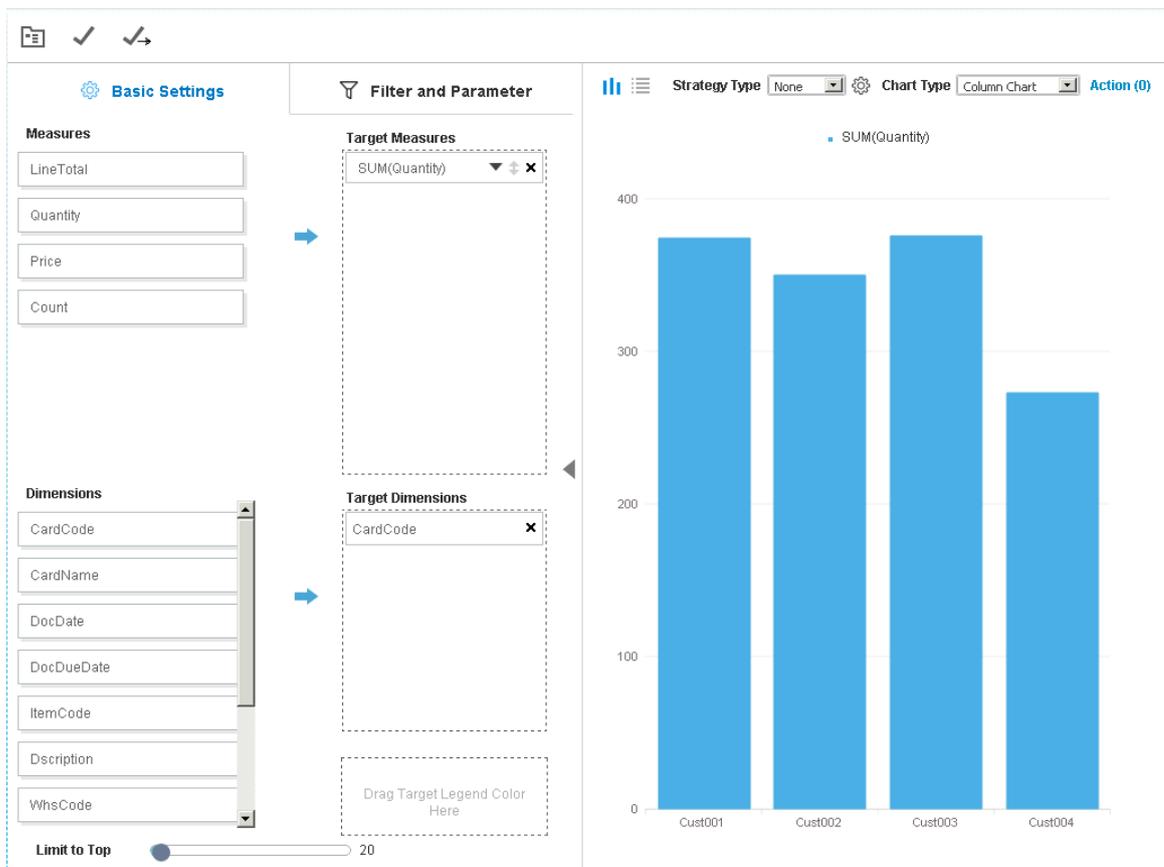
3. Drag another dimension to the legend color area.

   A value selection window appears, listing all the values in this dimension.

i Note

   You can select a maximum of three values.

In the screenshot, item code is applied as the legend color, and *Item001* and *Item002* were selected as the slicing values.
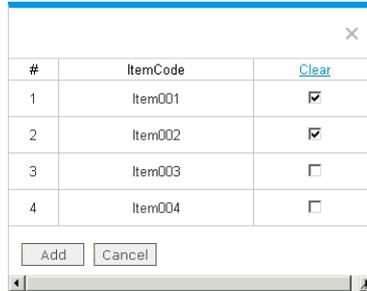
4. Select the values that you want to use to slice the measure values, and choose the *Add* button.

   The result area shows measure values sliced by the legend color values you selected.

   The screenshot displays the sales quantities of *Item001* and *Item002* for each customer.
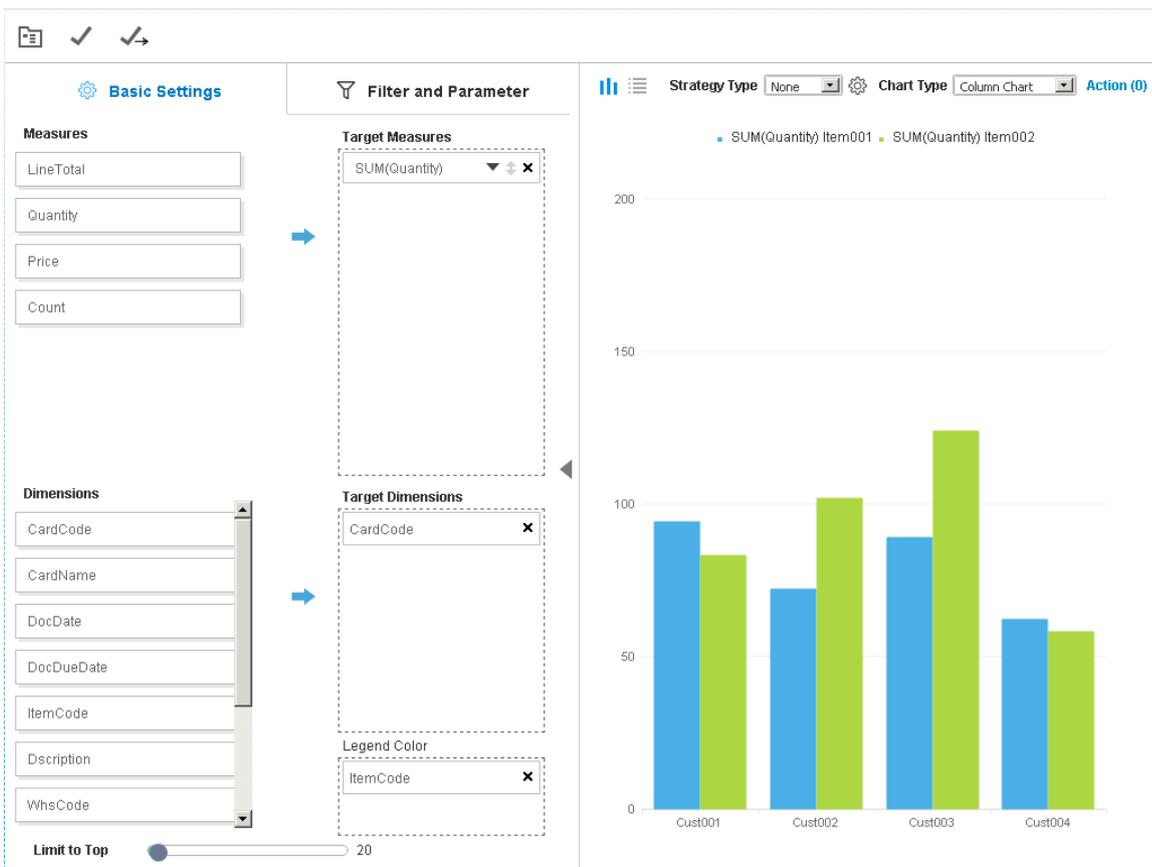
5. [Optional] To modify the legend color values, on the *Basic Settings* tab, click the legend color.

   The value selection window appears.

Result

- The legend color values appear on the *Filter and Parameter* tab. To edit or delete the legend color, go back to the *Basic Settings* tab.
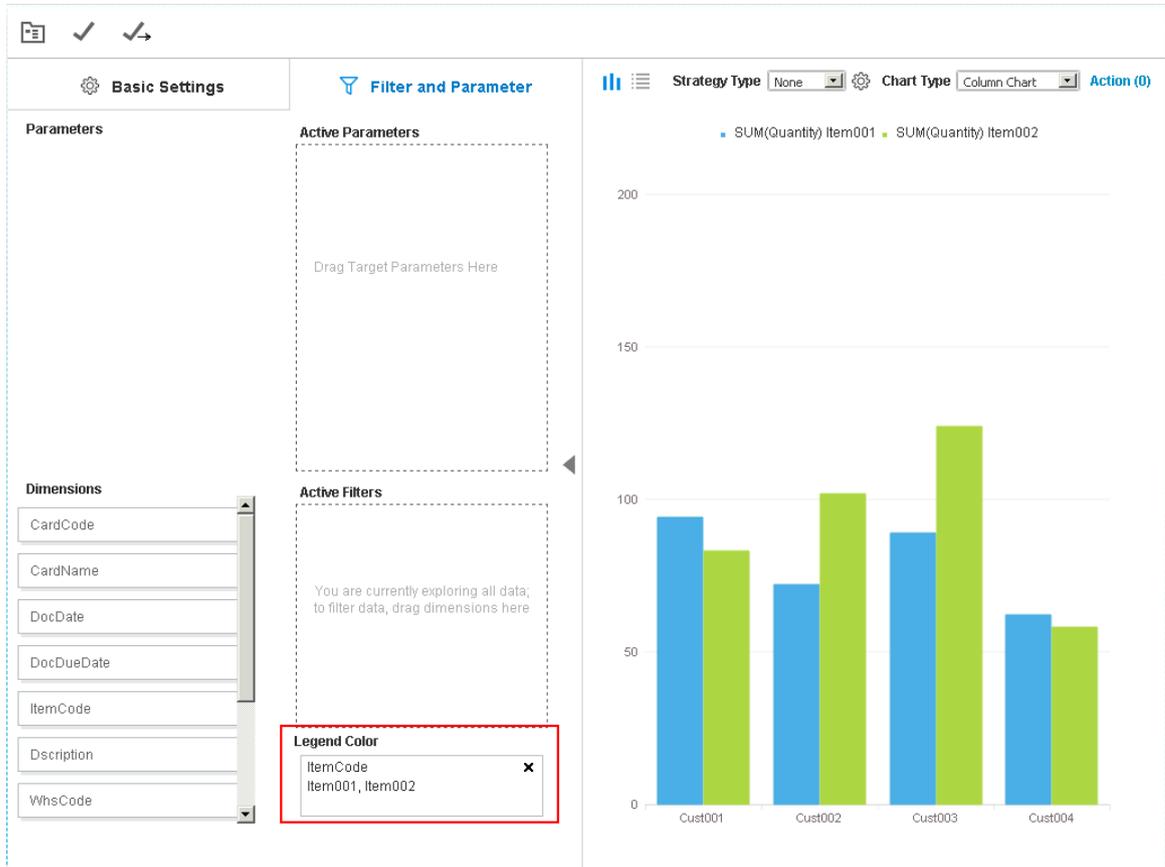
- In the advanced dashboard, you can view more or fewer legend color values.

  In the screenshots, *Item003* was also selected to display its sales quantities for each customer.

  ℹ **Note**

  Changing the legend color value only changes the display of this pervasive dashboard in the advanced dashboard. This does not change the pervasive dashboard.
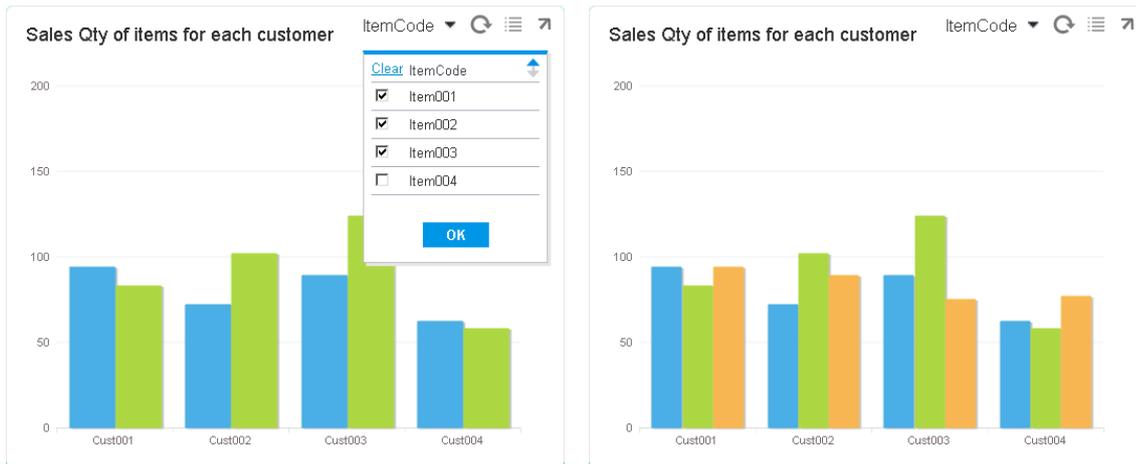
Useful Information

- When you drag a date type dimension to the legend color area, the time unit is automatically set to *Year*.
- When you drag a date type dimension to the legend color area, if the target dimension is also of date type, the time unit of the target dimension must be *Quarter*, *Month*, or *Week*.

  The dashboard in the screenshot shows the monthly sales quantities in 2014 and 2015.
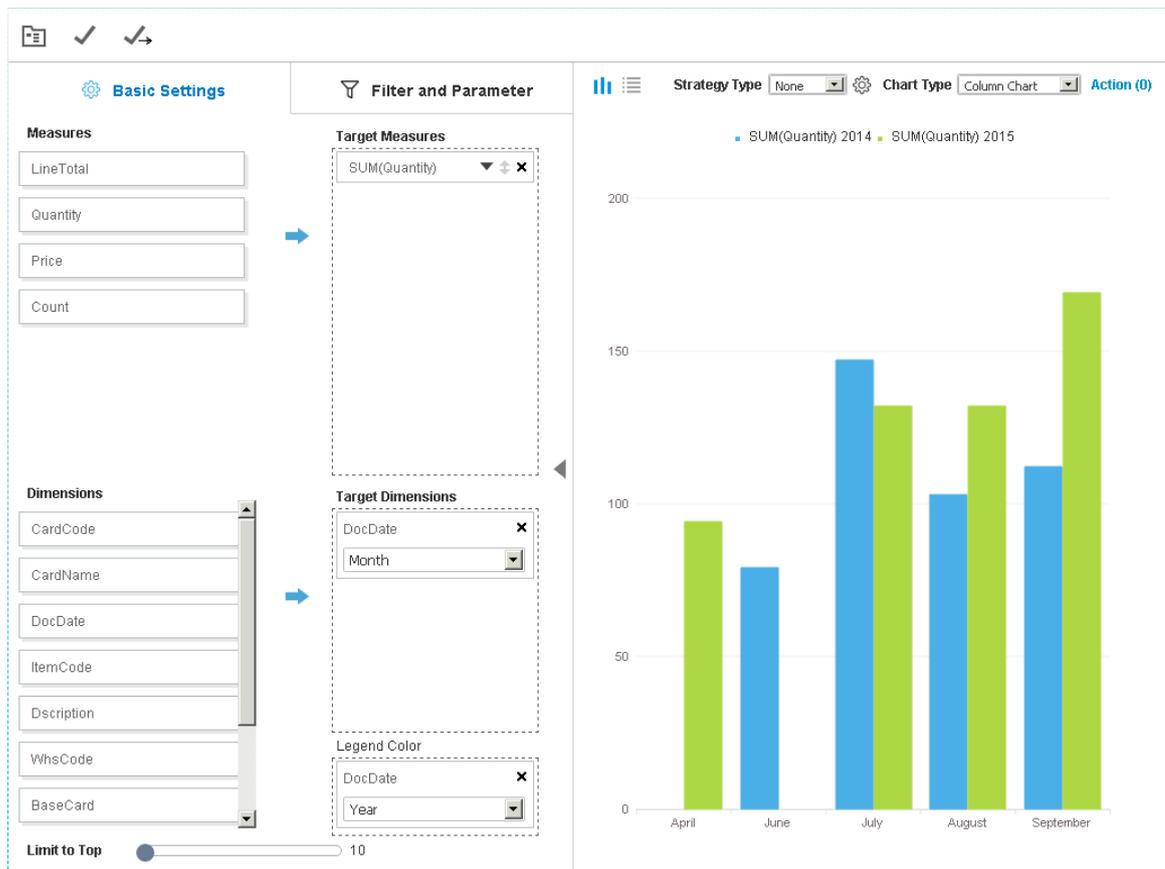
3.1.2   Filter and Parameter Tab

If you selected a query, the *Parameters* area displays the condition parameters.

If you selected a view, the *Parameters* area displays the input parameters of views.

On the *Filter and Parameter* tab of the dashboard designer, drag the required parameters and dimensions to the target areas to design your own dashboard. During your design process, the dashboard on the right displays real-time results.

Procedure

On the *Filter and Parameter* tab, you can perform the following:

- For parameters, you can perform the following:
  1. Drag the parameters to the target area.

     The *Parameter Editor* window appears.
  2. In the *Parameter Editor* window, perform the following based on the type of the parameter:
     - For a date type parameter, specify a default date.
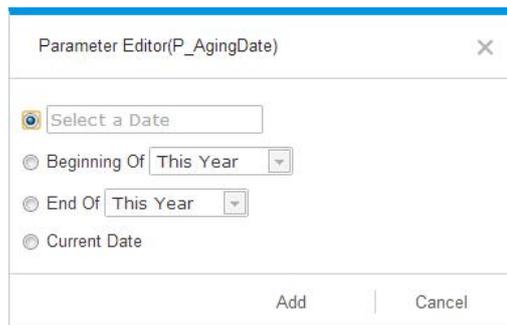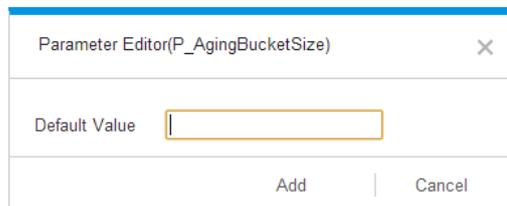
     - For a number type parameter, specify a default number.

