



# Hands-on Lab 6: Advanced Dashboard Capabilities in Cognos Analytics

**Estimated time needed:** 30 minutes

In this lab, you will learn and leverage some advanced Cognos Analytics dashboard capabilities. You will learn how to create calculations, how to keep/exclude data points from a visualization, how to set top/bottom on a visualization, how to create and leverage navigation paths and lastly, how to filter data in a dashboard.

## Software Used in this Lab

Like the videos in the course, for the hands-on labs we will be using IBM Cognos Analytics trial version (currently limited to 30 days) as this is available at no charge.

## Dataset Used in this Lab

The dataset used in this lab comes from the VM designed to showcase IBM Cognos Analytics. Source:

<https://www.ibm.com/cloud/garage/dte/tutorial/ibm-cognos-analytics-1113-getting-started-exploration-0>. This dataset is published by IBM.

You can download the dataset file directly from here: [CustomerLoyaltyProgram.csv](#)

## Objectives

After completing this lab, you will be able to:

- Start a new dashboard.
- Create calculations.
- Keep/exclude data points from a visualization.
- Set top/bottom on a visualization.
- Create and leverage navigation paths.
- Filter data in a dashboard.

## Exercise 1 : Start a New Dashboard

In this exercise, you will start a new dashboard for working with advanced Cognos Analytics dashboard capabilities.

1. To sign in to the Cognos Analytics platform with your IBMid, go to [myibm.ibm.com/dashboard/](https://myibm.ibm.com/dashboard/).
2. Enter your IBMid and password.
3. Scroll down and click **Launch**.

