



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/.
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


LaunchManage

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

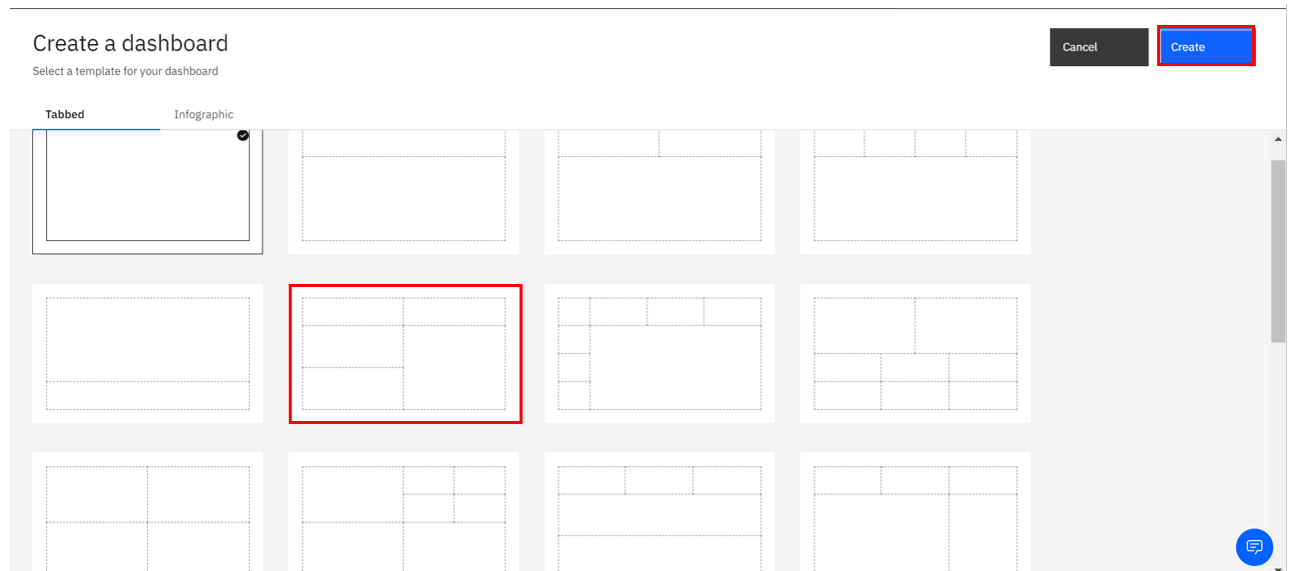
[Get started](#)[Recent](#)

CustomerLoyaltyProg...