     - For a string type parameter, specify a default value.
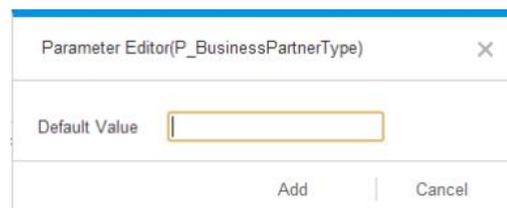
  3. To save the parameter settings, choose the *Add* button; to delete the parameter, in the target area, choose the ✖ icon.

     ℹ️ **Note**

     Some parameters are labeled with a red rectangle. To get a meaningful pervasive dashboard, you must drag those parameters to the target area.
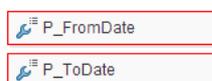
- For filters, you can perform the following:
  1. Drag the dimensions to the filter area.

     The *Filter Editor* window appears.
  2. In the *Filter Editor* window, perform the following based on the type of the dimension:
     - For a string type dimension, select a filtering value, or enter a filtering value and choose the *Add Value* button.

       The filtering value is added to the *Active Filters* section.

       For string type dimensions, *-Current User-* appears as a filtering value. If you choose this value, the code of the logged-on user will be used as the filtering value.
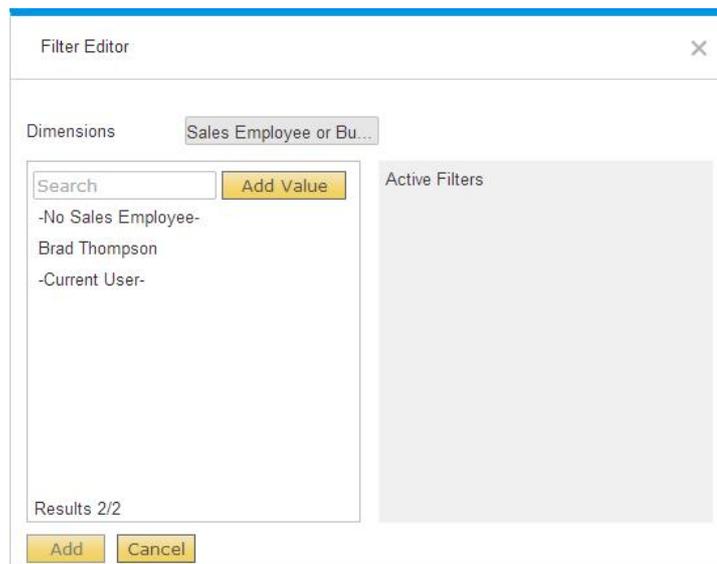
i **Note**

When the target measures filtered by certain filtering values have records in the database, then such and only such filtering values appear in the list. If you want to use other filtering values, you need to enter them and choose the *Add Value* button.

o   For a date type dimension, define a time range.
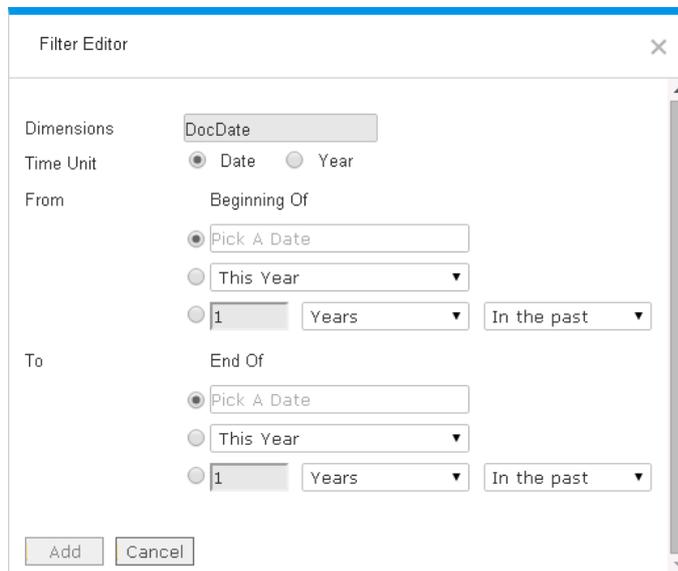
3. To save the filter settings, choose the *Add* button; to delete the filter, in the target area, choose the ✖ icon.

3.1.3   Dashboard Result Area

During your design process, this area displays real-time results. In this area, you can perform the following:

- To enlarge or restore the dashboard result area, choose ◀ or ▶.
- To change the chart types, in the *Chart Type* dropdown list, select the chart type that you want to use.

    i   Note

    The scatter chart supports at least two target measures.

    The bubble chart supports at least three target measures.

- To toggle between the dashboard view and the query result view, choose ▌▌or ☰

    ⚠ Caution

    In a pie chart, only the first dimension appears in the dashboard.

- Select a strategy type to perform data analysis. For more information, see Using Strategies in the Dashboard Designer.
- Choose *Action* and add actions to the pervasive dashboard. For more information, see Adding Actions to Pervasive Dashboards.
- Enable the time slider for displaying time-related data. For more information, see Using the Time Slider.

3.1.3.1 Using Strategies in the Dashboard Designer

The pervasive analytics designer allows you to use the following strategies:

- Forecast: use this strategy to make forecasts based on your existing data.
- K-Means Clustering: use this strategy to group all your data according to the k-means algorithm. The k-means algorithm partitions n records into k clusters, in which each record belongs to the cluster with the nearest center.
- ABC Analysis: use this strategy to classify data into three categories based on the values of the target measure in descending order.

Prerequisites

You have performed the following:

- You have installed the Application Function Library (AFL), which includes the SAP HANA Predictive Analysis Library (PAL). For more information about the Predictive Analysis Library, see the *SAP HANA Predictive Analysis Library (PAL) Reference* guide at http://help.sap.com/hana_platform. For more information about the database role PAL_ROLE, look for the *SAP Business One Administrator's Guide, version for SAP HANA* on sappartneredge.com.
- In the SAP HANA Studio, you have activated Script Server in your SAP HANA instance. See SAP Note 1650957 for further information.
- For a user-defined database user, you have assigned PAL_ROLE to this database user.
- You are not using the legend color or time slider function. For more information, see Using Legend Color and Using the Time Slider, respectively.

3.1.3.1.1 Using the Forecast Strategy

Prerequisite

In the dashboard designer, the type of all target dimensions must be DATE.

Procedure

1. In the *Select Base Data Source* window of the dashboard designer, select the query or view based on which you want to design a pervasive dashboard.
2. On the *Basic Settings* tab, specify the basic settings of the pervasive dashboard. For more information, see Basic Settings Tab.

3. In the dashboard designer, in the *Strategy Type* dropdown list, select *Forecast*.

    The forecast data appears in pink.
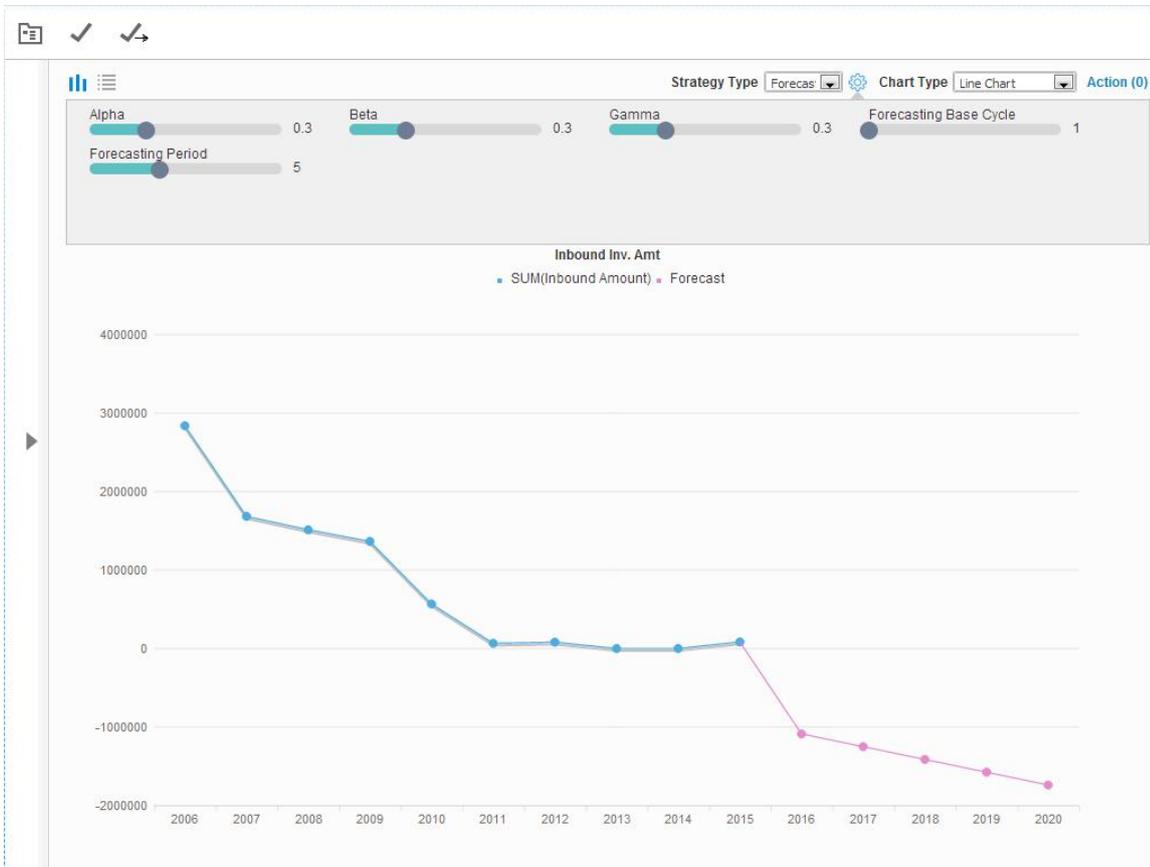
i Note

The *Forecast* strategy supports only the column and line charts.

i Note

The *Forecast* strategy supports only target dimensions whose display units are *Year*, *Quarter*, or *Month*. If there is more than one target dimension, their display units must be in the order of *Year*, *Quarter*, and *Month*.

4. To modify settings for the strategy, choose the ⚙ icon beside the *Strategy Type* dropdown list. In the settings area, you can define the following:

    o   *Alpha*, *Beta*, *Gamma*: three factors used in the forecasting calculation. For detailed information about the calculation, see the *Double Exponential Smoothing* and *Triple Exponential Smoothing* sections in the *SAP HANA Predictive Analysis Library (PAL) Reference* guide at http://help.sap.com/hana_platform.

    o   *Forecasting Base Cycle*: the cycle used for forecasting. You can change the cycle according to your own situation. For example, if your production cycle is six months, and you have defined the smallest display unit as *Month*, you define the base cycle as *6*, and the forecast will be calculated on a six-month cycle basis.

The default cycle is determined by the smallest display unit you selected in the *Target Dimensions* area. For example, the default cycle is *4* when the smallest display unit is *Quarter*, and the default cycle is *12* when the smallest display unit is *Month*.

For cycle *1*, the *Double Exponential Smoothing* calculation is used. For cycles other than *1*, the *Triple Exponential Smoothing* calculation is used.

ⅰ Note

The number of the smallest display units with data in the database must be greater than or equal to the forecasting base cycle multiplied by 2.

o *Forecasting Period*: the number of display units to be forecast.

3.1.3.1.2   Using the K-Means Clustering Strategy

Procedure

1. In the *Select Base Data Source* window of the dashboard designer, select the query or view based on which you want to design a pervasive dashboard.
2. On the *Basic Settings* tab, specify the basic settings of the pervasive dashboard. For more information, see Basic Settings Tab.

3. In the dashboard designer, in the *Strategy Type* dropdown list, select *K-Means Clustering*.

   The clustered data appears.
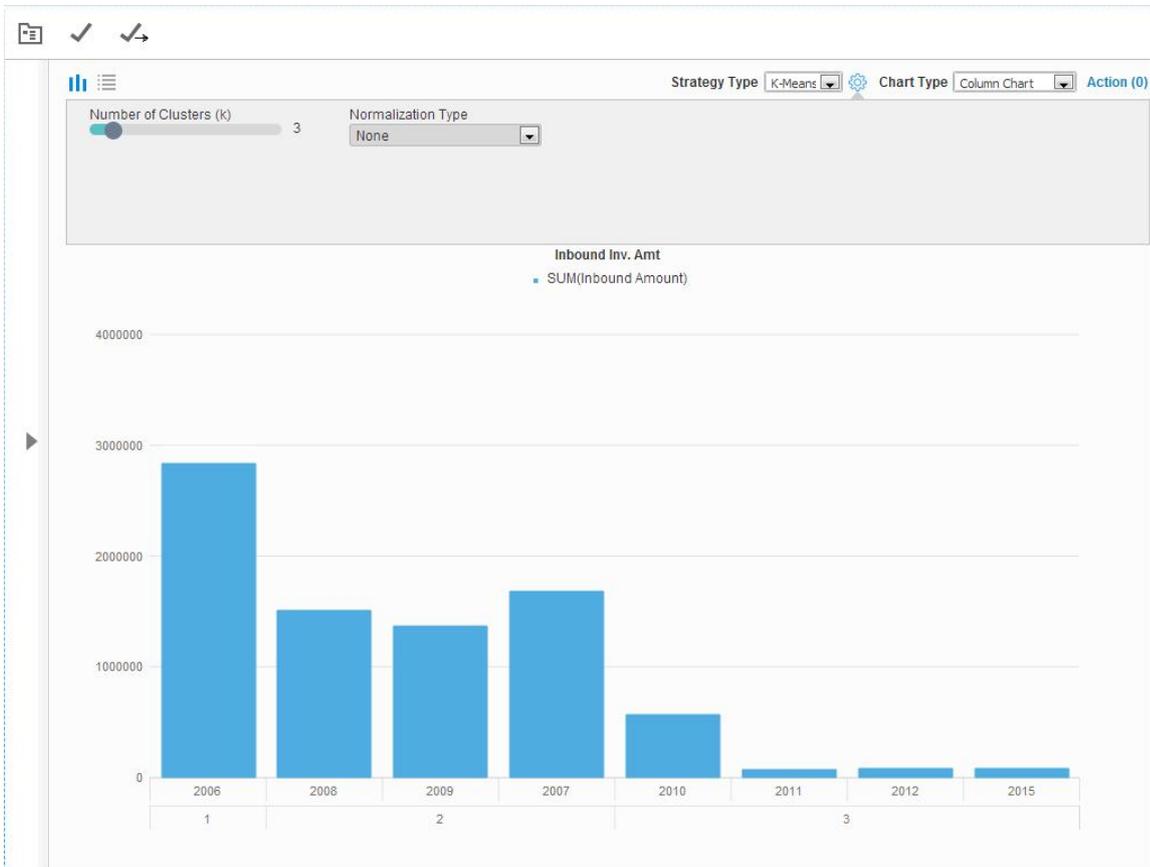
   ![Note icon] **Note**

   The *Limit to Top* bar is not available for this strategy.

4. To modify settings for the strategy, choose the ⚙ icon beside the *Strategy Type* dropdown list. In the settings area, you can define the following:

   o *Number of Clusters (k)*: the number of groups into which you want your data to be clustered. The default value is *3*.

   o *Normalization Type*: the type of the method that you want to use to normalize the data. Data normalization means adjusting values measured on different scales to a common scale. Pervasive analytics designer provides the following three options:

      o *None*: no normalization type is used. This is the default value.

      o *Percent*: for each point X (x1, x2, ..., xn), the normalized value will be X' (x1/S, x2/S, ..., xn/S), where S = |x1| + |x2| + ... |xn|. Each value will be converted to a new value in percentage.

      o *Linear*: for each column C, get the min and max value of C, and then C[i] = (C[i] - min)/(max-min). This normalization type is also known as the min-max normalization. It is a process of taking data measured in its engineering units (for example: miles per hour or degrees C) and transforming it to a value between 0.0 and 1.0, thus providing an easy way to compare values that are measured using different scales (for example degrees Celsius and degrees Fahrenheit) or different units of measure (speed and distance).

> **i** Note
>
> For detailed information about the calculation, see the *K-Means* section in the *SAP HANA Predictive Analysis Library (PAL) Reference* guide at http://help.sap.com/hana_platform.

3.1.3.1.3 Using the ABC Analysis Strategy

Prerequisite

In the dashboard designer, there must be only one target measure.

Procedure

1. In the *Select Base Data Source* window of the dashboard designer, select the query or view based on which you want to design a pervasive dashboard.
2. On the *Basic Settings* tab, specify the basic settings of the pervasive dashboard. For more information, see Basic Settings Tab.