# Products

## Trials

1 Offering



### IBM Cognos Analytics on Cloud - Trial

Active

Expires on Oct 16, 2020

Launch



Manage

4. From the **Recent** section, click on the uploaded data file **CustomerLoyaltyProgram.csv**.

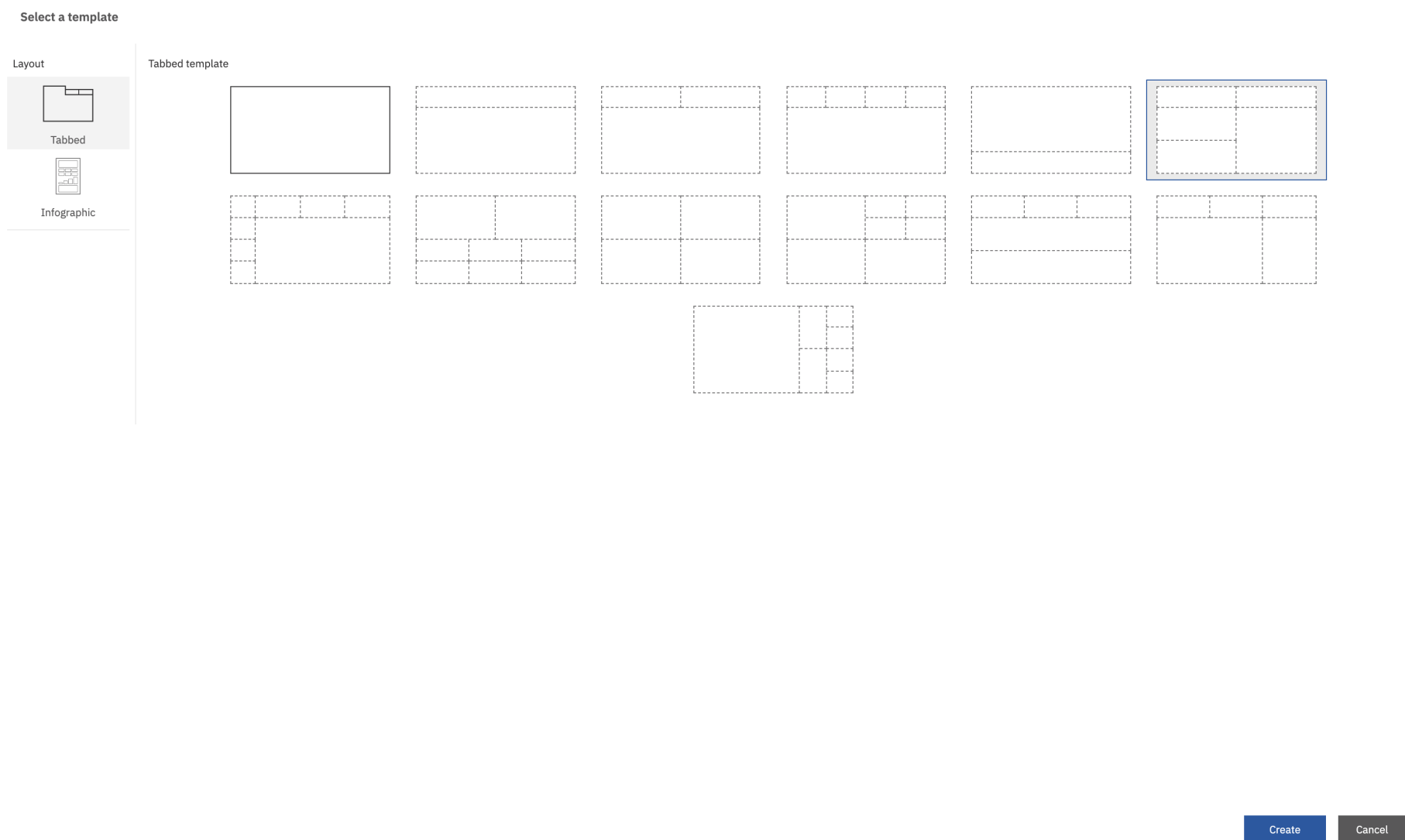


# Hello. Welcome to IBM Cognos Analytics.

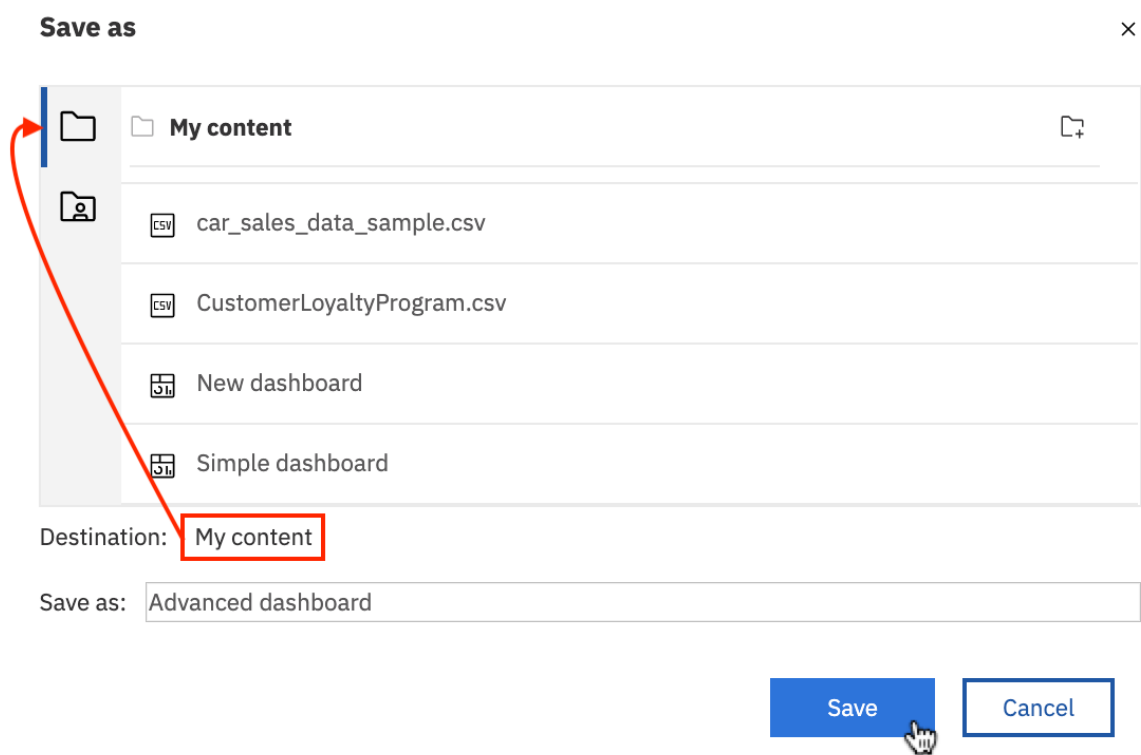
## Recent

Name	Type	Last modified
CustomerLoyaltyProgram.csv	CSV	

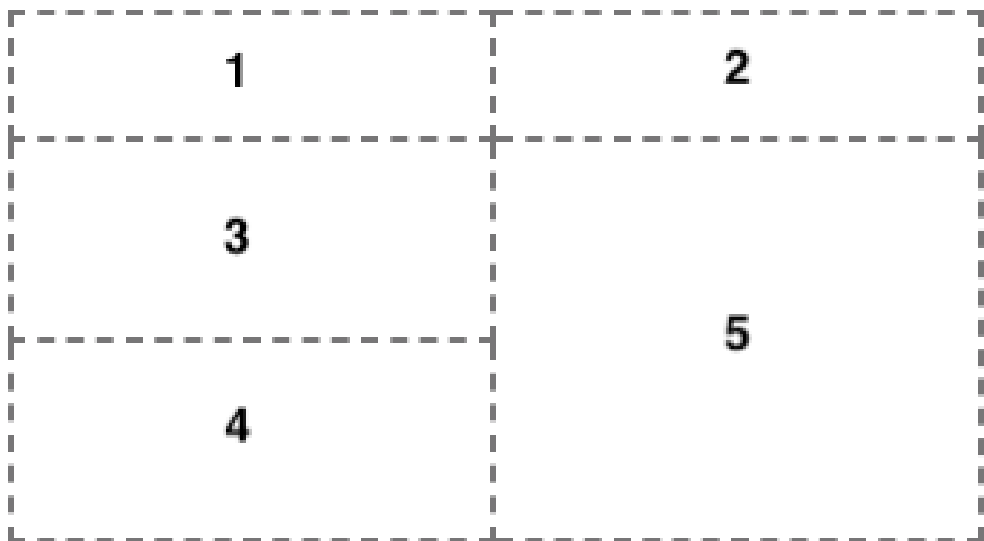
5. The Template window will be displayed, allowing you to select the type of dashboard and the template style. Select the **tabbed dashboard style**. This will allow you to have multiple pages for your dashboards. Select the **five-panel template**, then click **Create**.



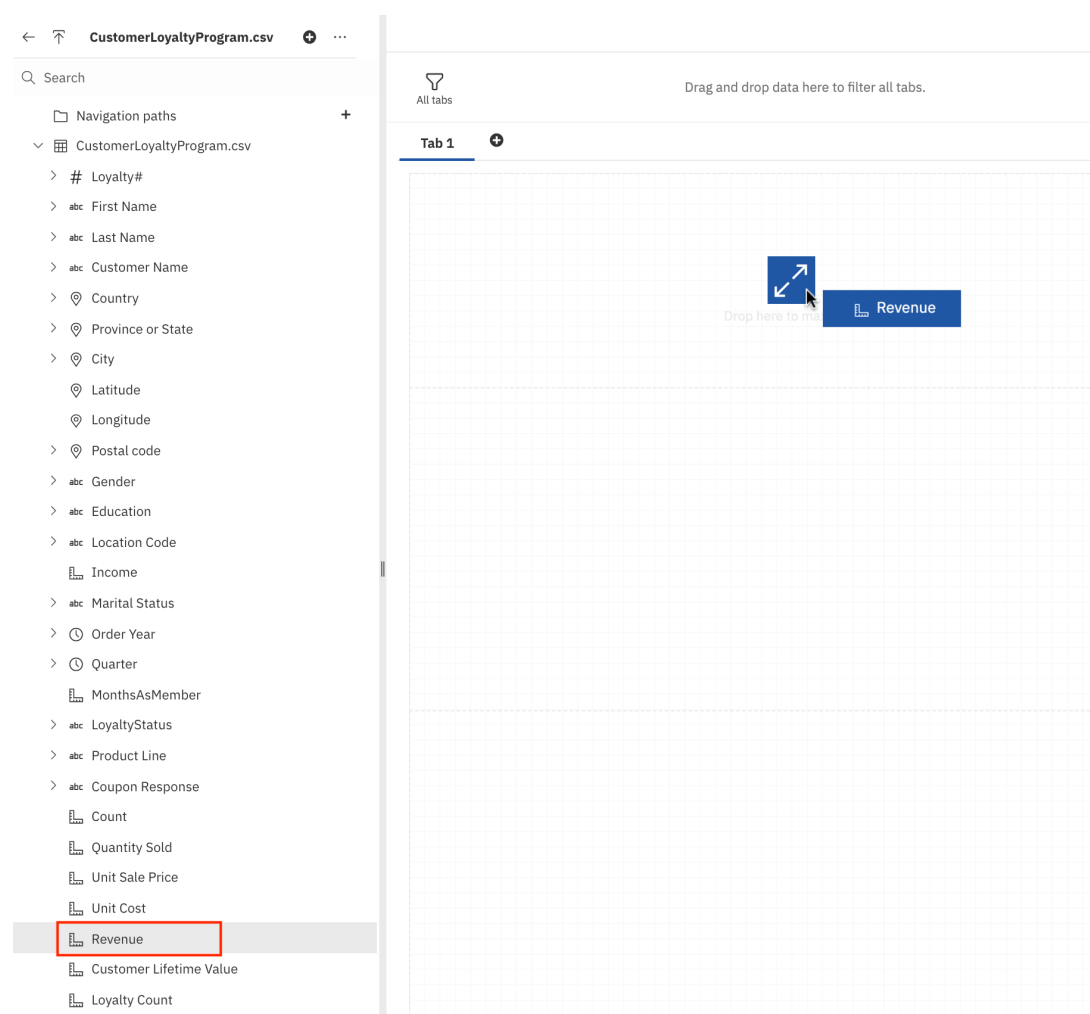
6. To save the newly created dashboard, press **CTRL+S**. Select 'My content' as the Destination. On the **Save as:** text field, type "Advanced dashboard", and click **Save**.