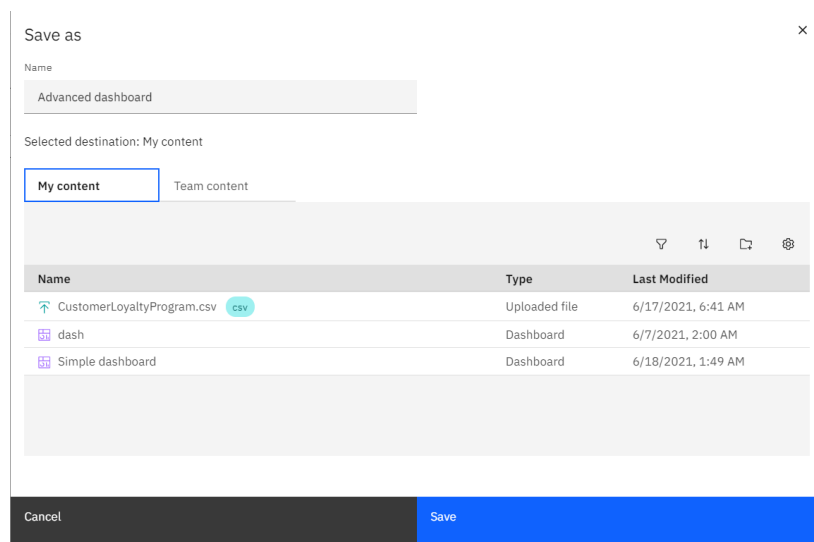
Last Modified
6/7/2021, 1:56 AM

CSV 

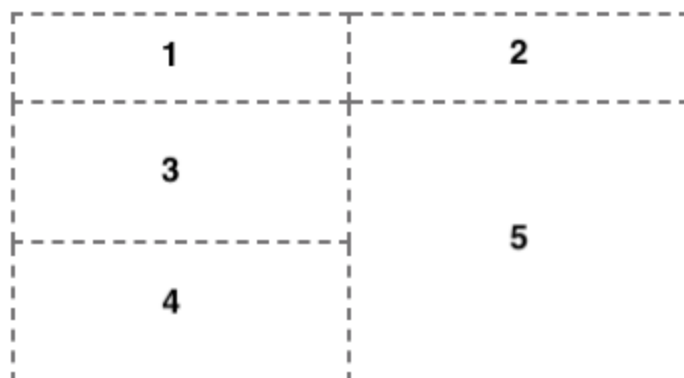
5. The Template window will be displayed, allowing you to select the type of dashboard and the template style. Select the **tabbed dashboard style**. This will allow you to have multiple pages for your dashboards. Select the **five-panel template**, then click **Create**.



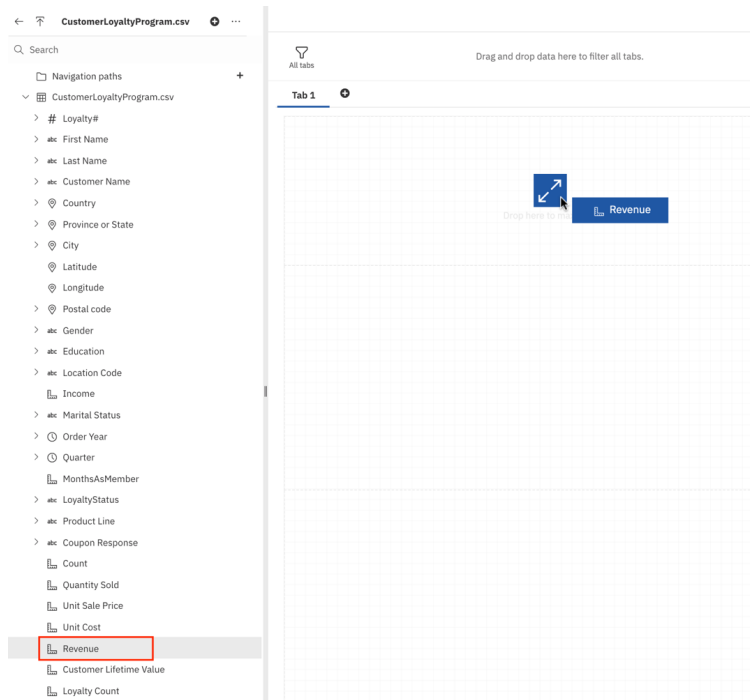
6. To save the newly created dashboard, press **CTRL+S**. Select 'My content' as the Destination. On the **Save as:** text field, type "Advanced dashboard", and click **Save**.