3. In the dashboard designer, in the *Strategy Type* dropdown list, select *ABC Analysis*.

    The categorized data appears.
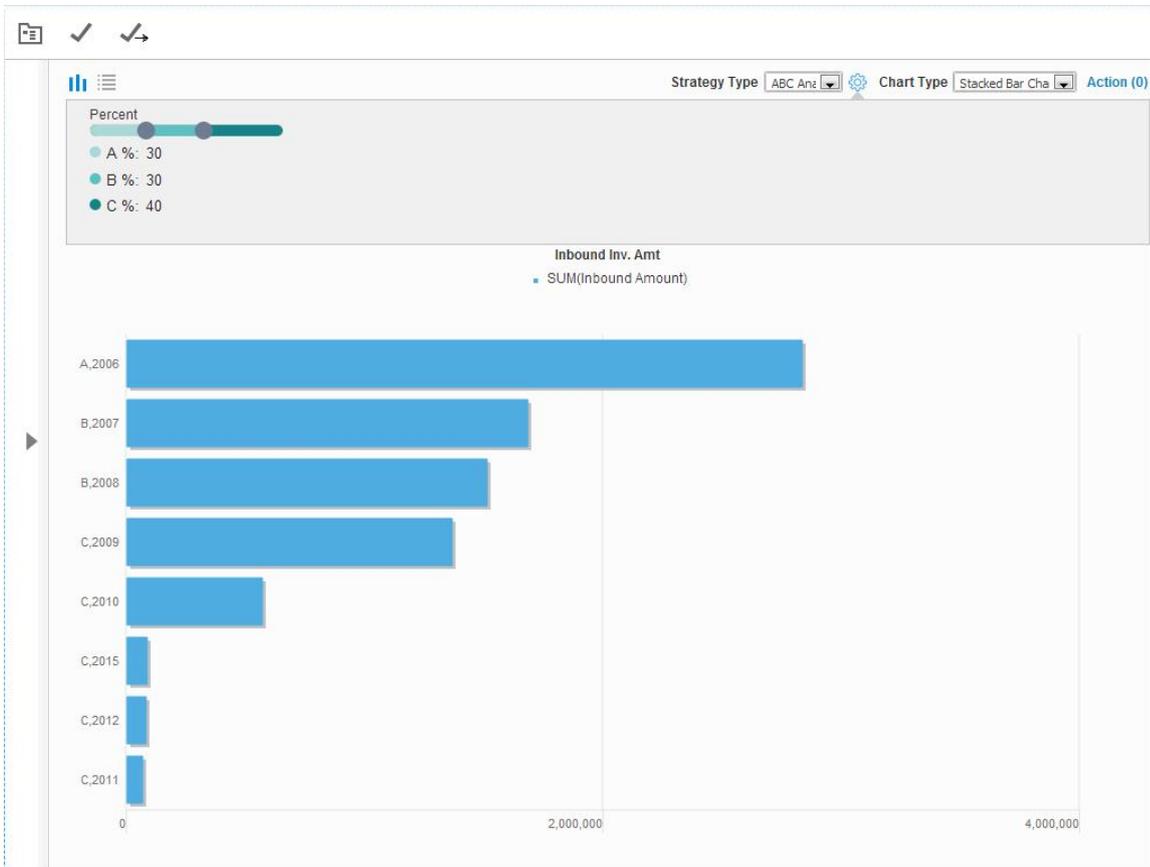
> **i** Note
>
> The *ABC Analysis* strategy supports all chart types except the scatter and bubble charts.

> **i** Note
>
> The *Limit to Top* bar is not available for this strategy.

4. To modify settings for the strategy, choose the ⚙ icon beside the *Strategy Type* dropdown list. In the settings area, for the *Percent* parameter, you can define the specific percentage that you want each category to occupy out of the total value in descending order.

> **i** Note
>
> For detailed information about the calculation, see the *ABC Analysis* section in the *SAP HANA Predictive Analysis Library (PAL) Reference* guide at http://help.sap.com/hana_platform.

3.1.3.2 Adding Actions to Pervasive Dashboards

To access the action section of a pervasive dashboard, in the upper right corner of the dashboard designer, choose *Action*. The action section displays all the actions that you have defined.

Procedure

To add actions to pervasive dashboards, follow the procedure below:

1. In the action section of a pervasive dashboard, choose ⊕ (*Add a New Action*) beside *Display Dashboard in Sidebars* or *Actions To Be Triggered.*
   The edit window appears.

2. You can add four types of actions. For more information, see the following sections.

3. To save the action, in the edit window, choose the *OK* button; to delete the action, in the action section, choose ✖ (*Remove*) beside the action.

3.1.3.2.1 Action: Link to SAP Business One Window

With this type of action, the current pervasive dashboard will appear in the sidebar of the linked SAP Business One, version for SAP HANA window.

Procedure

To add action type *Link to SAP Business One Window*, follow the procedure below:

1. In the action section of a pervasive dashboard, choose ⊕ (*Add a New Action*) beside *Display Dashboard in Sidebars.*

2. In the edit window, select the *Link to SAP Business One Window* radio button.

3. In the *Action Name* field, specify the action name.

4. In the *Target SAP Business One Window* dropdown list, select the window beside which you want your pervasive dashboard to appear. You can link to only one window with one action.
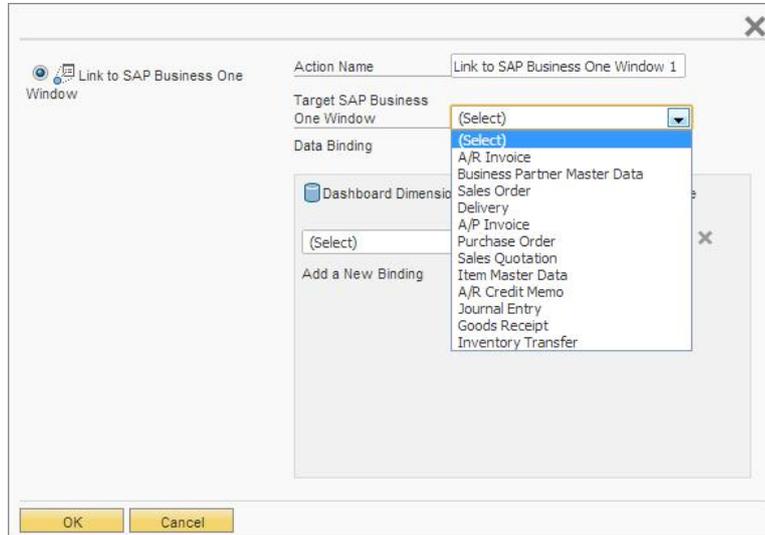
5. In the *Data Binding* section, select the dimension in the pervasive dashboard and link it to the field of the selected window. To add links to more fields, choose *Add a New Binding*.

    The pervasive dashboard will appear beside the window that you defined in the action. The value of the defined field in the action is transferred to its linked dimension, and the pervasive dashboard will display the data with the dimension value equal to the field value that you are exploring.

    For information about how to display the dashboard as a sidebar beside the linked window, see Viewing Linked Pervasive Dashboards in Sidebars.

6. To save the action, choose the *OK* button.
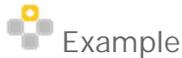
 Example

The pervasive dashboard displays the quantities of the best-selling items to the company's customers. You link the customer dimension in the dashboard to the business partner name in the *Business Partner Master Data* window. When navigating to a specific business partner in the *Business Partner Master Data* window, in the sidebar, you can see the quantities of the best-selling items to this business partner.

## 3.1.3.2.2   Action: Open SAP Business One Window

In the Fiori-style cockpit or an advanced dashboard, this type of action will appear when you right-click the data of pervasive dashboards. Choose this action to open the corresponding SAP Business One, version for SAP HANA window according to the data bindings that you have defined.

Procedure

To add action type *Open SAP Business One Window*, follow the procedure below:

1.   In the action section of a pervasive dashboard, choose ⊕ (*Add a New Action*) beside *Actions To Be Triggered*.

2. In the edit window, select the *Open SAP Business One Window* radio button.
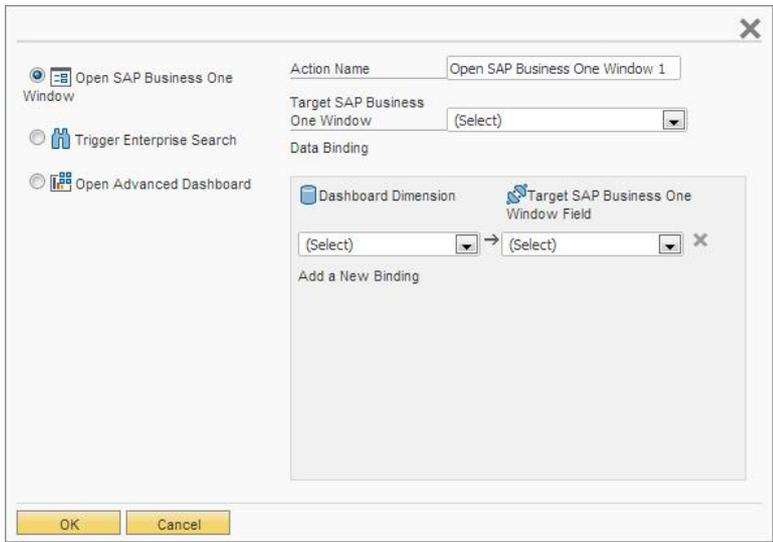
3. In the *Action Name* field, specify the action name.
4. In the *Target SAP Business One Window* dropdown list, select the window what you want to open. You can link to only one window with one action.
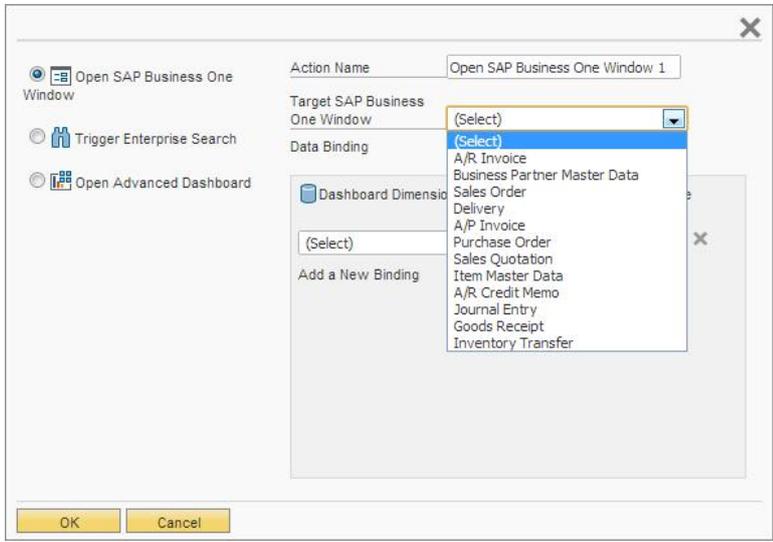
5. In the *Data Binding* section, select the dimension in the pervasive dashboard and link it to the field of the selected window. To add links to more fields, choose *Add a New Binding*.

    In the Fiori-style cockpit or an advanced dashboard, when you right-click a measure of the pervasive dashboard, and choose this action, the value of the defined dimension in the action is transferred to its linked field. The specific window appears with the field value equal to the dimension value.
6. To save the action, choose the *OK* button.

Example

You have performed the following:

1. In the pervasive dashboard, you added measure *Total Sales Amount*, and dimension *Customer Code* to the pervasive dashboard.
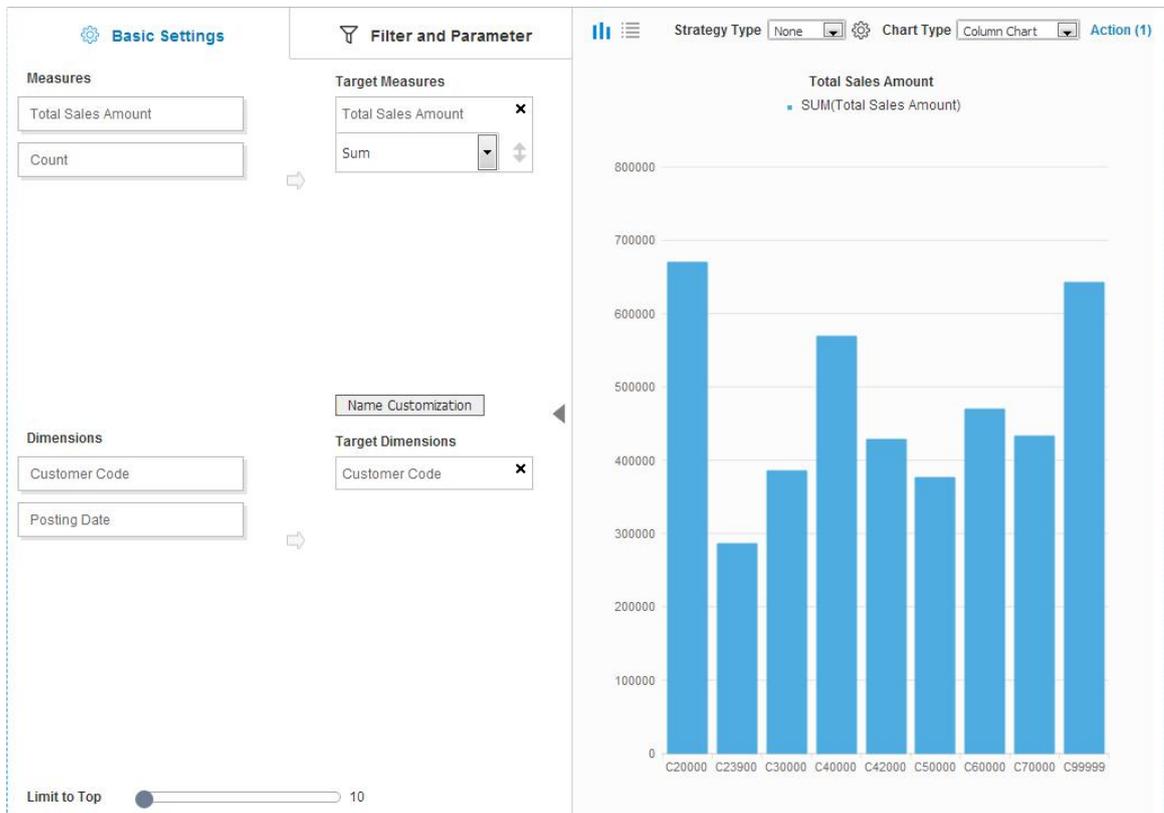
2. In the edit window, you selected the *Open SAP Business One Window* radio button, and specified `Open BP Master Data Based on Customer` as its name.

3. In the *Target SAP Business One Window* dropdown list, you selected *Business Partner Master Data*.

4. In the *Dashboard Dimension* dropdown list, you selected *Customer Code*.

5. In the *Target SAP Business One Window Field* dropdown list, you selected *BP Code*.
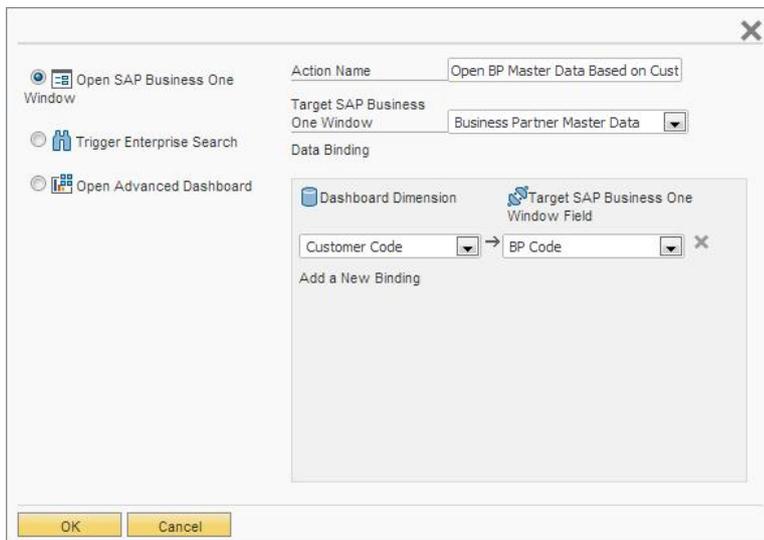
6. In the edit window, you chose the *OK* button.

Follow the procedure below to use the action:

1. In the Fiori-style cockpit or an advanced dashboard, right-click the total sales amount of a customer whose code is *C40000*, and choose *Open BP Master Data Based on Customer*.

2. The *Business Partner Master Data* window appears, with the *Code* field value as *C40000*.

3.1.3.2.3 Action: Trigger Enterprise Search

In the Fiori-style cockpit or an advanced dashboard, this type of action will appear when you right-click the data of pervasive dashboards. Choose this action to run an enterprise search with the dimension value as the search criterion.

Procedure

To add action type *Trigger Enterprise Search*, follow the procedure below:

1. In the action section of a pervasive dashboard, choose ⊕ (*Add a New Action*) beside *Actions To Be Triggered*.

2. In the edit window, select the *Trigger Enterprise Search* radio button.
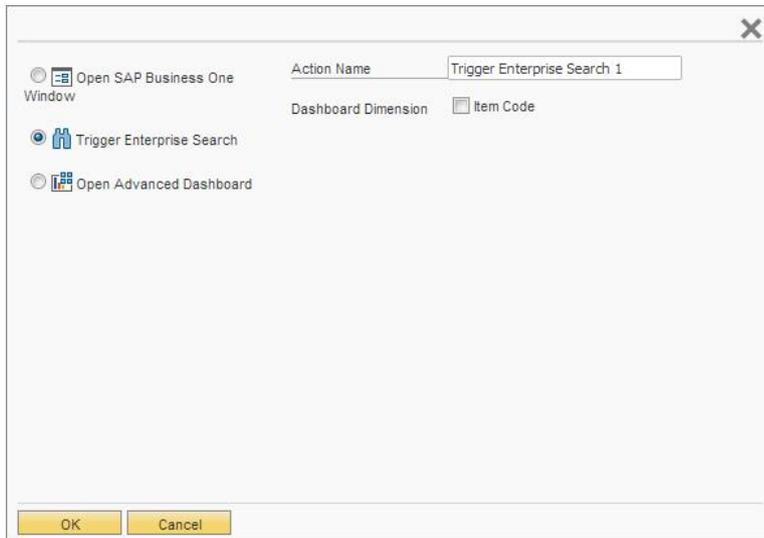
3. In the *Action Name* field, specify the action name.
4. In the *Dashboard Dimension* section, select the dimension whose value you want to use as the search criterion.

   ℹ **Note**

   If you select two or more dimensions, the application will search for results that contain all the dimension values.
5. To save the action, choose the *OK* button.