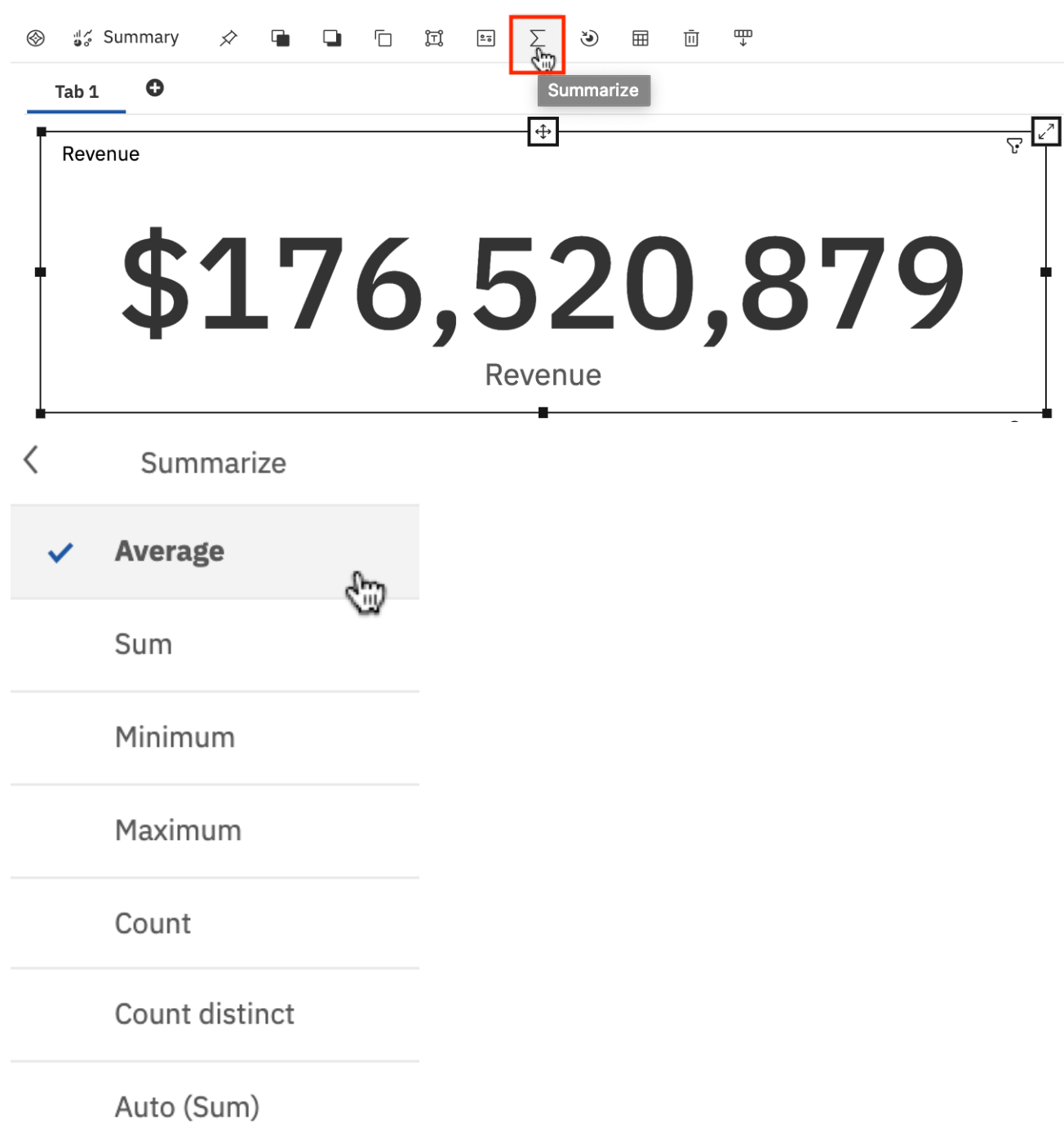
7. As you build the dashboard, the location placement for Widgets in the dashboard template will be referenced using the following Panel numbers.



8. From the **Data Source panel**, select **Revenue** and drag it to the center of **Panel 1**, releasing it once you see the **drop zone turn blue**.

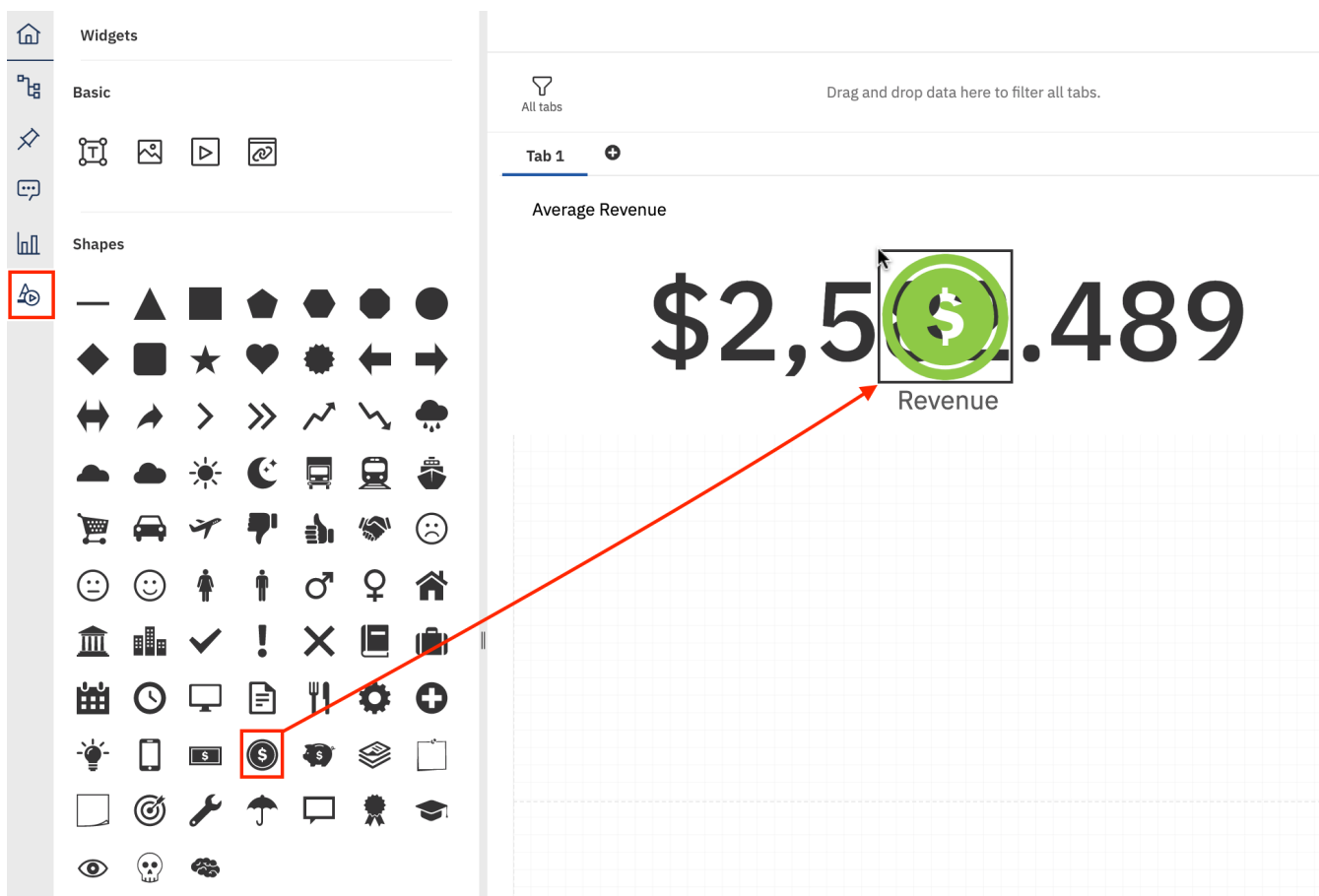


9. Click on the **Summary chart in Panel 1** to bring it into focus. From the on-demand toolbar, click **Summarize**. Then select **Average**.