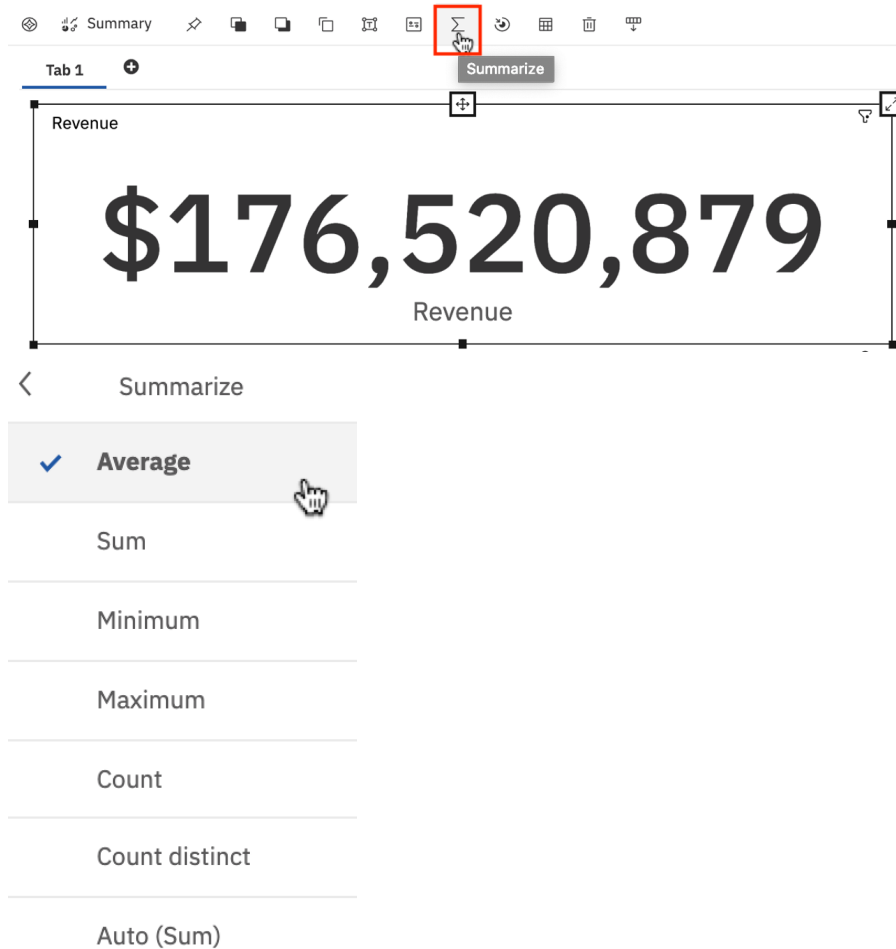
7. As you build the dashboard, the location placement for Widgets in the dashboard template will be referenced using the following Panel numbers.



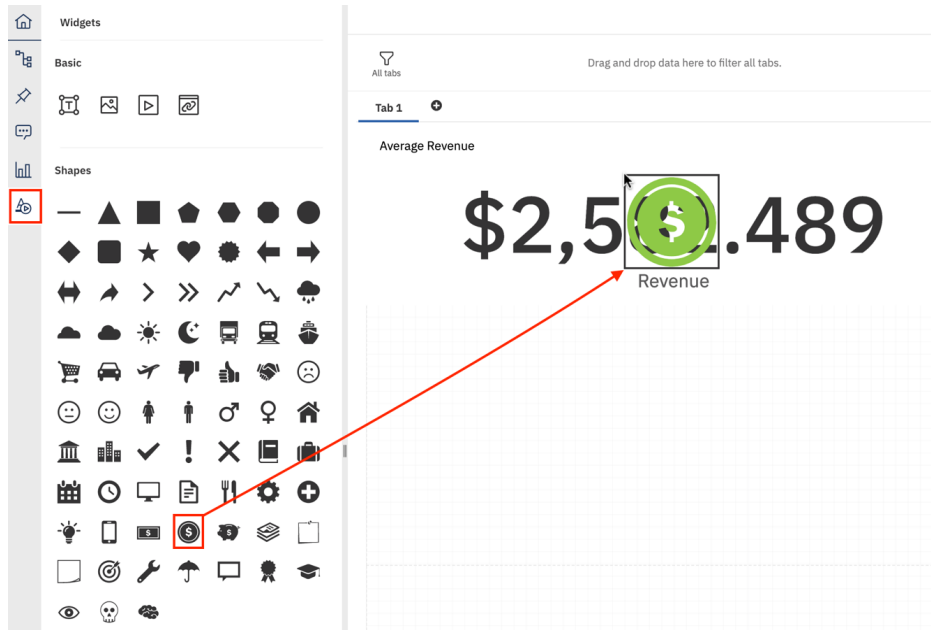
8. From the **Data Source panel**, select **Revenue** and drag it to the center of **Panel 1**, releasing it once you see the **drop zone turn blue**.