Example

You have performed the following:

1. In the pervasive dashboard, you added measure *Total Sales Amount*, and dimension *Customer Code* to the pervasive dashboard.
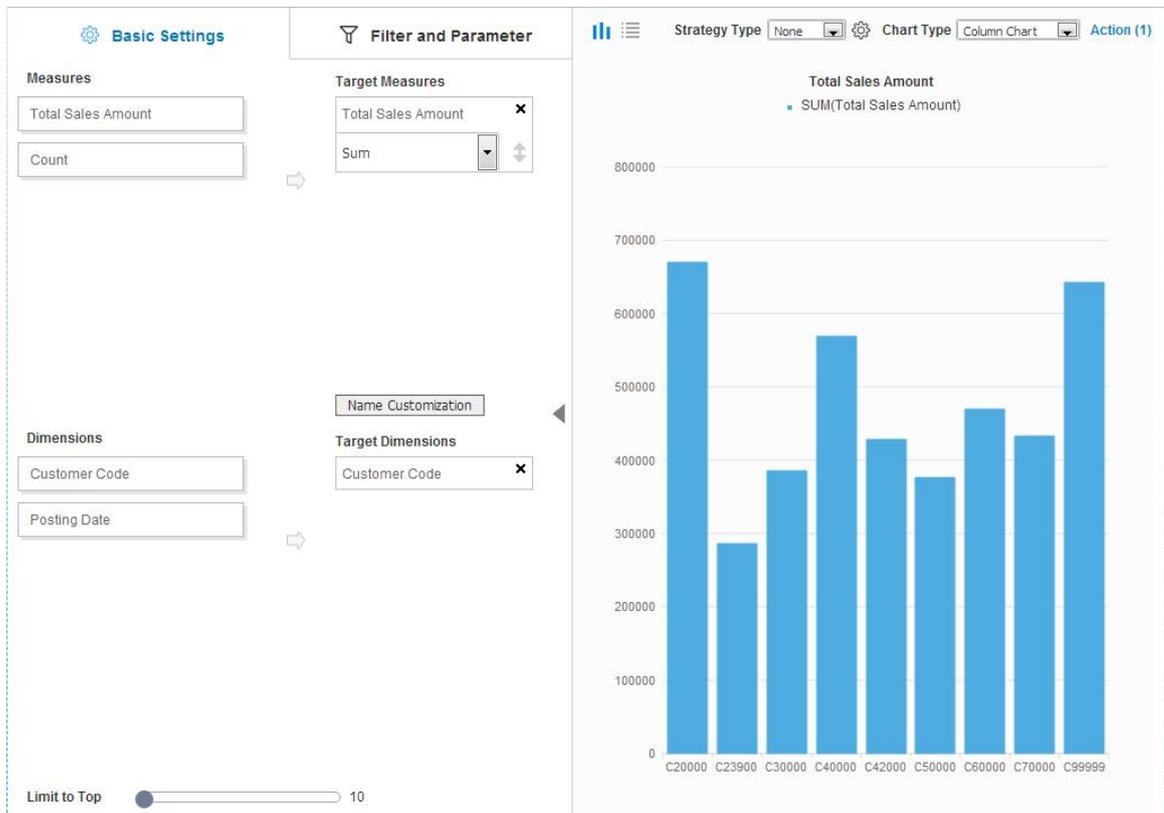
2. In the edit window, you selected the *Trigger Enterprise Search* radio button, and specified `Search for BP Code` as its name.

3. In the *Dashboard Dimension* section, you selected dimension *Customer Code*.
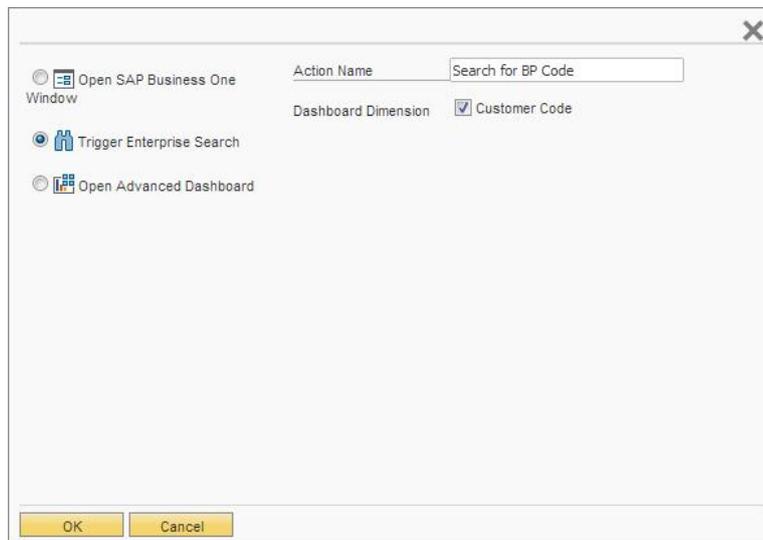
4. In the edit window, you chose the *OK* button.

   Follow the procedure below to use the action:

1. In the Fiori-style cockpit or an advanced dashboard, right-click the total sales amount of a customer whose code is *C40000*, and choose *Search for BP Code*.

2. The *Search Result* window appears, with *C40000* as its search criterion.
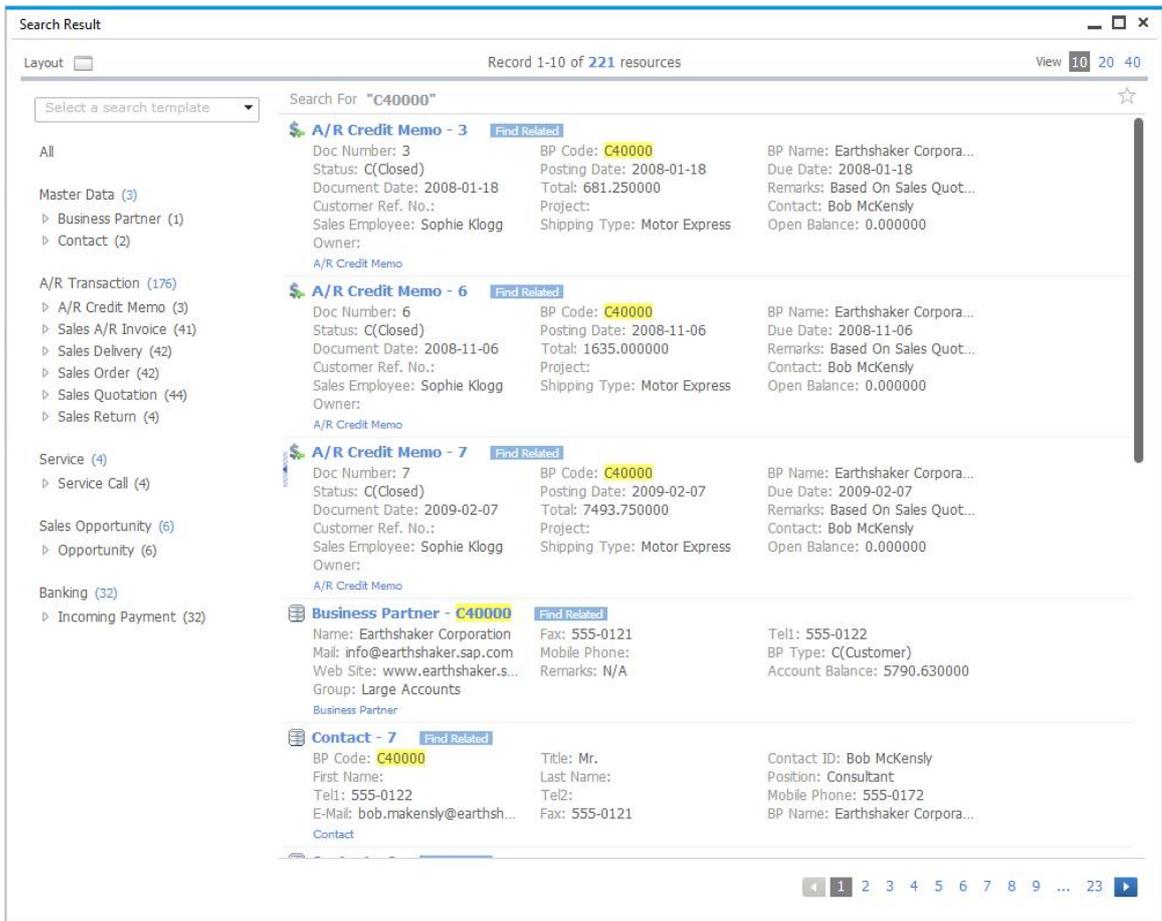
3.1.3.2.4   Action: Open Advanced Dashboard

In the Fiori-style cockpit or an advanced dashboard, this type of action will appear when you right-click the data of pervasive dashboards. Choose this action to open the linked advanced dashboard with the dimension value as the filter.

Procedure

To add action type *Open Advanced Dashboard*, follow the procedure below:

1. In the action section of a pervasive dashboard, choose ⊕ (*Add a New Action*) beside *Actions To Be Triggered*.

2. In the edit window, select the *Open Advanced Dashboard* radio button.

3. In the *Action Name* field, specify the action name.
4. In the *Target Adv. Dashboard* dropdown list, select the advanced dashboard that you want to open. You can link to only one advanced dashboard with one action.
5. In the *Data Binding* section, select the dimension in the pervasive dashboard and link it to the filter of the selected advanced dashboard. To add links to more filters, choose *Add a New Binding*.

   For more information about filters in advanced dashboards, see Setting Up Filters and Using Filters.

   In the Fiori-style cockpit or an advanced dashboard, when you right-click a measure of the pervasive dashboard, and choose this action, the value of the defined dimension in the action is transferred to its linked filter. The advanced dashboard appears with the dimension value as its filtering value.
6. To save the action, choose the *OK* button.

Example

You have performed the following:

1. In the pervasive dashboard, you added measure *Total Sales Amount*, and dimension *Customer Code* to the pervasive dashboard.
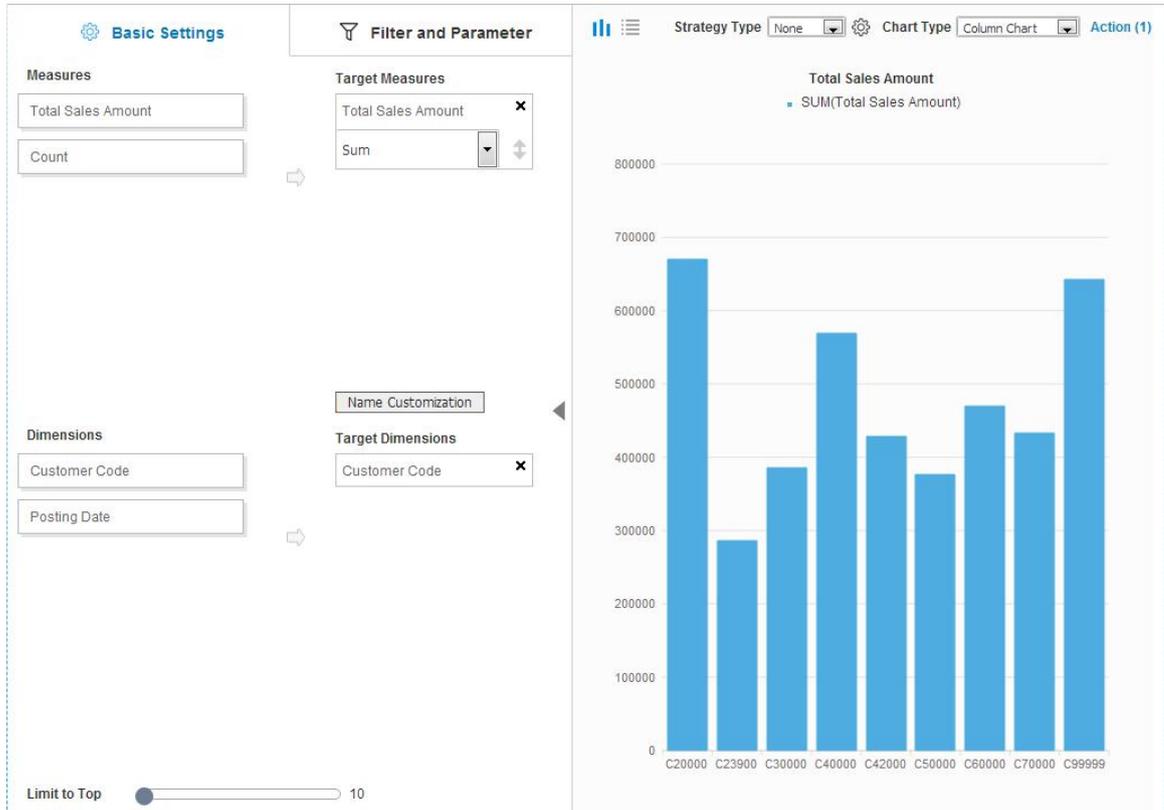
2. In the edit window, you selected the *Open Advanced Dashboard* radio button, and specified `Open Advanced Dashboard Based on Customer` as its name.

3. In the *Target Adv. Dashboard* dropdown list, you selected *Advanced Dashboard About Customer*, an advanced dashboard that you have already created with a filter called *Customer*. The target dimension of the base widget in filter *Customer* is *BP Code*. For more information about setting up filters, see Setting Up Filters.

4. In the *Dashboard Dimension* dropdown list, you selected *Customer Code*.

5. In the *Target Adv. Dashboard Filter* dropdown list, you selected *Customer*.
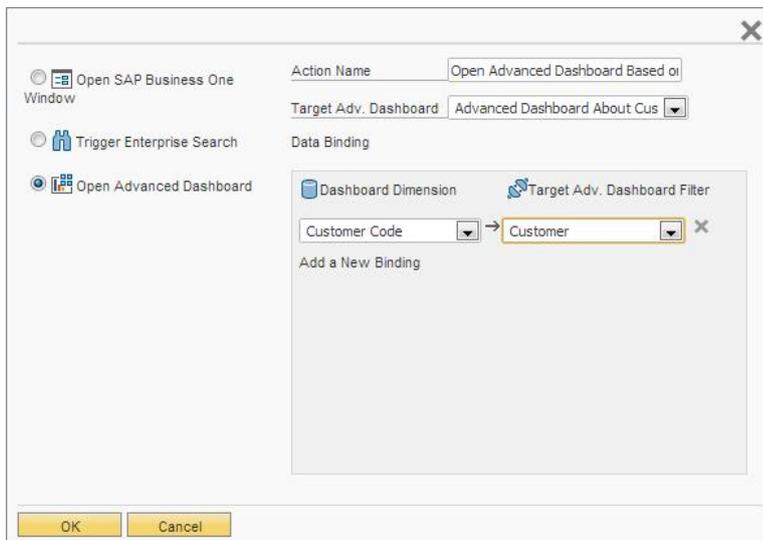
6. In the edit window, you chose the *OK* button.

Follow the procedure below to use the action:

1. In the Fiori-style cockpit or an advanced dashboard, right-click the total sales amount of a customer whose code is *C40000*, and choose *Open Advanced Dashboard Based on Customer*.

2. The advanced dashboard *Advanced Dashboard About Customer* appears, displaying data filtered by the value *C40000*.
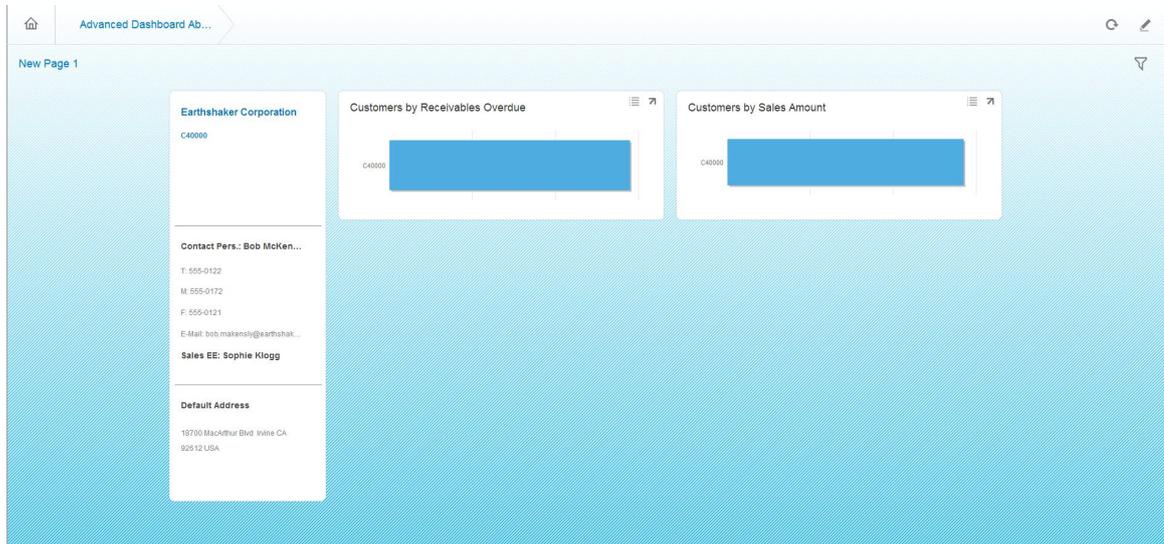
3.1.3.3 Using the Time Slider

i Note

You cannot use strategies if you are using the time slider function.

Prerequisite

You have added only one dimension, the dimension is of date type, and the time unit is only one of the following:

- *Year-Quarter*
- *Year-Month*
- *Year-Week*
- *Date*

Procedure

1. In the *Select Base Data Source* window of the dashboard designer, select the query or view based on which you want to design a pervasive dashboard.