10. Click on the **Summary chart in Panel 1** if needed to bring it into focus. From the on-demand toolbar, click **Edit the title**. Enter the title **"Average Revenue"** to the visualization.

11. From the **Navigation panel**, select **Widgets** to open the widgets panel. Drag and drop **Money coin** from **Shapes** to the center of **Panel 1**.



12. To save the current work in the dashboard, press **CTRL+S**.

13. Your **Panel 1 widget** should look like the one below:

Average Revenue



💰 = 100 Revenue

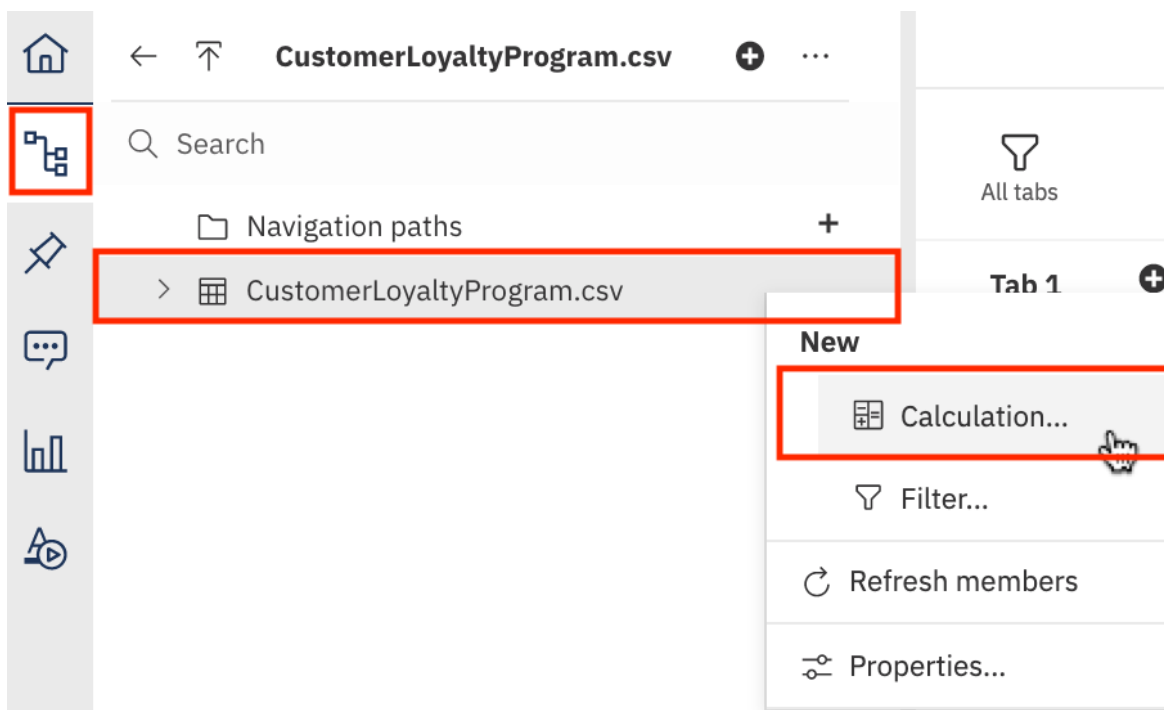
## Exercise 2 : Working with Advanced Cognos Analytics Dashboard Capabilities

In this exercise, you will practice some advanced Cognos Analytics dashboard capabilities.

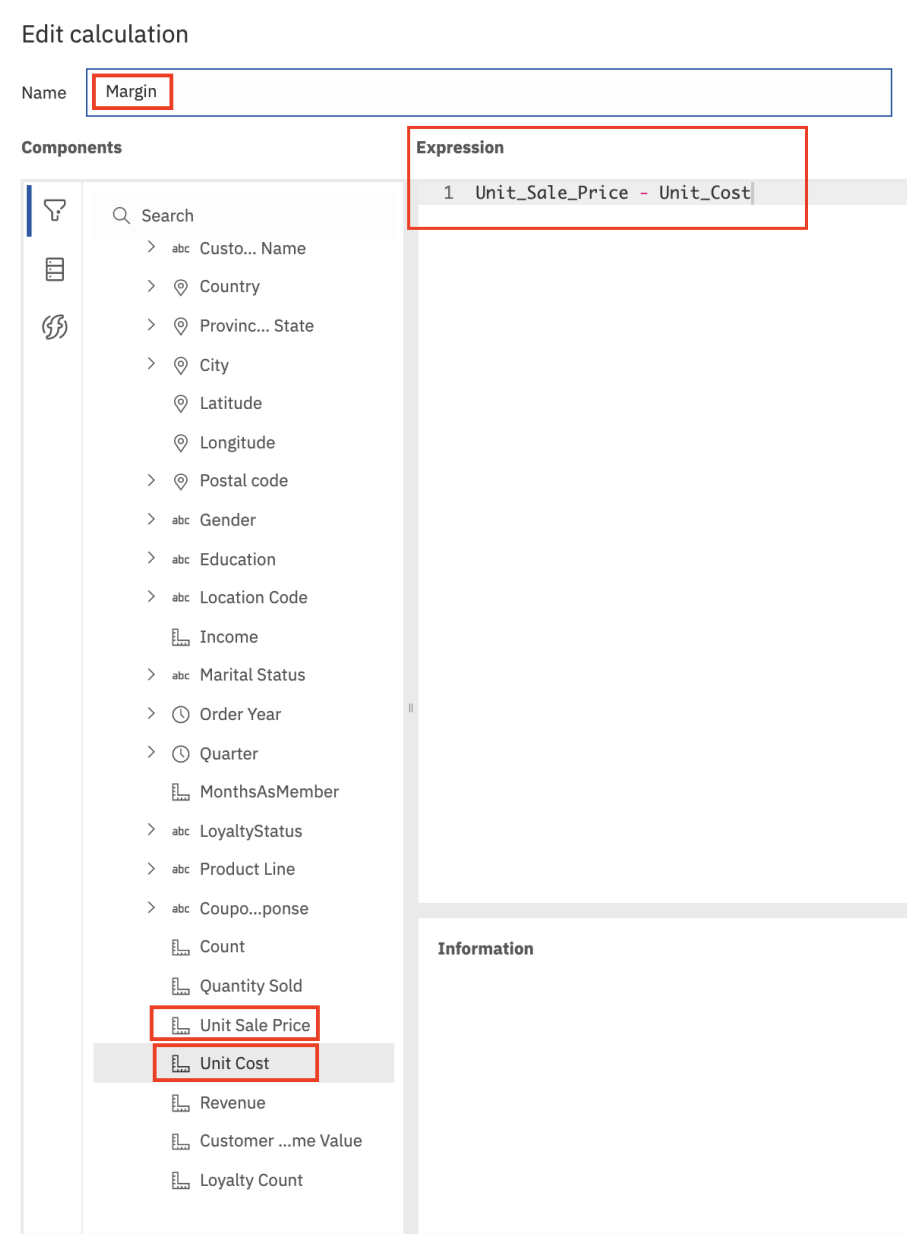
- Task A : Create Calculations
- Task B : Keep/Exclude Data Points from a visualization
- Task C : Set Top/Bottom on a visualization
- Task D : Create and Leverage Navigation Paths
- Task E : Filter Data in Current tab

### Task A : Create Calculations

1. From the **Navigation** panel, select **Sources** to open the data source panel, if it is not already open. The **Data Source** panel displays the uploaded file "**CustomerLoyaltyProgram.csv**" as the Selected Source.
2. Right-click on the **CustomerLoyaltyProgram.csv** of data source panel and select **Calculation**.



3. Name the calculation as **"Margin"**. From panel **Components** to the field **Expression**, drag and drop **Unit\_Sale\_Price**, type minus - and then drag and drop **Unit\_Cost**. Click **OK**.



4. On the Data Source panel, expand CustomerLoyaltyProgram.csv, if needed. From the **Data Source** panel, select **Margin** and drag it to the center of **Panel 2**, releasing it once you see the **drop zone turn blue**.

5. Click on the **Summary chart in Panel 2** to bring it into focus. Right-click on the **Summary chart in Panel 2** and select **Summarize**. Then select **Average**.

6. Right-click on the **Summary chart in Panel 2** and select **Format**. Then select **Currency**. Finally select **\$(USD)** as the currency.

<

Format

Margin

Auto

Text

Number

Percent

Currency

Number of decimal places

Default

Use thousands separator

Abbreviate

Currency

Default

NT\$ (TWD) - Taiwan, dollar

₴ (UAH) - Ukraine, hryvnia

\$ (USD) - Unite...merica, dollar

Bs.F. (VEF) - Ve... bolivar fuerte

₫ (VND) - Việt Nam, đồng

<default>

Currency symbol ⓘ

Add a symbol

Label position

Default

Default specifies the format inherited from the system

7. Click on the **Summary chart in Panel 2** if needed to bring it into focus. From the on-demand toolbar, click **Edit the title**. Enter the title **"Average Margin"** to the visualization.

8. To save the current work in the dashboard, press **CTRL+S**.

9. Your **Panel 2 widget** should look like the one below:

Average Margin

\$84.36

Margin

# Task B : Keep/Exclude Data Points from a Visualization

1. On the Data Source panel, expand CustomerLoyaltyProgram.csv, if needed. From the **Data Source** panel, press **CTRL** and select **Revenue, Product Line** and drag it to the center of **Panel 3**, releasing it once you see the **drop zone turn blue**.

2. From the **Data Source** panel, press select **Location Code** and drag it to the **drop zone of Color** of **Panel 3**.