2. On the *Basic Settings* tab, drag required measures and date-type dimensions to the target area.

    The dashboard in the screenshot displays sales quantities of each time period for the latest 10 months.
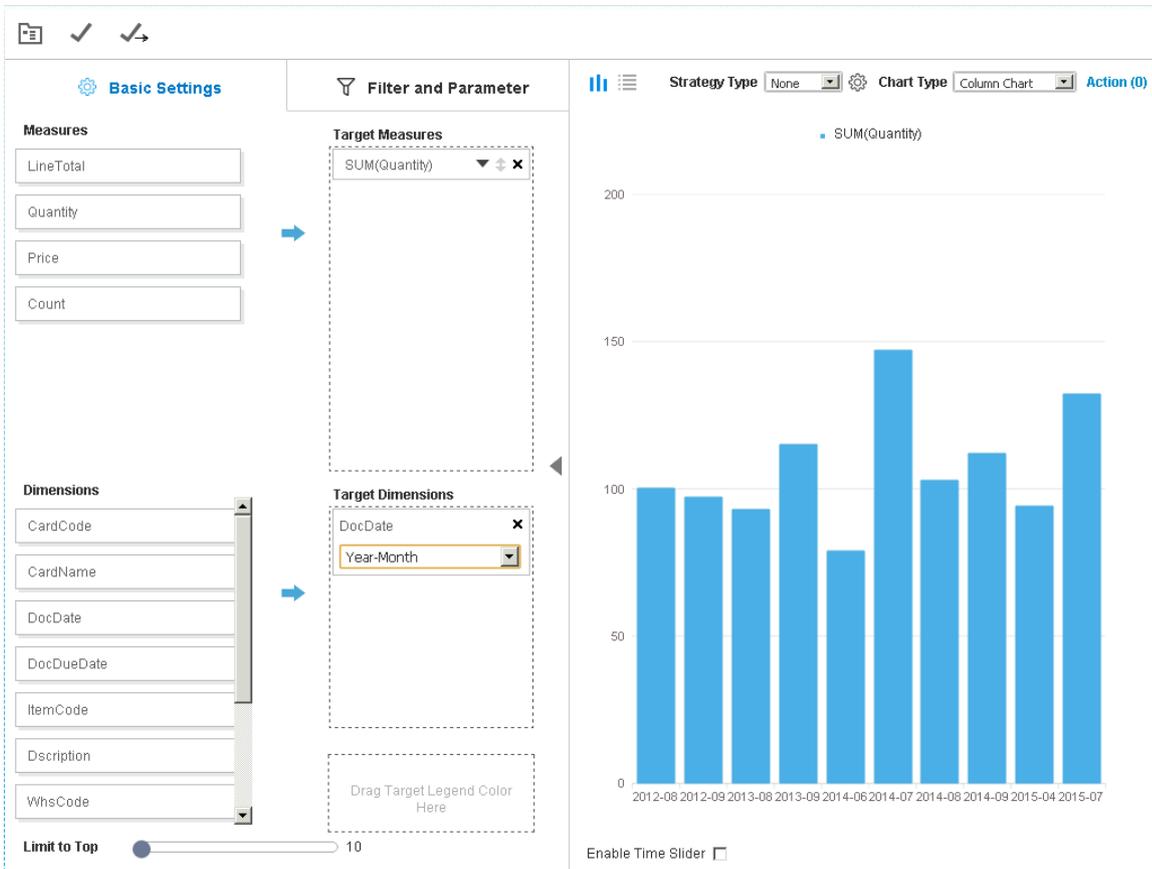
3. To enable the slider for the dashboard in the advanced dashboard, select the *Enable Time Slider* checkbox. The time slider appears. You can drag the left or right bar of the slider to display the data you want.
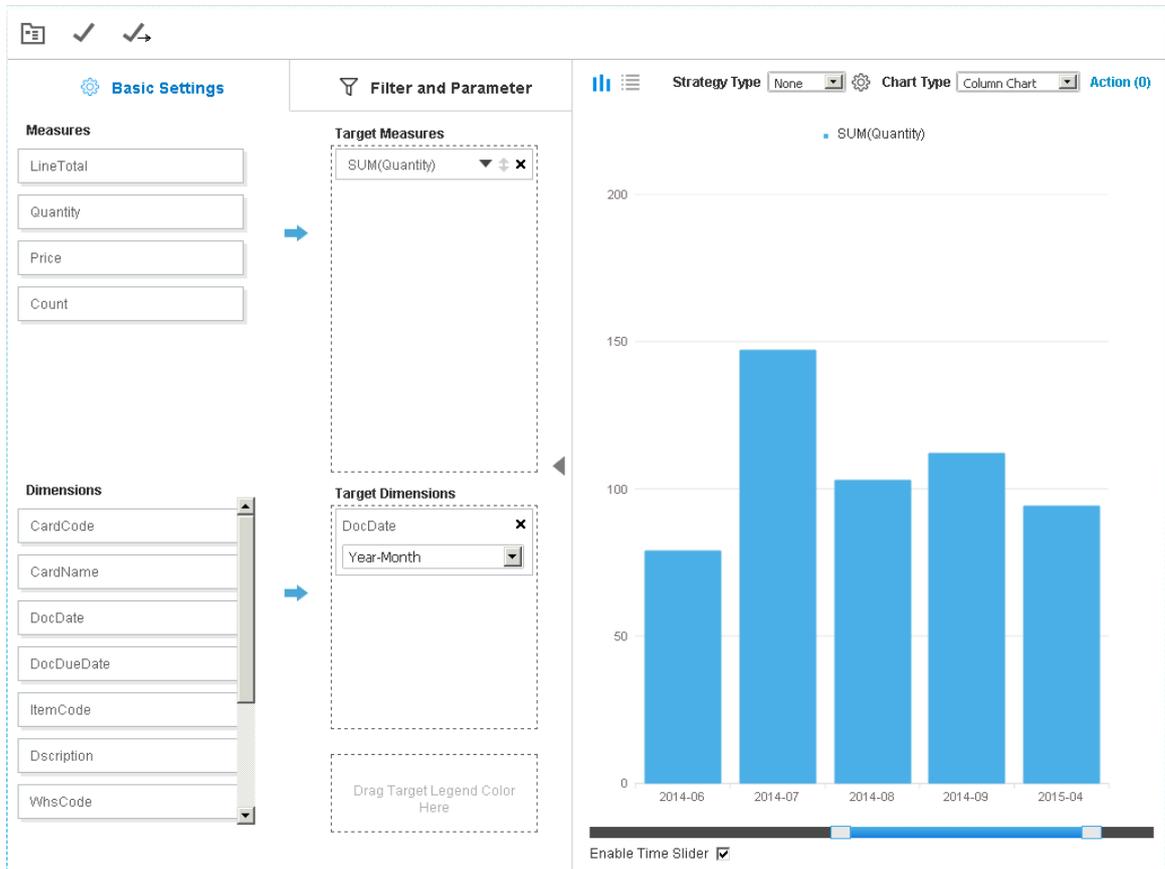
Result

In the advanced dashboard, you can drag the time slider to view data.
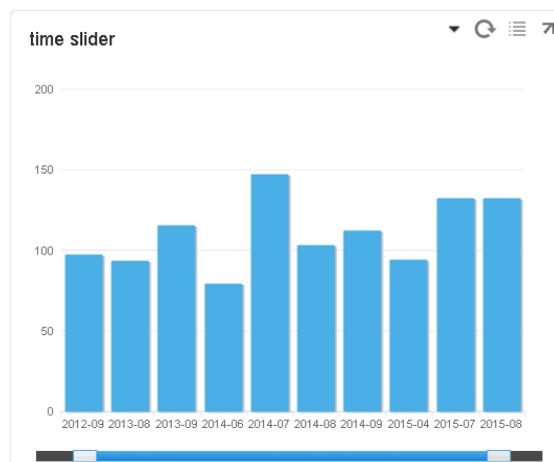
3.2 Viewing Pervasive Dashboards in the Cockpit

For more information about viewing dashboards in the cockpit, see *Working with Crystal Dashboards* in the online help documentation.

You can add to your cockpit all pervasive dashboards for which you have authorizations. To set authorizations for pervasive dashboards to users, from the SAP Business One, version for SAP HANA *Main Menu*, choose *Administration → System Initialization → Authorizations → General Authorizations*. In the *Authorizations* window, select the user to whom you want to grant the authorization, and in *Analytics → Content → Dashboard*, select *Full Authorization* for the pervasive dashboards to which you want to grant authorization.

3.3 Viewing Pervasive Dashboards in the Fiori-Style Cockpit

For more information about viewing pervasive dashboards in the Fiori-style cockpit, look for the *How to Work with the Fiori-Style Cockpit* guide on sappartneredge.com.

3.4 Viewing Linked Pervasive Dashboards in Sidebars

Prerequisites

- On the *Display* tab of the *General Settings* window, you have selected the checkbox *Enable sidebar in windows to display linked dashboards*.
- You have authorizations for the pervasive dashboard that you want to view. To set authorizations for pervasive dashboards to users, from the SAP Business One, version for SAP HANA *Main Menu*, choose *Administration → System Initialization → Authorizations → General Authorizations*. In the *Authorizations* window, select the user to whom you want to grant the authorization, and in *Analytics → Content → Dashboard*, select *Full Authorization* for the pervasive dashboards to which you want to grant authorization.

Procedure

1. From the SAP Business One, version for SAP HANA *Main Menu*, choose the required menu entry, and open the linked window.

   The window appears with a sidebar. If there is no sidebar, in the SAP Business One, version for SAP HANA menu bar, choose *View → User-Defined Fields*.

2. Choose » and select the *Analytics* tab to display the linked dashboard.

   i Note

   If there is more than one dashboard linked to this window, you can choose the dashboard name or scroll your mouse wheel to switch dashboards.

   Navigating to a different record in the window generates different information based on your links.

3. In the displayed dashboard, to refresh the dashboard content, choose ⟳ (*Refresh*).

3.5 Viewing Recommendations in Sidebars

Prerequisites

- On the *Display* tab of the *General Settings* window, you have selected the checkbox *Enable sidebar in windows to display linked dashboards*.
- You have run the recommendation service successfully, by navigating to the URL: `https://<Server Address>:<Port>/PredictiveAnalysis` in a Web browser, logging on to the company you are working with, and choosing the *Refresh Now* button.

  ⓘ Note

  The URL supports the following Web browsers: Google Chrome, Microsoft Edge, Apple Safari, and Mozilla Firefox.

Procedure

1. From the SAP Business One, version for SAP HANA *Main Menu*, choose *Sales - A/R* → *Sales Quotation* or *Sales Order*.

   The *Sales Quotation* or *Sales Order* window appears with a sidebar. If there is no sidebar, in the SAP Business One, version for SAP HANA menu bar, choose *View* → *User-Defined Fields*.

2. Choose » and select the *Recommendation* tab to display the recommended items.

o   When you input a customer in the document, the recommended items appear in the *Recommendations for This Customer* section. If this customer has no sales records or recommended items in the database, this section will display the items that are bought most frequently company wide. You can choose the *Add* button for a specific item to add it to the sales document.

o   When you input an item in the document or move your mouse to an item line, the items that are most related to this customer and this item appear in the *Customers Who Bought This Item Also Bought* section. You can choose the *Add* button for a specific item to add it to the sales document.

i Note

Every time you want to view the latest recommendation data in your company database, you must go to the URL in the *Prerequisites* part to choose the *Refresh Now* button.

3.6   Managing Pervasive Dashboards in the Pervasive Analytics Designer

For more information about managing crystal dashboards, for example, importing and exporting dashboard packages, activating or deactivating a dashboard, see *Working with Crystal Dashboards* in the online help documentation.

Prerequisites

- You have installed the app framework for SAP Business One, version for SAP HANA. For more information about installing the app framework, look for the *Working with App Framework for SAP Business One, version for SAP HANA* guide on sappartneredge.com.
- You have authorizations for the pervasive analytics designer. To set authorizations for the pervasive analytics designer to users, from the SAP Business One, version for SAP HANA *Main Menu*, choose *Administration → System Initialization → Authorizations → General Authorizations*. In the *Authorizations* window, select the user for whom you want to set authorizations, and under *Analytics,* in *Pervasive Analytics Designer,* select *Full Authorization*.

Procedure

1. In the SAP Business One, version for SAP HANA toolbar, choose ▨ (*Pervasive Analytics*).

   Alternatively, in the SAP Business One, version for SAP HANA menu bar, choose *Tools → Pervasive Analytics*.

   The *Pervasive Analytics* window appears.

   > **i** Note
   >
   > Only users with authorizations for the pervasive analytics designer can access the window.

2. In the *My Dashboards* section, you can find all pervasive dashboards, for which you can perform the following:
   o   Select each pervasive dashboard to view its contents.
   o   To delete a pervasive dashboard, hover your mouse over the relevant dashboard, choose the ✖ icon, and choose the *Yes* button in the system message.
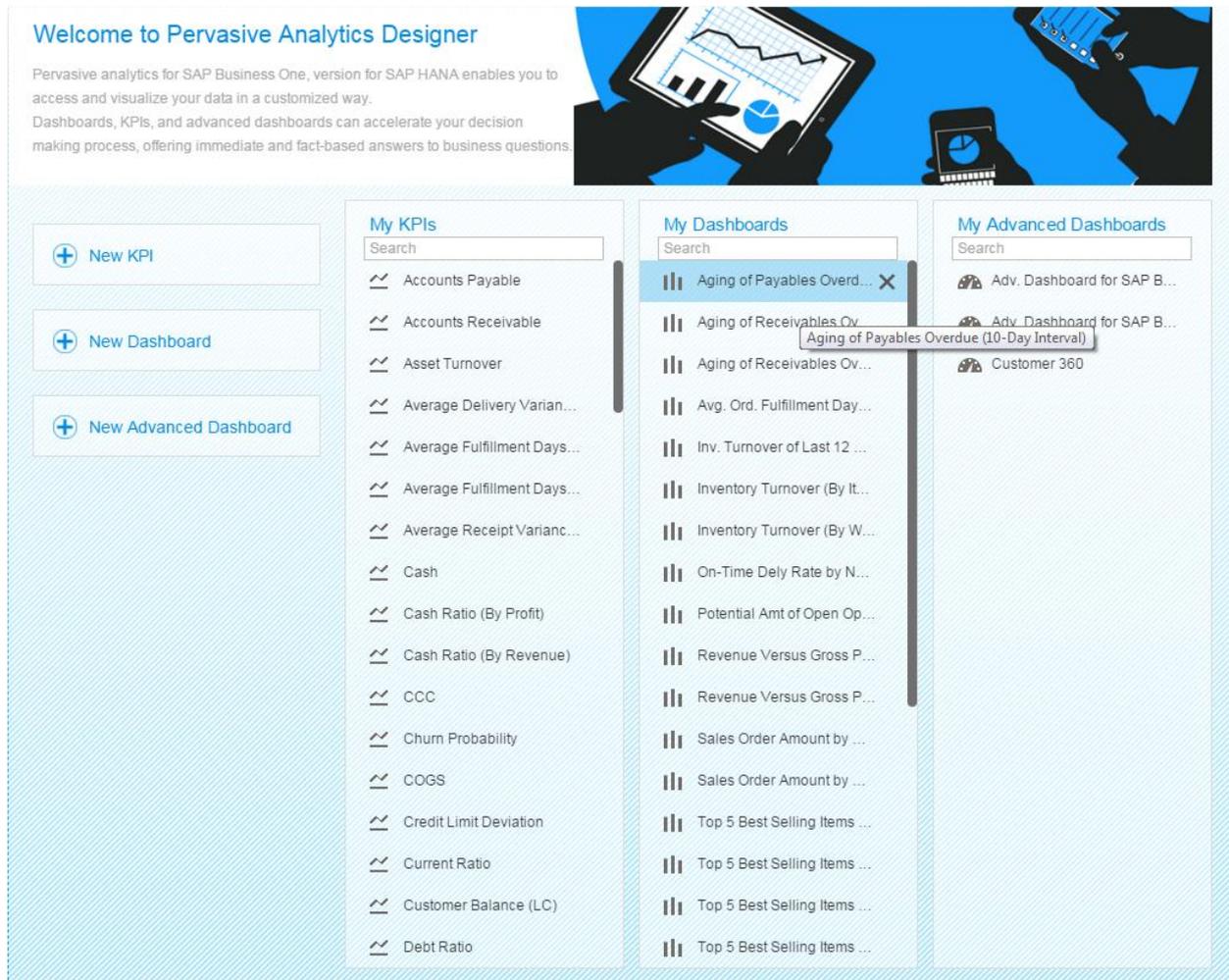
3.7   Predefined Pervasive Dashboards

SAP provides the following predefined pervasive dashboards.

ⅰ Note

To see a specific query, in the menu bar, choose *Tools → Queries → Query Manager*. For more information about the query manager, see *Query Manager* in the online help documentation.