> 

📍

Province or State

> 

📍

City

📍

Latitude

📍

Longitude

> 

📍

Postal code

> 

abc

Gender

> 

abc

Education

abc

Location Code

📊

Income

> 

abc

Marital Status

> 

🕒

Order Year

> 

🕒

Quarter

📊

MonthsAsMember

Revenue by Product Line

Color

Drag data here

abc Location Code

Revenue

Product Line

Suburban

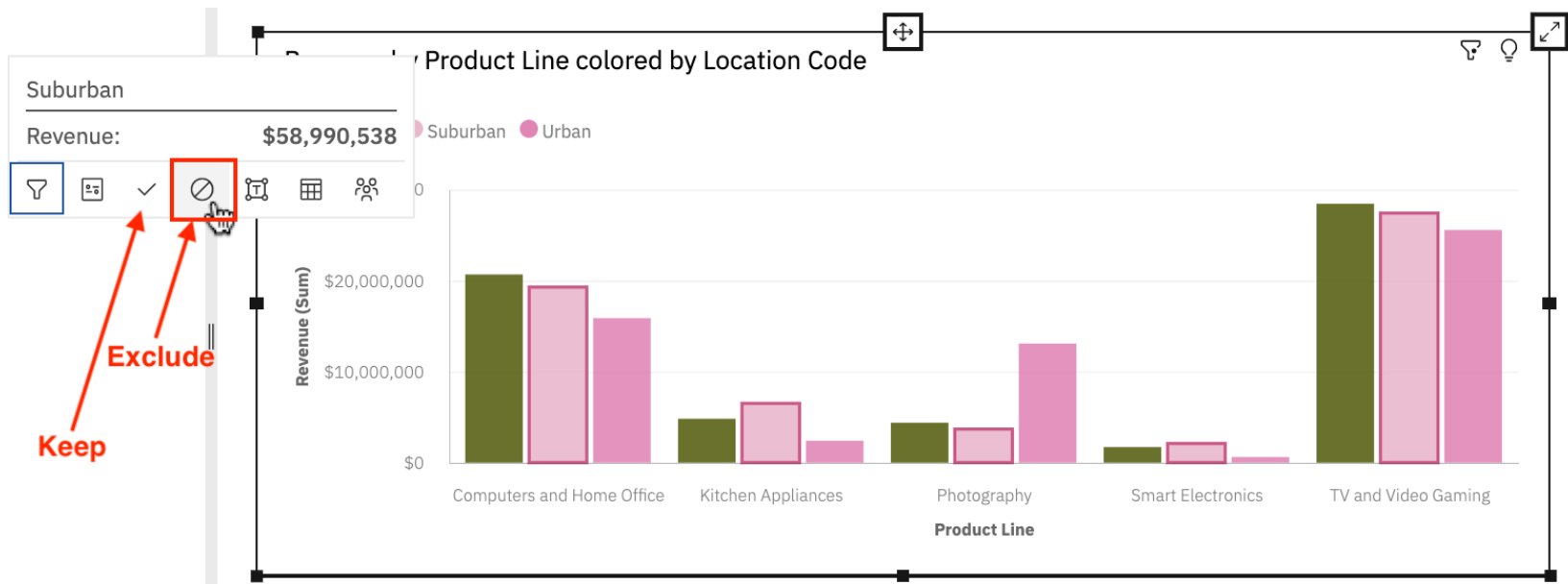
Urban

Suburban

Smart Electronics

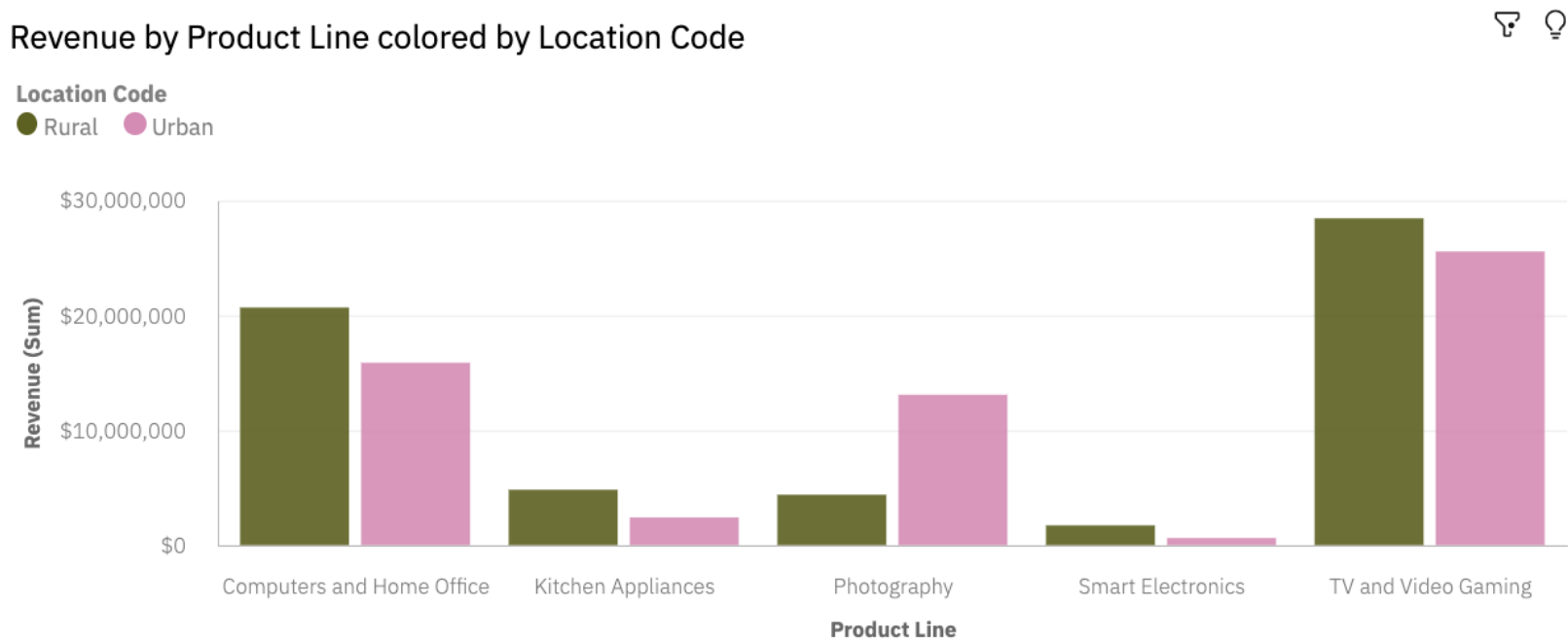
TV and Video Gaming

3. Right-click on the **Suburban** data point of the panel 3 visualization. Select **Exclude**.



4. To save the current work in the dashboard, press **CTRL+S**.

5. Your **Panel 3 widget** should look like the one below:



## Task C : Set Top/Bottom on a Visualization

1. From the **Data Source** panel, press **CTRL** and select **Quantity Sold, City** and drag it to the center of **Panel 4**, releasing it once you see the **drop zone turn blue**.
2. Click on the **chart in panel 4** to bring it into focus and render the **on-demand toolbar**.
3. Click the **Change Visualization** button in the on-demand toolbar. Use the **arrow ">"** to expand **All Visualizations**. Find and select **Column**.
4. Click on the **Column chart in panel 4** to bring it into focus. Right-click on the axis label **Quantity Sold (Sum)** and select **Top or bottom**.





5. Set the **value of Number of results** as **10**. Select **Top count**.

Top or bottom

Number of results

The value can be 1 - 100

10

Show

☒ Top count

☐ Bottom count

Clear

6. From the on-demand toolbar, click **Edit the title**. Enter the title "**Top 10 Quantity Sold by City**" to the visualization.

7. To save the current work in the dashboard, press **CTRL+S**.

8. Your **Panel 4 widget** should look like the one below:



## Task D : Create and Leverage Navigation Paths

1. Click on the **Create navigation path** of **Navigation paths** of the data source panel.

CustomerLoyaltyProgram.csv

Navigation paths

CustomerLoyaltyProgram.csv

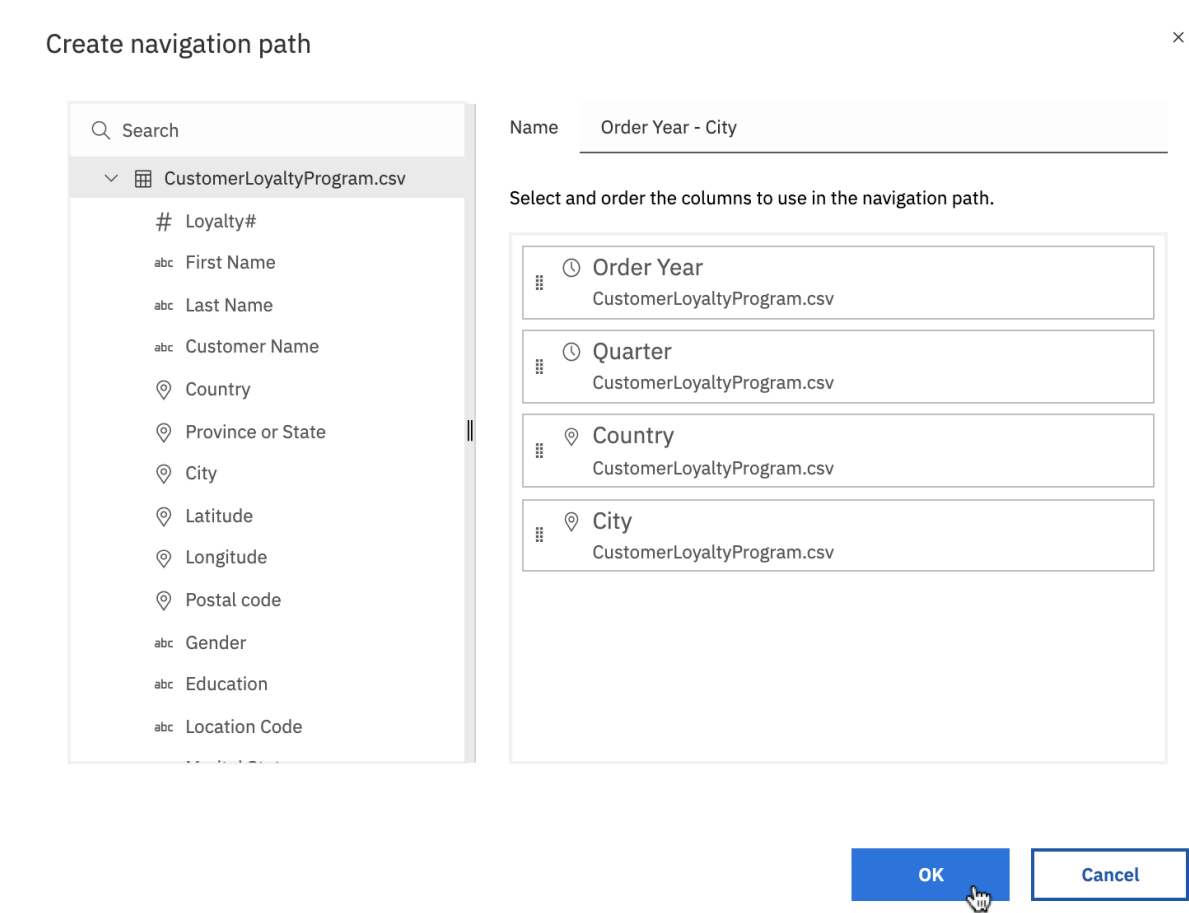
Margin

Loyalty#

First Name

Last Name

2. In the **Create navigation path** dialog box, expand CustomerLoyaltyProgram.csv, if needed. Select, drag and release **Order Year, Quarter, Country, City** sequentially, maintaining the order(shown on the image below) on the right panel. Once done, click **OK**.

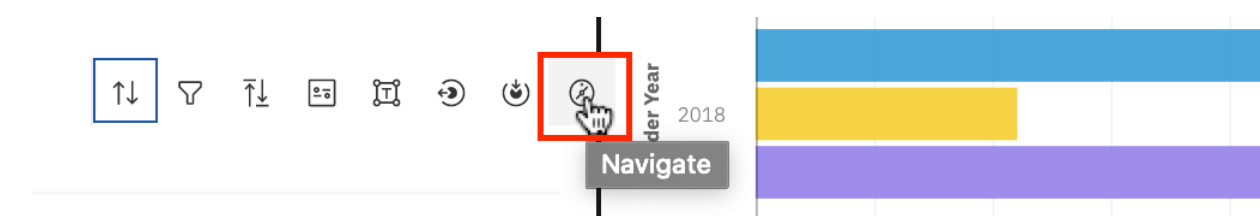


3. From the **Data Source** panel, press **CTRL** and select **Margin, Product Line, Order Year** and drag it to the center of **Panel 5**, releasing it once you see the **drop zone turn blue**.

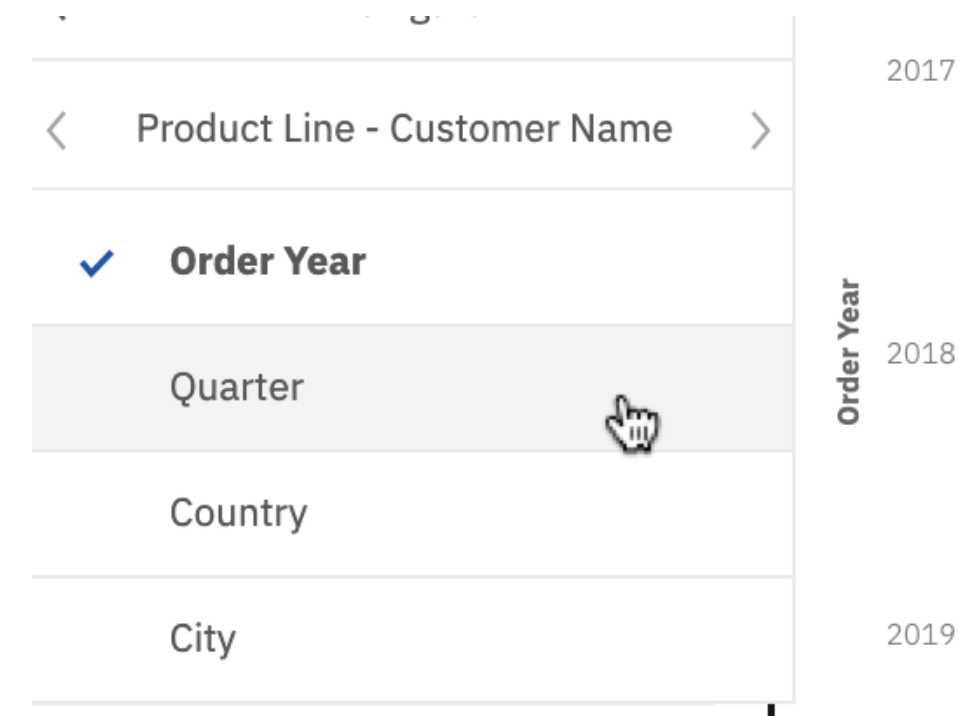
4. Click on the **chart in panel 5** to bring it into focus and render the **on-demand toolbar**.

5. Click the **Change Visualization** button in the on-demand toolbar. Use the **arrow ">"** to expand **Recommended visualizations**. Find and Select **Bar**.

6. Right-click on the axis label **Order Year**. Select **Navigate**.

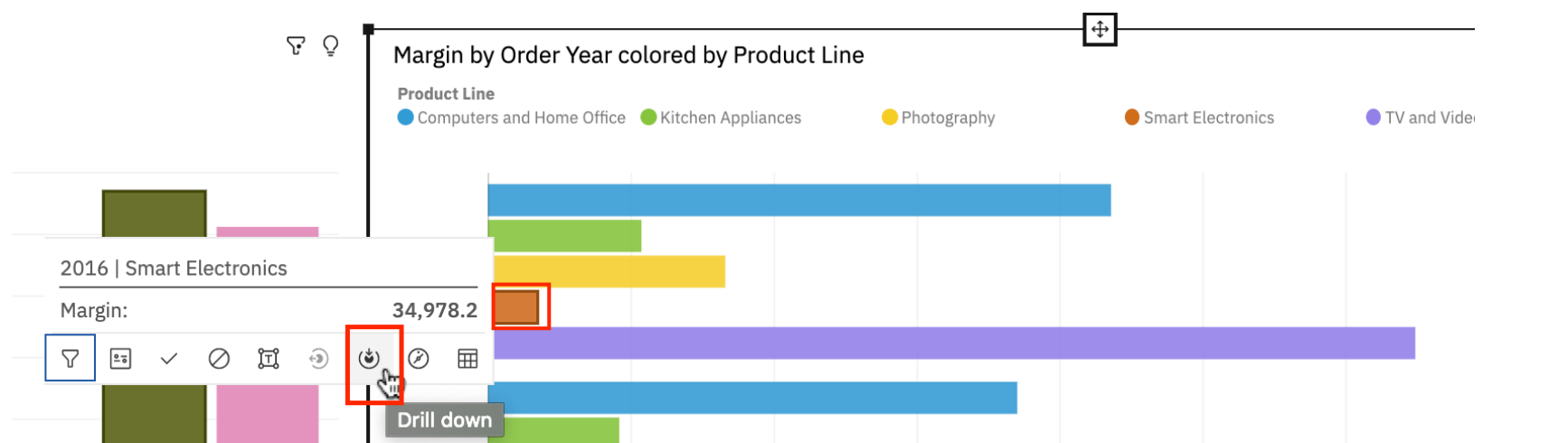


7. One by one select **Order Year, Quarter, Country, City** to navigate among the columns of the navigation paths and observe the resulting panel 5 visualization. Lastly, keep the **Order Year** selected.