Pervasive Dashboard	Description	Data Source
Aging of Payables Overdue (10-Day Interval)	Vendor liabilities aging	User-defined query *Aging of Payables Overdue (10-Day Interval)*
Aging of Receivables Overdue (10-Day Interval)	Customer receivables aging	User-defined query *Aging of Receivables Overdue (10-Day Interval)*
Aging of Receivables Overdue (30-Day Interval)	Customer receivables aging	User-defined query *Aging or Receivables Overdue (30-Day Interval)*
Avg. Ord. Fulfillment Days by Cust. (Last 6 Mo.)	The total of the following: Average number of days it takes to deliver products since the sales order is created for each business partner. This dashboard covers sales orders within this and the last five months according to their document dates. Fulfillment days per sales order = posting date of delivery - posting date of sales order	User-defined query *Monthly Average Fulfillment Days of Sales Orders by Customers*
Inv. Turnover of Last 12 Months (6-Month Comp.)	Inventory turnover	User-defined query *Inventory Turnover*
Inventory Turnover (By Item Group)	Inventory turnover statistics by item group	User-defined query *Inventory Turnover (By Item Group)*
Inventory Turnover (By Warehouse)	Inventory turnover statistics by warehouse	User-defined query *Inventory Turnover (By Warehouse)*
On-Time Dely Rate by Number by Cust. (Last 6 Mo.)	The total of the following: The result of the number of on-time delivered sales orders divided by the number of all delivered sales orders to each business partner. This dashboard covers sales orders within this and the last five months according to their document dates. The deliveries whose posting dates are earlier than or equal to the posting dates of sales orders are considered as on-time deliveries.	User-defined query *Monthly On-Time Delivery Rate by Number of Orders by Customers*

Pervasive Dashboard	Description	Data Source
Potential Amt of Open Oppty by Stages - Curr. User	Potential amount of all open opportunities of the currently logged-on sales employee displayed by stages. In the SAP Business One Sales app, this dashboard appears by default when you tap the *Potential Amt of Open Opportunities - Curr. User* KPI in the KPI screen. For more information about opening pervasive dashboards from KPIs in the SAP Business One Sales app, see Action: Open Dashboard (For the SAP Business One Sales App).	User-defined query *Opportunity*
Revenue Versus Gross Profit for Last 6 Months	Comparison of revenue and gross profit	User-defined query *Revenue Versus Gross Profit for Last 6 Months*
Revenue Versus Gross Profit for Last 6 Years	Comparison of net sales amount and gross profit in this and the last five years	Calculation view *Profitability Analysis*
Sales Order Amount by Mo./Qty/Yr (LC) - Curr. User	The total sales order amount of the currently logged-on sales employee displayed by months. In the SAP Business One Sales app, this dashboard appears by default when you tap the *Sales Order Amount of This Month (LC) - Curr. User* KPI in the KPI screen, and can be displayed by months, quarters, or years. For more information about opening pervasive dashboards from KPIs in the SAP Business One Sales app, see Action: Open Dashboard (For the SAP Business One Sales App).	User-defined query *Sales Order*
Sales Order Amount by Months (LC)	The total sales order amount displayed by months. In the SAP Business One Sales app, this dashboard appears on the *General* tab of customers by default, and displays the total sales order amount of the specific customer by months, quarters, or years. For more information about customizing the advanced dashboard to be displayed in the SAP Business One Sales app, see Predefined Advanced Dashboards.	User-defined query *Sales Order*
Top 5 Best Selling Items by Sales Amount	Items ranked by sales amount based on invoices	User-defined query *Best Sellers by Sales Amount*
Top 5 Best Selling Items by Sales Amount (Mobile)	Items ranked by sales amount based on invoices. In the SAP Business One Sales app, this dashboard appears on the *General* tab of customers by default, and displays the items ranked by sales amount based on the invoices of the specific customer.	User-defined query *Sales Invoice*

Pervasive Dashboard	Description	Data Source
	For more information about customizing the advanced dashboard to be displayed in the SAP Business One Sales app, see Predefined Advanced Dashboards.	
Top 5 Best Selling Items by Sales Amt - Curr. User	Items ranked by sales amount based on the invoices of the currently logged-on sales employee. In the SAP Business One Sales app, this dashboard appears in the KPI screen by default. For more information about customizing the advanced dashboard to be displayed in the SAP Business One Sales app, see Predefined Advanced Dashboards.	User-defined query *Sales Invoice*
Top 5 Best Selling Items by Sales Amt of This Year	Items ranked by sales amount based on invoices in this year	Calculation view *Profitability Analysis*
Top 5 Customers by Receivables Overdue	Customers ranked by receivables overdue	User-defined query *Customers by Receivables Overdue*
Top 5 Customers by Sales Amount	Customers ranked by sales amount based on invoices	User-defined query *Customers by Sales Amount*
Top 5 Customers by Sales Amount - Curr. User	Customers ranked by sales amount based on the invoices of the currently logged-on sales employee. In the SAP Business One Sales app, this dashboard appears in the KPI screen by default. For more information about customizing the advanced dashboard to be displayed in the SAP Business One Sales app, see Predefined Advanced Dashboards.	User-defined query *Sales Invoice*
Top 5 Item Groups by Inventory Value	Item groups ranked by item inventory value in the groups	User-defined query *Item Groups by Inventory Value*
Top 5 Purchased Items by Purchase Amount	Items ranked by purchase amount based on invoices	User-defined query *Purchased Items By Purchase Amount*
Top 5 Sales Employees by Sales Amount	Sales employees ranked by sales amount based on invoices	Calculation view *Profitability Analysis*
Top 5 Vendors by Payables Overdue	Vendors ranked by payables overdue	User-defined query *Vendors by Payables Overdue*
Top 5 Vendors by Purchase Amount	Vendors ranked by purchase amount based on invoices	User-defined query *Vendors by Purchase Amount*

Pervasive Dashboard	Description	Data Source
Total Purchase Versus Goods Return for Last 6 Months	Comparison of purchase amount and goods return	User-defined query *Total Purchase Versus Goods Return for Last 6 Months*

4 Working with Advanced Dashboards

An advanced dashboard can contain the following widgets:

- Pervasive dashboard
- Key performance indicator (KPI)
- Count
- Business Partner Info

The major functions include, but are not limited to, the following:

- You can view an advanced dashboard in pages.
- You can add filters to specific widgets to see only the data related to what interests you.
- You can use actions of the widgets in the advanced dashboard.

4.1 Designing Advanced Dashboards Using the Pervasive Analytics Designer

Prerequisites

- You have installed the app framework for SAP Business One, version for SAP HANA. For more information about installing the app framework, look for the *Working with App Framework for SAP Business One, version for SAP HANA* guide on sappartneredge.com.
- You have authorizations for the pervasive analytics designer. To grant authorizations for the pervasive analytics designer to users, from the SAP Business One, version for SAP HANA *Main Menu*, choose *Administration → System Initialization → Authorizations → General Authorizations*. In the *Authorizations* window, select the user for whom you want to set authorizations, and under *Analytics,* in *Pervasive Analytics Designer,* select *Full Authorization*.

Procedure

1. In the SAP Business One, version for SAP HANA toolbar, choose 🗗 (*Pervasive Analytics*).

   Alternatively, in the SAP Business One, version for SAP HANA menu bar, choose *Tools → Pervasive Analytics*.

   The *Pervasive Analytics* window appears.

   > ℹ️ Note
   >
   > Only users with authorizations for the pervasive analytics designer can access this window.

2. On the left side of the *Pervasive Analytics* window, choose *New Advanced Dashboard*.

A blank advanced dashboard appears in edit mode.
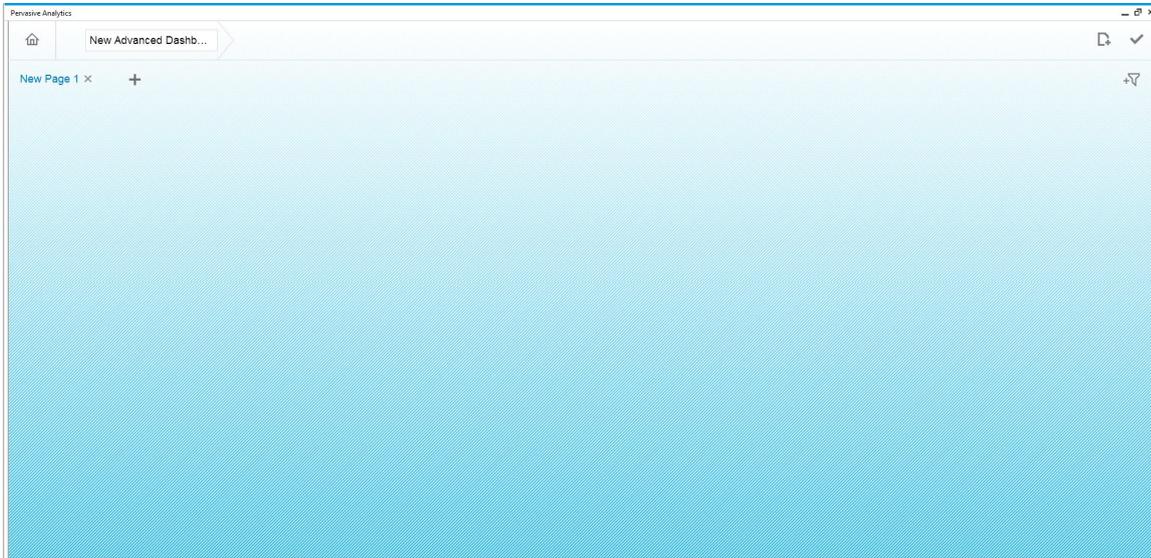
3. To add a widget, in the upper right corner of the advanced dashboard, choose ⬜ (*Add Widgets*).

The widget gallery appears.

4. In the widget gallery, select the widget that you want to add to the current page of your advanced dashboard.

To find a widget in a specific category, in the upper left corner of the widget gallery, select the category that you want to explore.

To find a specific widget, in the upper right corner of the widget gallery, enter the widget name, or part of the name, to search for the widget.
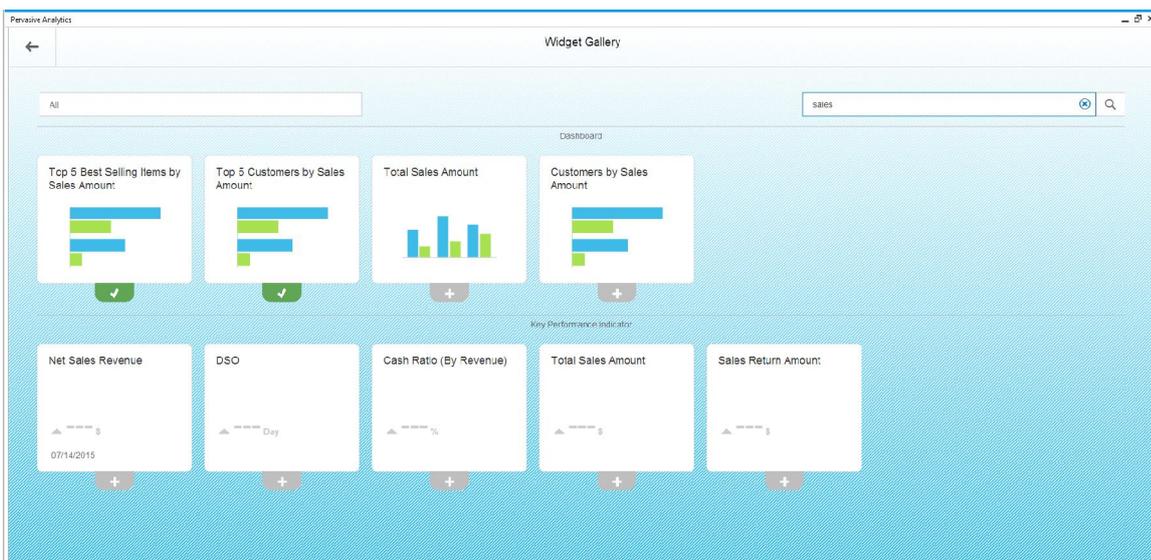
5. After you select the widgets, in the upper left corner of the widget gallery, choose ⬅ (*Go Back*).

The widgets appear in the current page of the advanced dashboard in edit mode.
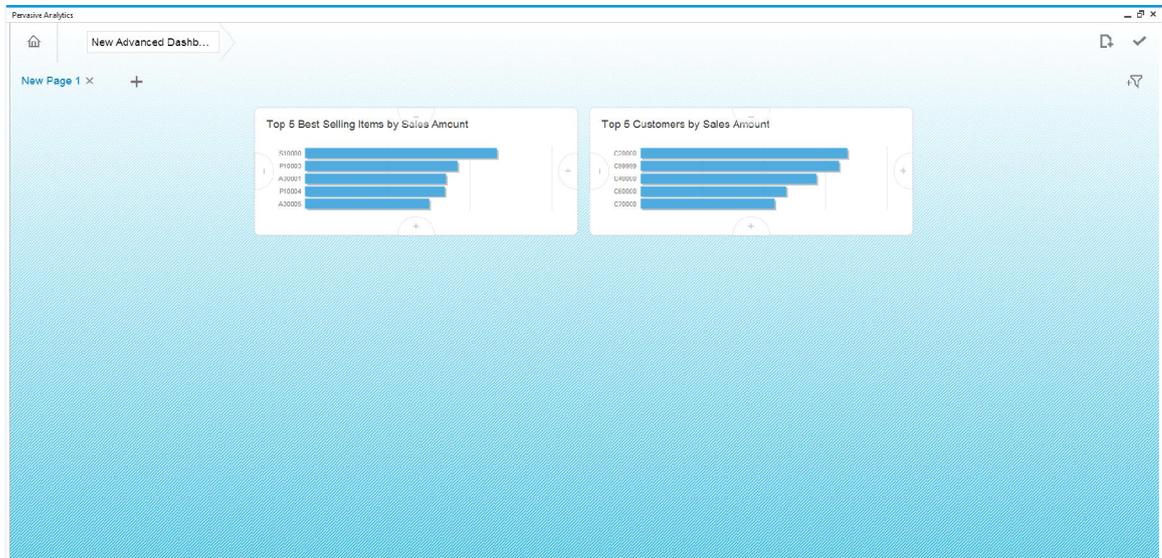
6. To specify new names for the current page and advanced dashboard, click the titles of the page and advanced dashboard, and enter the names.

7. [Optional] To add a filter for the advanced dashboard, in the upper right corner of the current page, choose ⧩ (*Filter Settings*). For more information, see Setting Up Filters.

8. To save the advanced dashboard, in the upper right corner of the advanced dashboard, choose ✔ (*Save*).

4.1.1 Edit Mode

In the pervasive analytics designer, when you design a new advanced dashboard or open an existing advanced dashboard, the dashboard appears in edit mode.
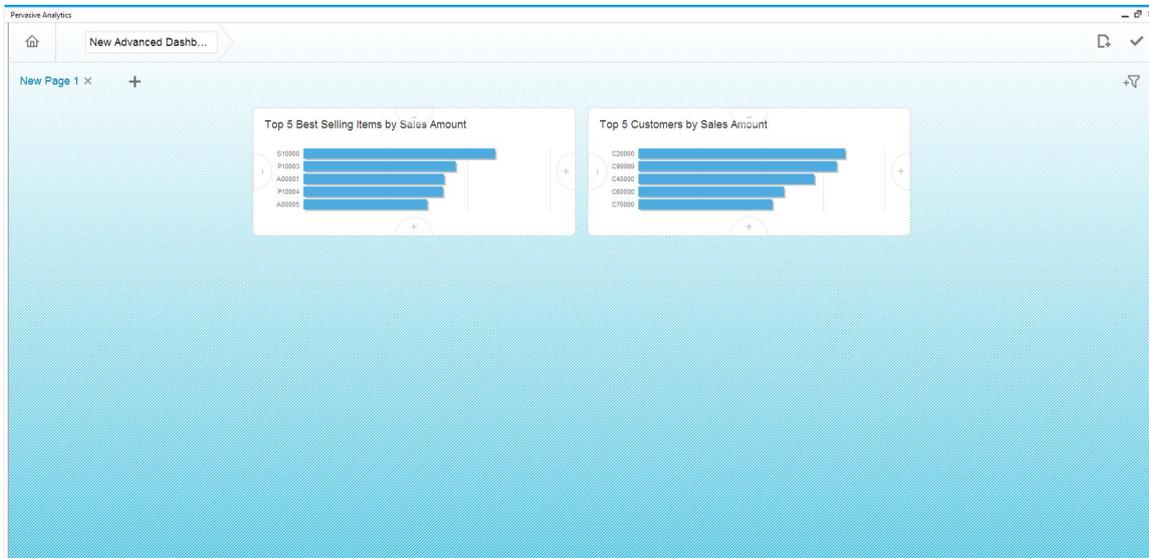
In the edit mode of an advanced dashboard, you can perform the following:

- To specify a new name for the current page or advanced dashboard, click the title of the page or advanced dashboard, and enter the name.
- To add a new page, to the right of the current page name, choose ✛ (*Add New Page*).
- To delete an existing page, beside the name of the page that you want to delete, choose ✕ (*Remove Page*).
- To add a widget, in the upper right corner of the advanced dashboard, choose ⟶ (*Add Widgets*).
- To change the place of a widget, select the widget that you want to move, and drag it to the place that you prefer.

- To delete a widget, select the widget that you want to delete, and drag it to the red area in the lower right corner.
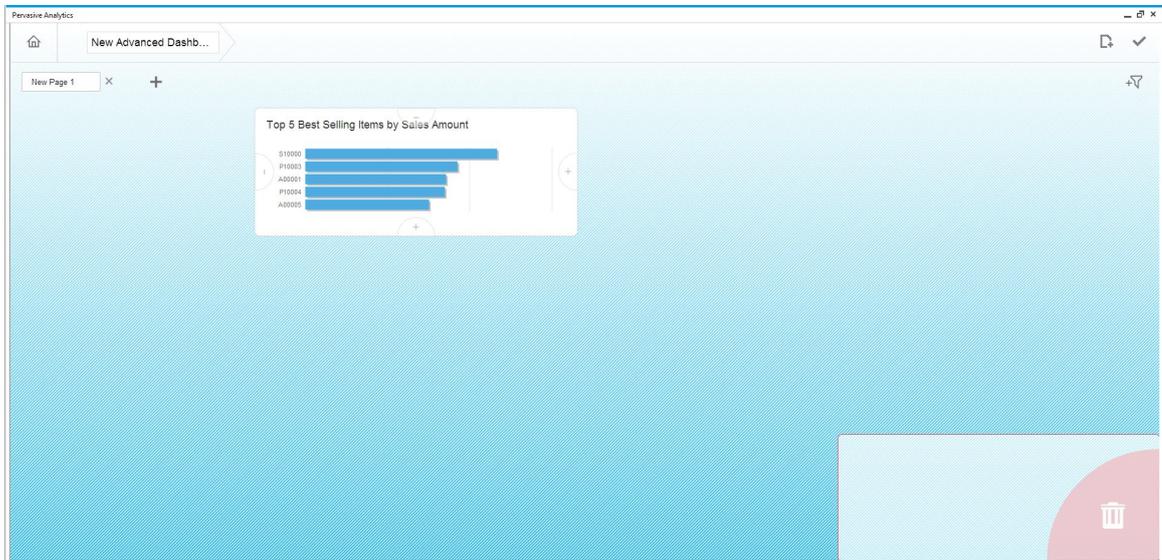
- To add a filter, in the upper right corner of the current page, choose ⊹▽ (*Filter Settings*). For more information, see Setting Up Filters.
- To save the advanced dashboard, in the upper right corner of the advanced dashboard, choose ✔ (*Save*).
- For a pervasive dashboard, to change its size, around the pervasive dashboard, choose the minus or plus sign.