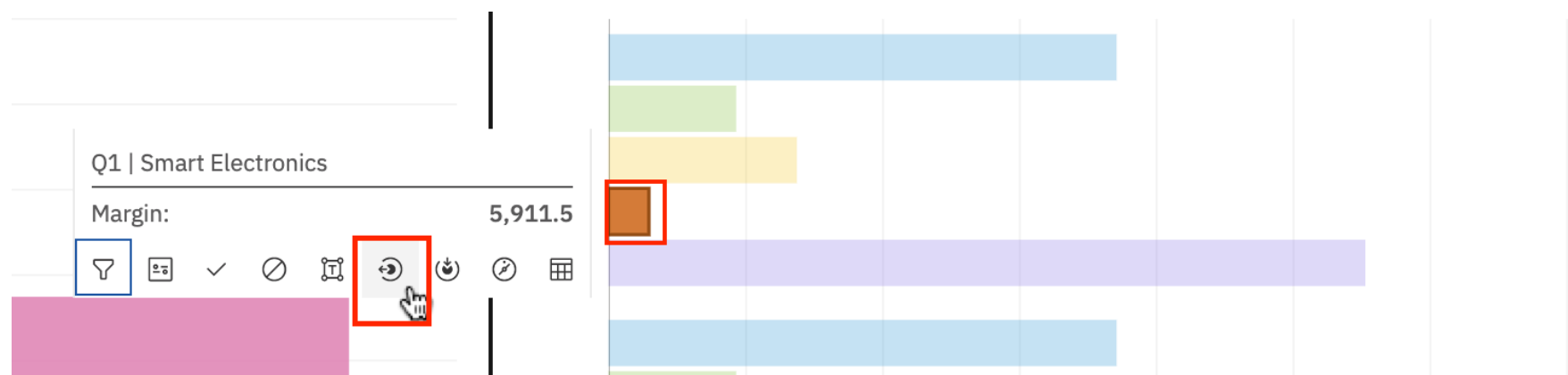


8. Alternative interactive way with Drill down/back:

- Click on the **chart in panel 5** to bring it into focus if needed.
- Right-click on **2016 Smart Electronics bar** of the bar chart.
- Select **Drill down**.

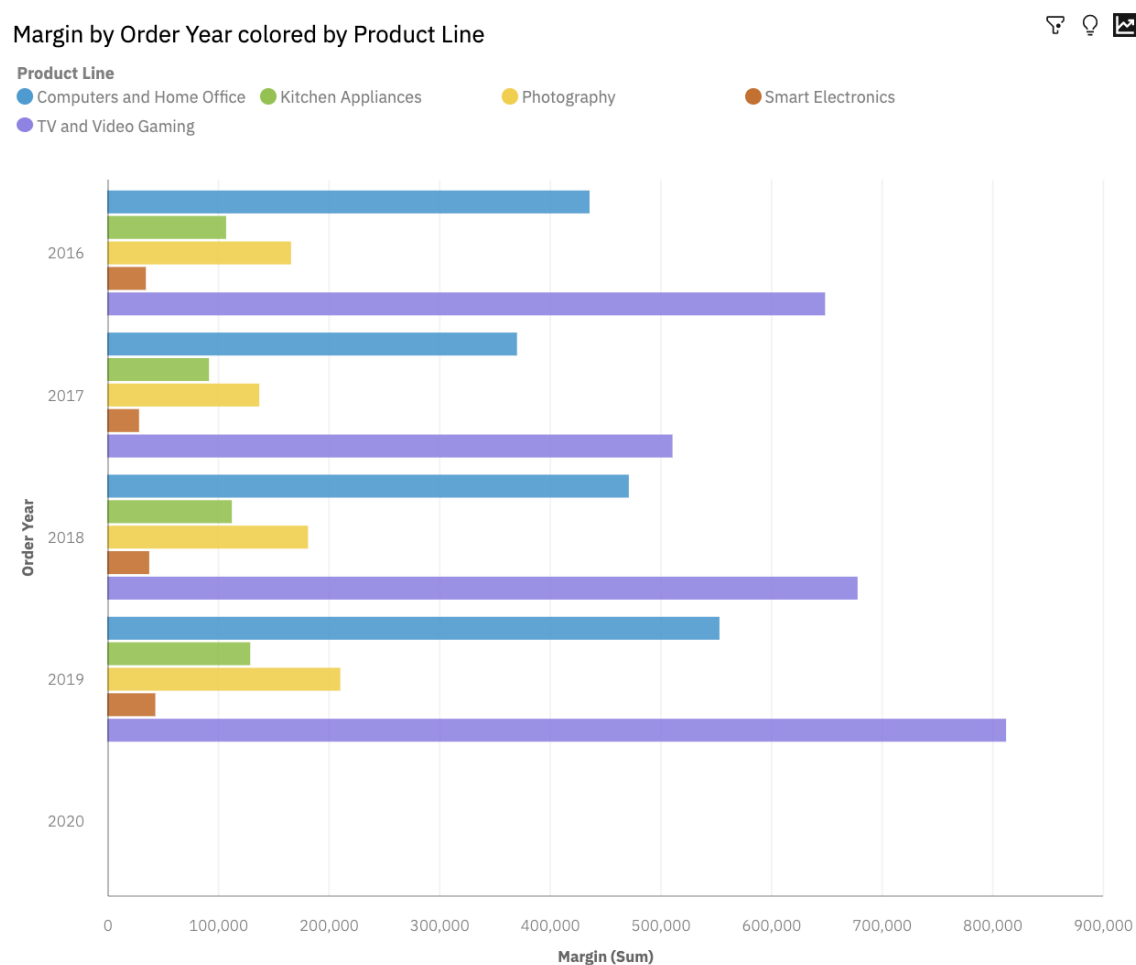


- Now right-click on **Q1 Smart Electronics bar** of the bar chart.
- Select **Drill back**.



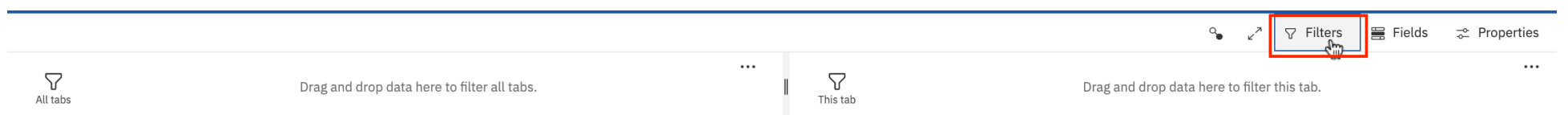
9. To save the current work in the dashboard, press **CTRL+S**.

10. Your **Panel 5 widget** should look like the one below:



## Task E : Filter Data in the Current Tab

1. If required, click **Filters** in the **Dashboard Toolbar** to display the filters pane.



2. From the **Data Source** panel, select **Product Line** and drag and release it on the **This tab** filter panel on the right-hand side.



# Author(s)

- [Sandip Saha Joy](#)

# Other Contributor(s)

- [Steve Ryan](#)

# Changelog

Date	Version	Changed by	Change Description
2020-10-02	1.1	Steve Ryan	ID review
2020-09-24	1.0	Sandip Saha Joy	Initial version created

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