4.1.2 View Mode

The view mode appears in the following situations:

- In the edit mode of the advanced dashboard, in the upper right corner of the advanced dashboard, you choose ✔ (*Save*).
- In the view mode of the advanced dashboard, or in the Fiori-style cockpit, you open an advanced dashboard from the action of a pervasive dashboard or KPI.
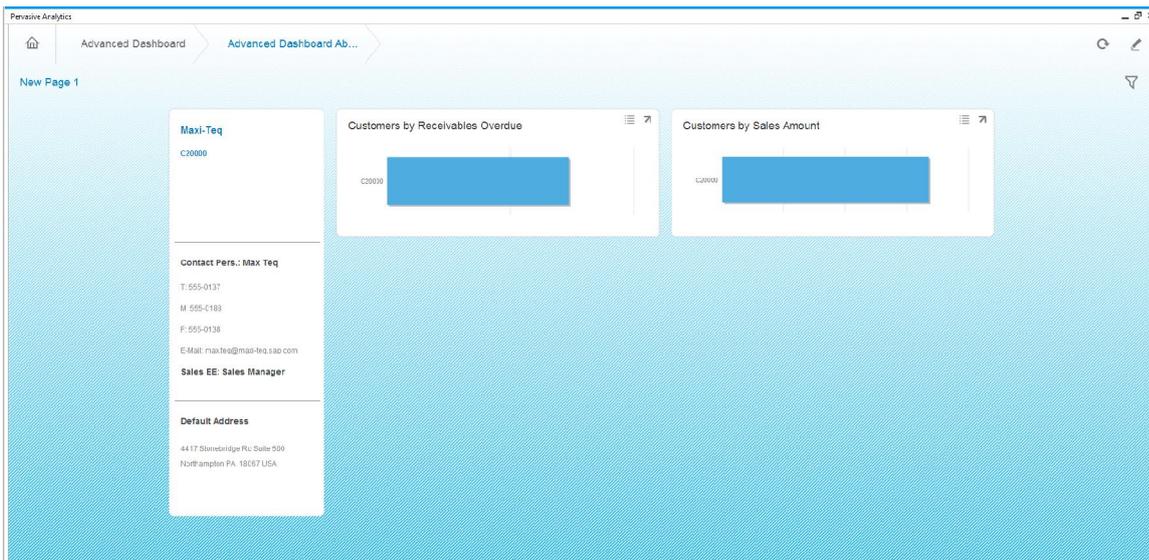
In the view mode of an advanced dashboard, you can perform the following:

- To refresh the data, in the upper right corner of the advanced dashboard, choose ↻ (*Refresh*).
- To edit the advanced dashboard, in the upper right corner, choose ✎ (*Edit*).
- To use the filters, in the upper right corner of the current page, choose ▽ (*Filters*). For more information, see Using Filters.
- To go back from the current advanced dashboard to the previous one, in the upper left corner of the advanced dashboard, choose the name of the previous dashboard.
- To perform actions defined for a pervasive dashboard, right-click the data for a dimension, and choose the action.
- To perform an action defined for a KPI, click anywhere on the KPI.
- To perform an action for a count widget, choose the number of the widget.

- For a pervasive dashboard, you can perform the following:
  - To toggle between the dashboard view and the query result view, in the upper right corner of the pervasive dashboard, choose ▐▐ (*Switch to Chart*) or ☰ (*Switch to Table*).
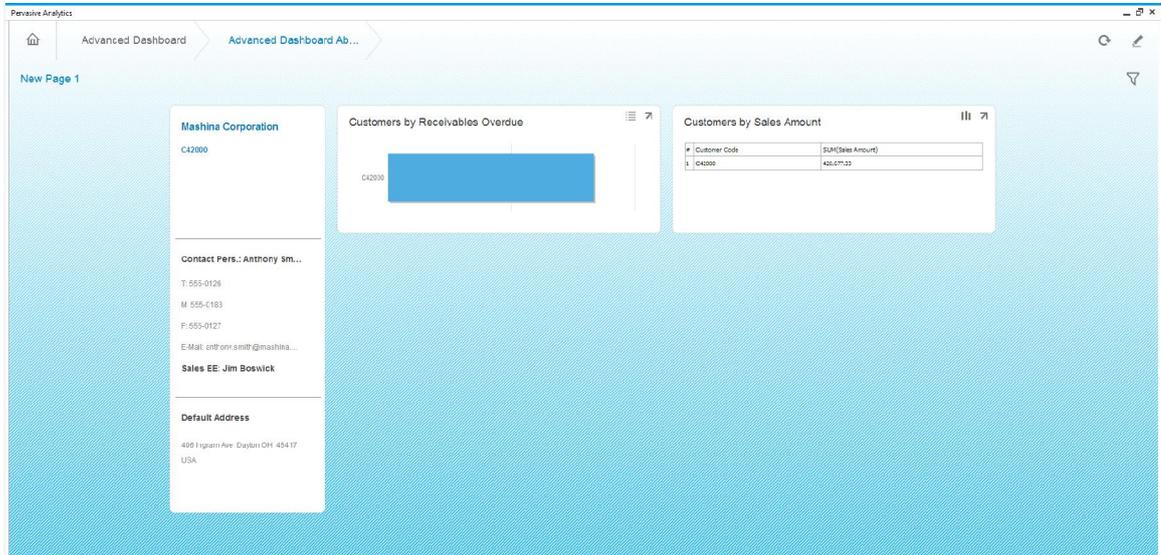
  - To refresh the pervasive dashboard, in the upper right corner of the pervasive dashboard, choose ↻ (*Refresh*).

  - For pervasive dashboards for which you have defined legend color, to view data based on different legend color values, in the upper right corner of the pervasive dashboard, choose ▼. The pervasive dashboard in the screenshots displays data with the two legend color values selected when the dashboard was designed. When you select another legend color value, the pervasive dashboard displays data based on the three legend color values. For more information about legend color, see Using Legend Color.

Note

Changing the legend color value only changes the display of this pervasive dashboard in the advanced dashboard. This does not change the pervasive dashboard.
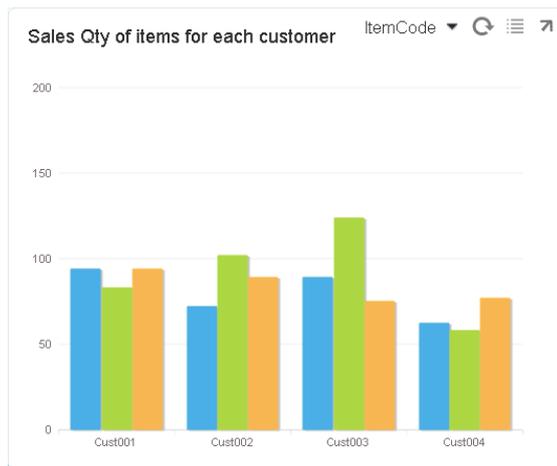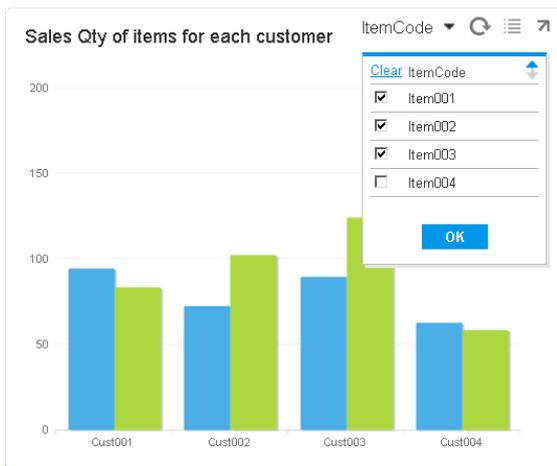
o For pervasive dashboards for which you have enabled the time slider, to change the data view in different time period, drag the left or right bar of the slider.
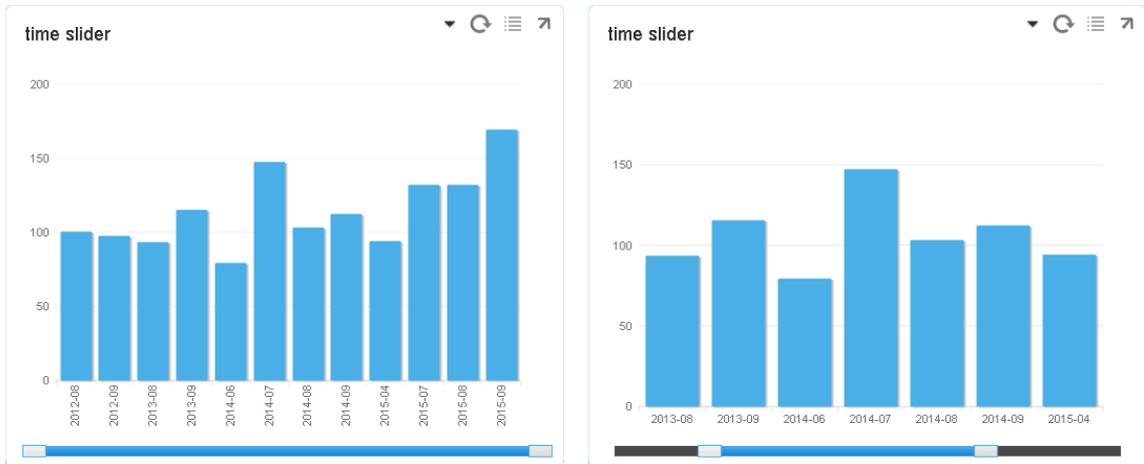
o To enlarge the pervasive dashboard in the dashboard designer, in the upper right corner of the pervasive dashboard, choose ⬀ (*Enlarge the Dashboard*). In its enlarged view, you can change the settings of the pervasive dashboard for a new result, but you cannot save the changed pervasive dashboard.
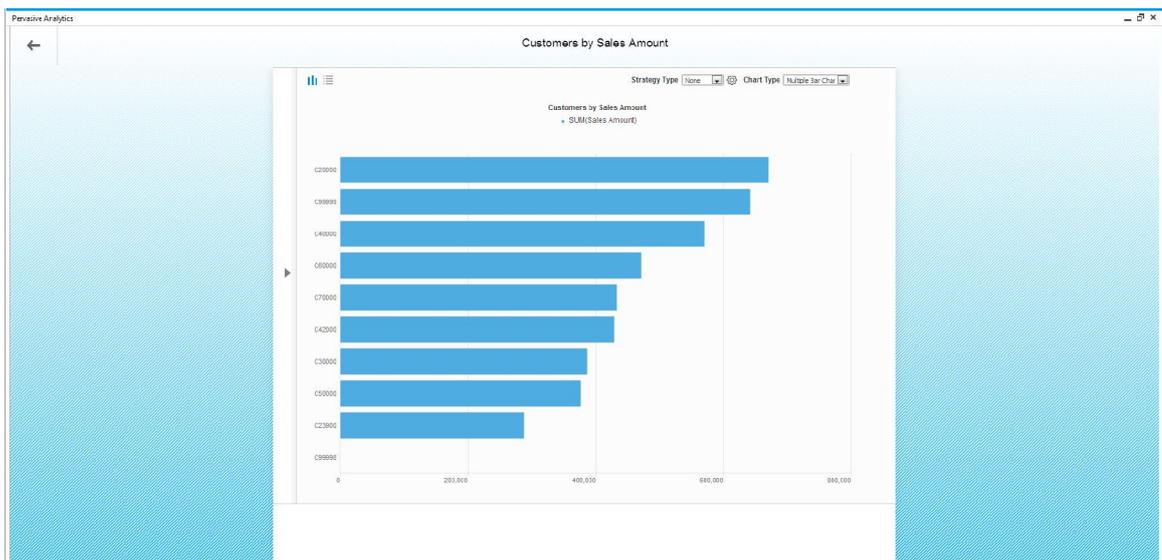
o To go back to the advanced dashboard, in the upper left corner of the dashboard designer, choose ⬅ (*Go Back*).

4.1.3   Setting Up Filters

You can set up filters for specific widgets in the whole advanced dashboard.

Procedure

In the edit mode of an advanced dashboard, to set up filters, follow the procedure below:

1. In the upper right corner of the current page, choose ➕▽ (*Filter Settings*).

   The *Filter Settings* page appears.
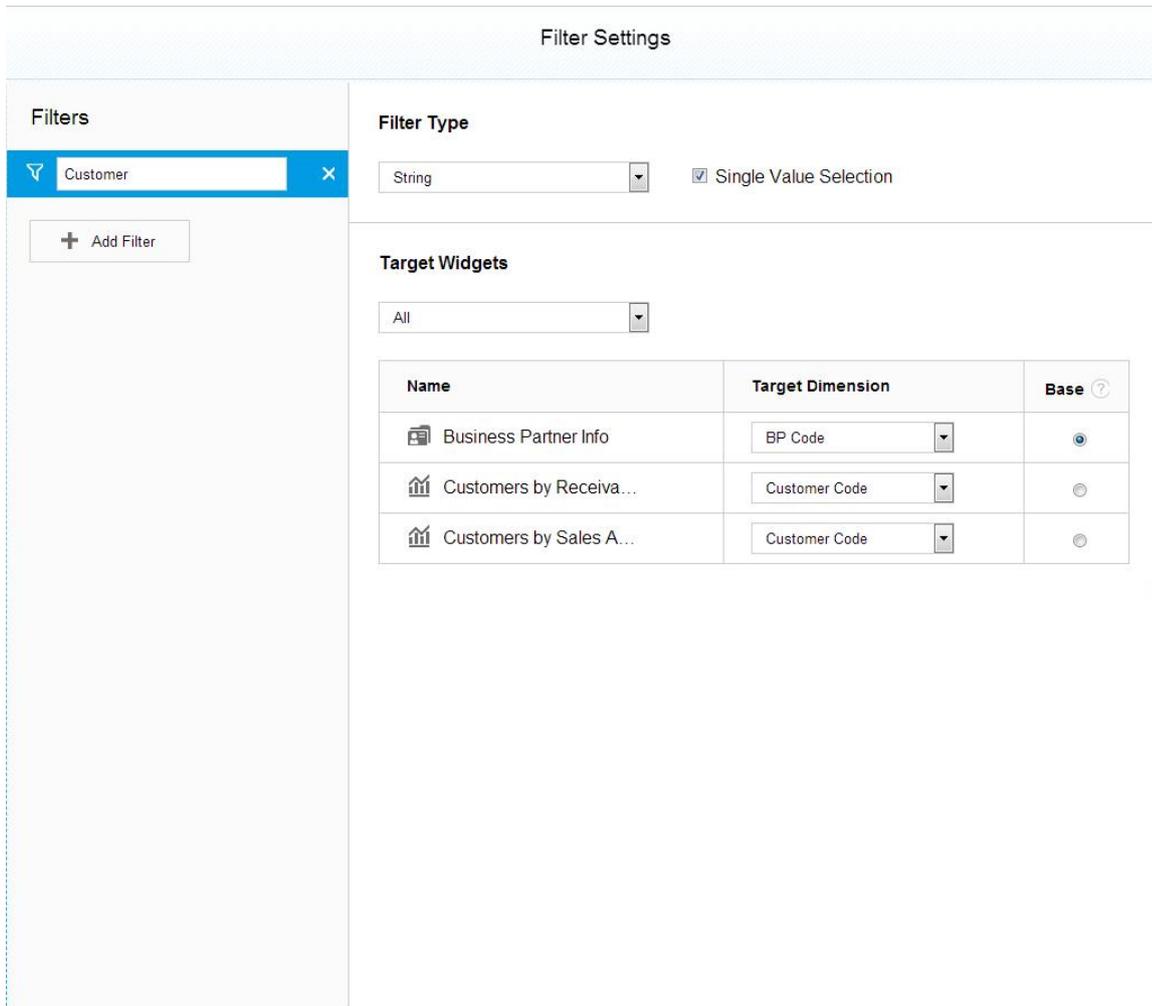
2. In the left pane, choose *Add Filter*.

   Filter settings appear in the right pane.

   The *Target Widgets* section lists all the widgets except the count widget in the advanced dashboard, and you can view them by pages.

3. In the *Filter Type* section, select *String* or *Date* as your filter type.

4. In the *Filter Type* section, if you select the *Single Value Selection* checkbox, when you use this filter, you can select only one filtering value. If you deselect the *Single Value Selection* checkbox, when you use this filter, you can select multiple filtering values.

   ⓘ Note

   For a filter that includes a *Business Partner Info* widget, you must select the *Single Value Selection* checkbox.

5. To include specific widgets in your filtering scope, in the *Target Dimension* column of those widgets, select the dimension that you want to set as the filter.

   For widgets whose base data source is a query, the *Target Dimension* dropdown list contains all the non-numerical columns of the query.

   For widgets whose base data source is a view, the *Target Dimension* dropdown list contains all the attributes of the view.

   > ℹ **Note**
   >
   > Filter settings does not support composite KPIs. The *Target Dimension* and *Base* columns for composite KPIs are disabled.

6. To set a base widget, proceed as follows:
   1. In the *Target Widgets* section, locate the widget from which you want to retrieve the filtering values.
   2. In the *Target Dimension* column of the target widget, select the dimension whose values you want to retrieve as the filtering values, and select its *Base* column.

   > ℹ **Note**
   >
   > If you define two or more target widgets, those widgets will be refreshed to display the filtered data when you use the filter, and the filtering values will be retrieved from the target dimension of the base widget.

   > ℹ **Note**
   >
   > All widgets except KPI can be used as base widgets.

7. To save the filter, in the upper right corner of the filter settings, choose ✔ (*Save*).

4.1.4   Using Filters

You can use filters for target widgets that you have defined in the filters.

Procedure

In the view mode of an advanced dashboard, to use filters, follow the procedure below:

1. In the upper right corner of the current page, choose ▽ (*Filters*).

   The *Filter By* window appears.
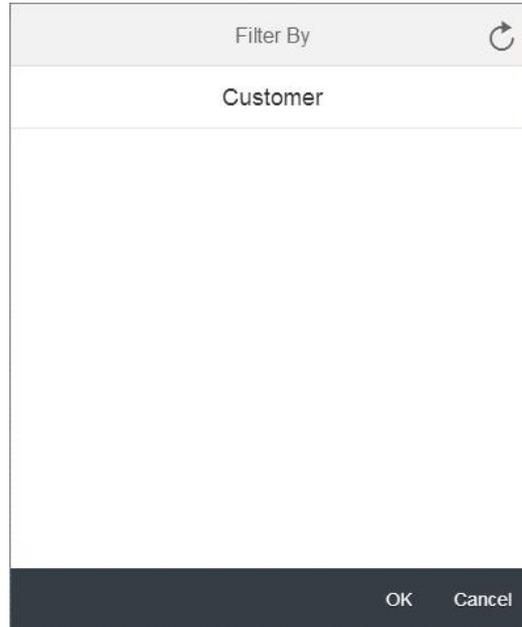
2. Select the filter that you want to use.

   The filtering values are retrieved from the target dimension of the base widget.
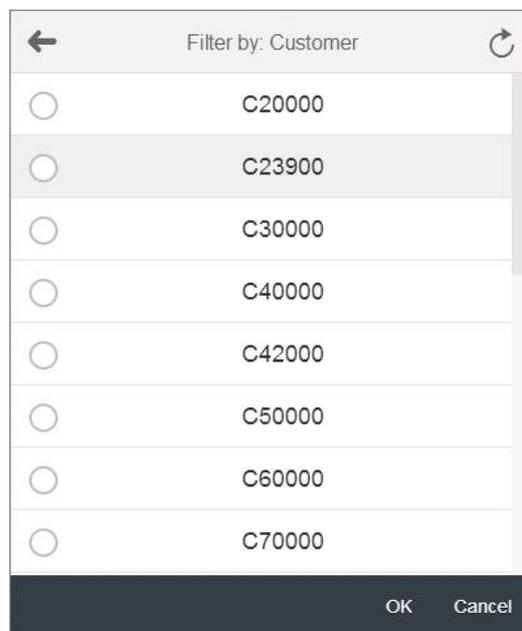
3. Select the filtering values that you want to use for the target widgets.

To clear the values that you just selected, in the upper right corner, choose ↺ (*Clear All Filters*).

> ℹ️ **Note**
>
> You can set the selection method for the filtering values, single selection or multiple selections, by setting the *Single Value Selection* checkbox in the filter.

4. In the upper left corner, choose ←.

   The number of filtering values appears beside the filter you just used.

Filter By	↻
Customer	1
	OK Cancel
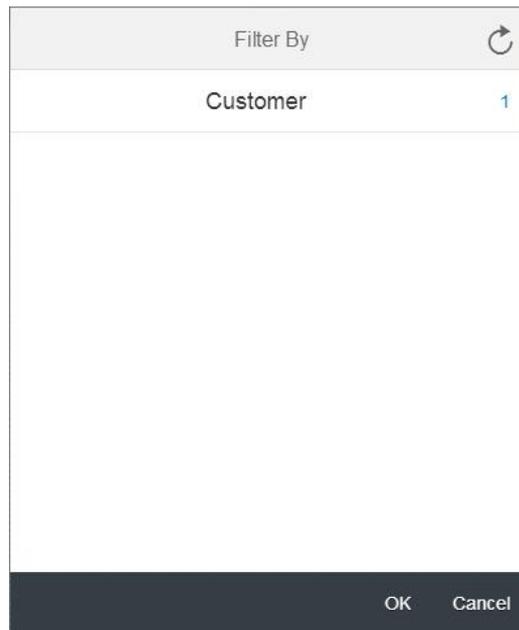
> ℹ️ **Note**
>
> To use two or more filters, select them, and select the filtering values.
>
> To clear all filters, in the upper right corner, choose ↺ (*Clear All Filters*).

5. In the *Filter By* window, choose the *OK* button.

   The data of the target widgets are filtered by the values you selected.

4.2 Viewing and Managing Advanced Dashboards in the Pervasive Analytics Designer

Prerequisites

- You have installed the app framework for SAP Business One, version for SAP HANA. For more information about installing the app framework, look for the *Working with App Framework for SAP Business One, version for SAP HANA* guide on sappartneredge.com.
- You have authorizations for the pervasive analytics designer. To grant authorizations for the pervasive analytics designer to users, from the SAP Business One, version for SAP HANA *Main Menu*, choose

Administration → System Initialization → Authorizations → General Authorizations. In the *Authorizations* window, select the user for whom you want to set authorizations, and under *Analytics,* in *Pervasive Analytics Designer,* select *Full Authorization*.

Procedure

1. In the SAP Business One, version for SAP HANA toolbar, choose 🖳 (*Pervasive Analytics*).

    Alternatively, in the SAP Business One, version for SAP HANA menu bar, choose *Tools → Pervasive Analytics*. The *Pervasive Analytics* window appears.

    ℹ️ Note

    Only users with authorizations for the pervasive analytics designer can access the window.

2. In the *My Advanced Dashboards* section, you can find all the advanced dashboards, for which you can perform the following:

    o Select each advanced dashboard to view its contents.

    o To delete an advanced dashboard, hover your mouse over the relevant dashboard, choose the ✖ icon, and choose the *Yes* button in the system message.

4.3   Predefined Advanced Dashboards

SAP provides the following predefined advanced pervasive dashboards.

For more information about the KPIs and pervasive dashboards contained in the predefined advanced dashboards, see Predefined KPIs and Predefined Pervasive Dashboards.

Adv. Dashboard for SAP Business One Sales App - Curr. Sales EE

In the SAP Business One Sales app, this advanced dashboard appears in the KPI screen by default. For more information about the mobile app, look for the guides *How to Work with SAP Business One Sales, mobile app for iOS* or *How to Work with SAP Business One Sales, mobile app for Android* on sappartneredge.com.

This advanced dashboard contains the following KPIs and pervasive dashboards. For more information about the KPIs and pervasive dashboards, see Predefined KPIs and Predefined Advanced Dashboards.

- *Potential Amt of Open Opportunities - Curr. User* (KPI): when you tap this KPI in the SAP Business One Sales app, the *Potential Amt of Open Oppty by Stages - Curr. User* pervasive dashboard appears.
- *Sales Order Amount of This Month (LC) - Curr. User* (KPI): when you tap this KPI in the SAP Business One Sales app, the *Sales Order Amount by Mo./Qty/Yr (LC) - Curr. User* pervasive dashboard appears.
- *Top 5 Customers by Sales Amount - Curr. User* (pervasive dashboard)
- *Top 5 Best Selling Items by Sales Amt - Curr. User* (pervasive dashboard)

You cannot delete the predefined advanced dashboard, but you can modify it. It is the first page of this advanced dashboard that appears in the KPI screen in the SAP Business One Sales app.

Adv. Dashboard for SAP Business One Sales App - Customer

In the SAP Business One Sales app, this dashboard appears on the *General* tab of customers by default. For more information about the mobile app, look for the guides *How to Work with SAP Business One Sales, mobile app for iOS* or *How to Work with SAP Business One Sales, mobile app for Android* on sappartneredge.com.

This advanced dashboard contains the following KPIs and pervasive dashboards. For more information about the KPIs and pervasive dashboards, see Predefined KPIs and Predefined Advanced Dashboards.

- *Sales Order Amount by Months (LC)* (pervasive dashboard)
- *Total Amount of Open Deliveries (LC)* (KPI)
- *Customer Balance (LC)* (KPI)
- *Top 5 Best Selling Items by Sales Amount (Mobile)* (pervasive dashboard)

You cannot delete the predefined advanced dashboard, but you can modify it. It is the first page of this advanced dashboard that appears in the KPI screen in the SAP Business One Sales app.

When displayed on the *General* tab of customers in the SAP Business One Sales app, the data is based on the specific customer you are exploring.

> **i** Note
>
> To make sure the first page of this advanced dashboard displays data based on the specific customer in the SAP Business One Sales app, in the data source of the KPIs and dashboards contained in the first page, there must be a dimension called `CardCode`, and the name is case sensitive. Otherwise, the data will not be based on the specific customer you are exploring.

The following is an example of a KPI data source that contains a dimension called `CardCode`:

The following is an example of a pervasive dashboard data source that contains a dimension called **CardCode**:
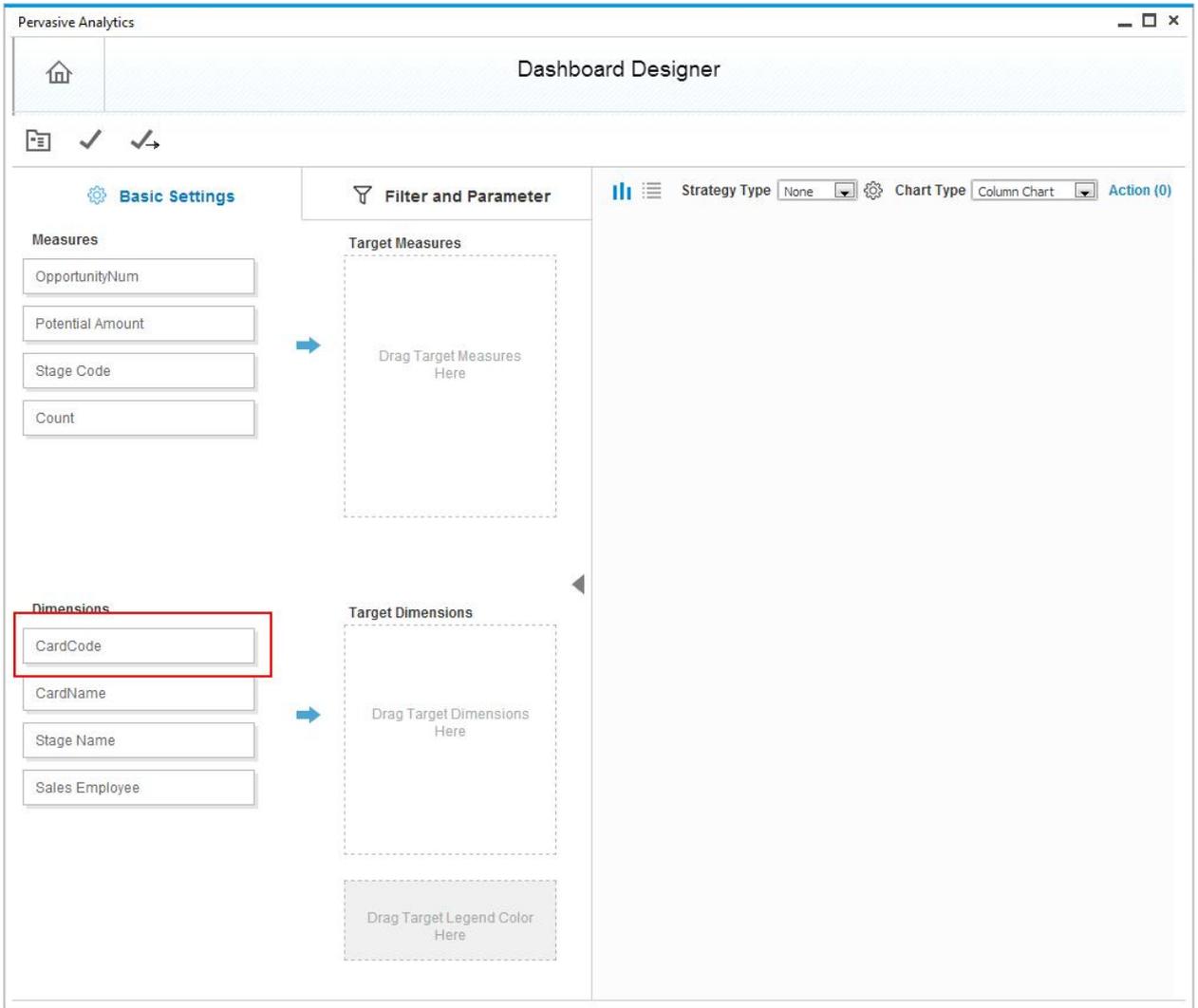
Customer 360

For more information about working with Customer 360, see Working with Customer 360.

This advanced dashboard contains the following KPIs and pervasive dashboards. For more information about the KPIs and pervasive dashboards, see Predefined KPIs and Predefined Advanced Dashboards.

- *General* tab:
  - o Business Partner Profile
  - o *Total Sales Amount (LTD)* (KPI)
  - o *Gross Profit (LTD)* (KPI)
  - o *Number of Open Service Calls* (KPI)
  - o *Revenue Versus Gross Profit for Last 6 Years* (pervasive dashboard)
  - o *Potential Amt of Open Opportunities* (KPI)

- o *Churn Probability* (KPI)
- o *Opportunity Win Rate (LTD)* (KPI)
- o *Weighted Amount of All Open Opportunities (LC)* (KPI)
- *Sales* tab:
  - o Business Partner Profile
  - o *Total Sales Amount (YTD)* (KPI)
  - o *Gross Profit (YTD)* (KPI)
  - o *Gross Profit Margin (YTD)* (KPI)
  - o *Revenue Versus Gross Profit for Last 6 Months* (pervasive dashboard)
  - o *Top 5 Best Selling Items by Sales Amt of This Year* (pervasive dashboard)
  - o *Number of Open Sales Quotations* (KPI)
  - o *Number of Open Sales Orders* (KPI)
- *Logistics* tab:
  - o Business Partner Profile
  - o *On-Time Delivery Rate* (KPI)
  - o *Average Fulfillment Days for a Sales Order* (KPI)
  - o *Sales Return Amount for This Year* (KPI)
  - o *Avg. Ord. Fulfillment Days by Cust. (Last 6 Mo.)* (pervasive dashboard)
  - o *On-Time Dely Rate by Number by Cust. (Last 6 Mo.)* (pervasive dashboard)
  - o *Number of Open Deliveries* (KPI)
  - o *Open Amount of Deliveries* (KPI)
- *Receivables* tab:
  - o Business Partner Profile
  - o *Credit Limit Deviation* (KPI)
  - o *Total Receivable Amount YTD* (KPI)
  - o *Receivables Overdue* (KPI)
  - o *Aging of Receivables Overdue (30-Day Interval)* (pervasive dashboard)

You cannot delete the predefined advanced dashboard, but you can modify it.

5   Working with Customer 360

Procedure

1. In the SAP Business One, version for SAP HANA *Main Menu*, choose *Business Partners → Business Partner Master Data*.

2. In the *Business Partner Master Data* window, navigate to a customer, and in the lower-right corner, choose *You Can Also → View Customer 360*.

The *Customer 360* advanced dashboard appears, displaying a 360-degree view of the customer. For more information about the advanced dashboard, see Predefined Advanced Dashboards.
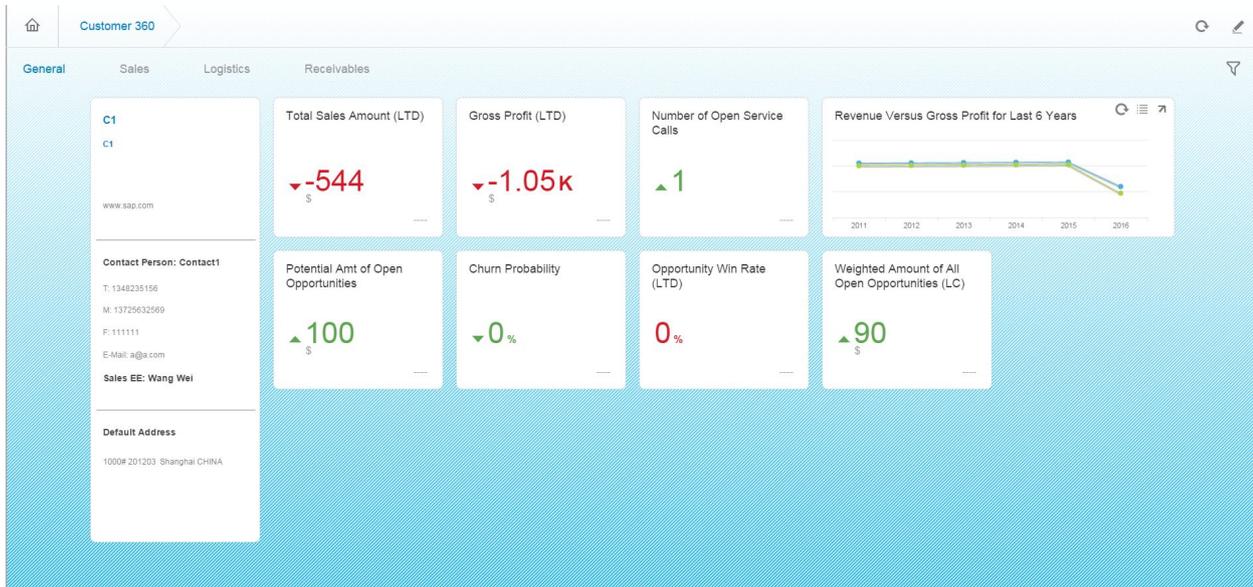
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