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

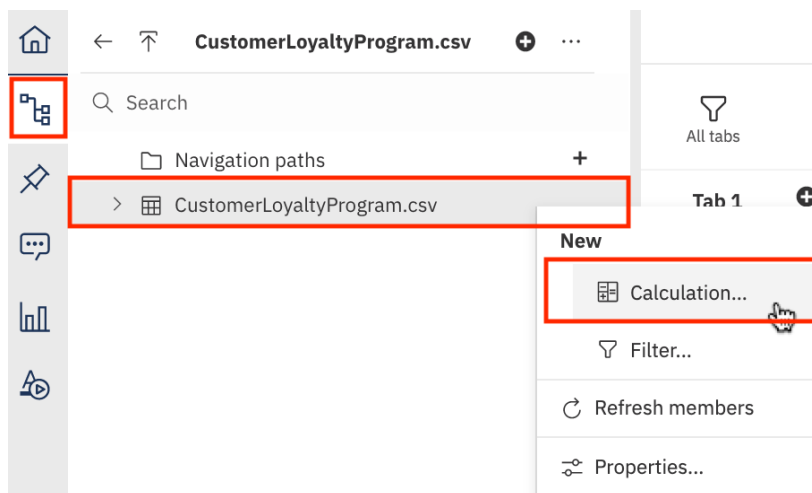
Exercise 2 : Working with Advanced Cognos Analytics Dashboard Capabilities

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

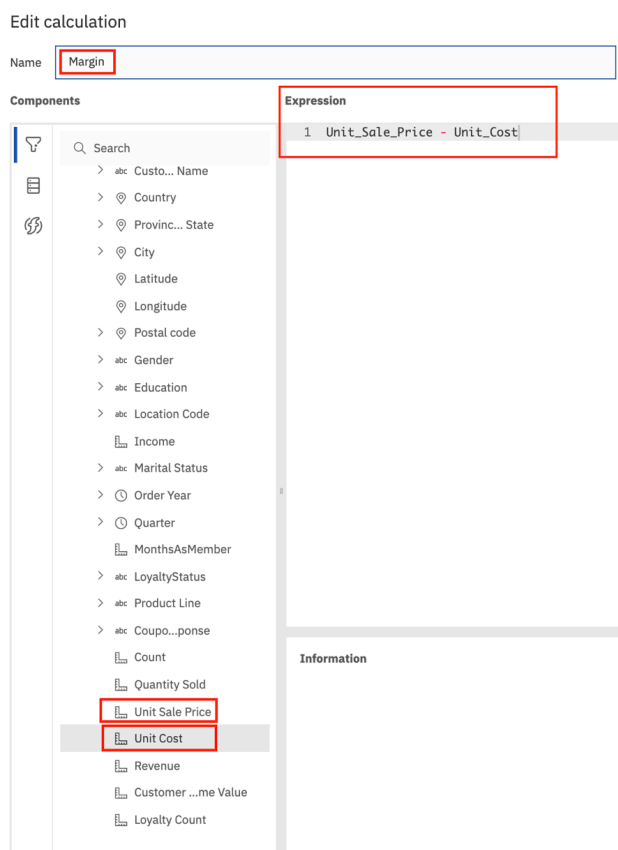
- Task A : Create Calculations
- Task B : Keep/Exclude Data Points from a visualization
- Task C : Set Top/Bottom on a visualization
- Task D : Create and Leverage Navigation Paths
- Task E : Filter Data in Current tab

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

- 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.
- To save the current work in the dashboard, press **CTRL+S**.
- Your **Panel 2 widget** should look like the one below:

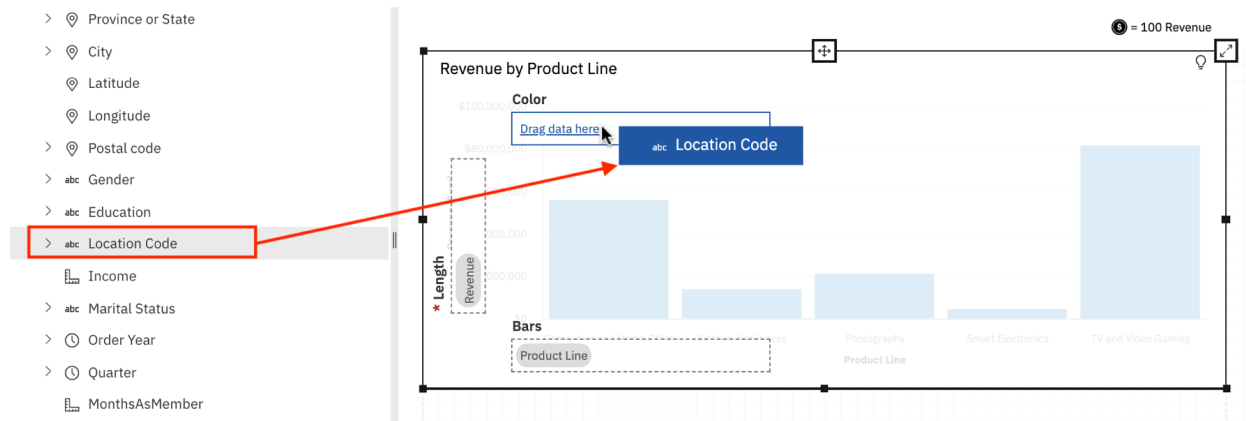
Average Margin

\$84.36

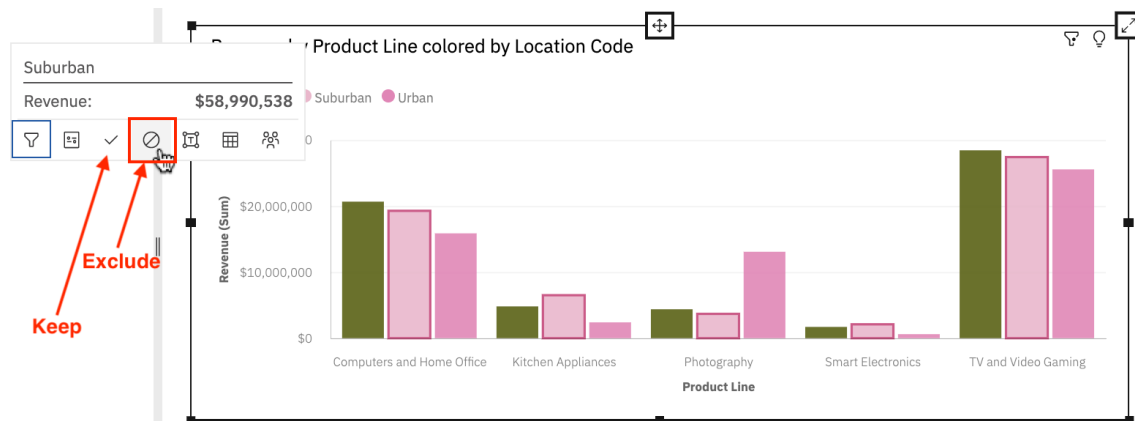
Margin

Task B : Keep/Exclude Data Points from a Visualization

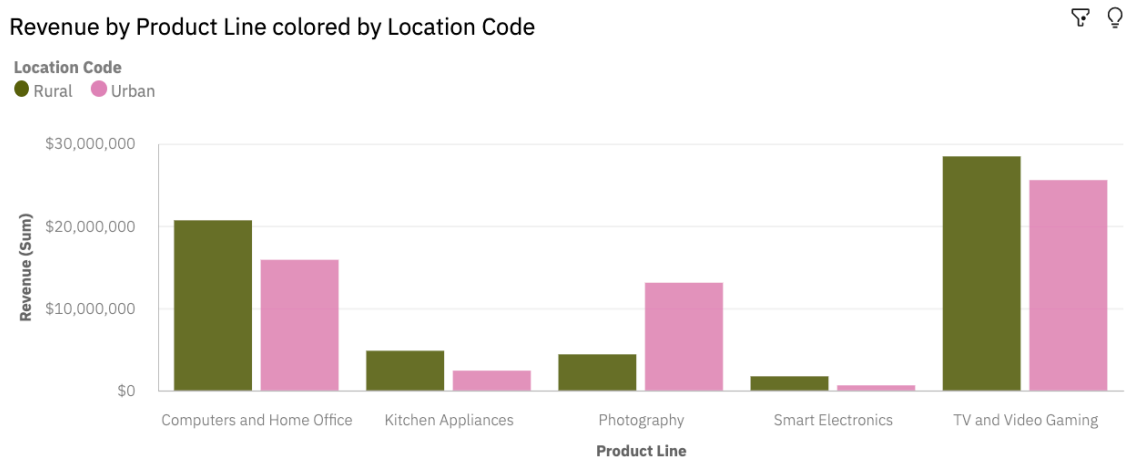
- On the **Data Source** panel, expand **CustomerLoyaltyProgram.csv**, if needed. From the **Data Source** panel, press **CTRL** and select **Revenue, Product Line** and drag it to the center of **Panel 3**, releasing it once you see the **drop zone turn blue**.
- From the **Data Source** panel, press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



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



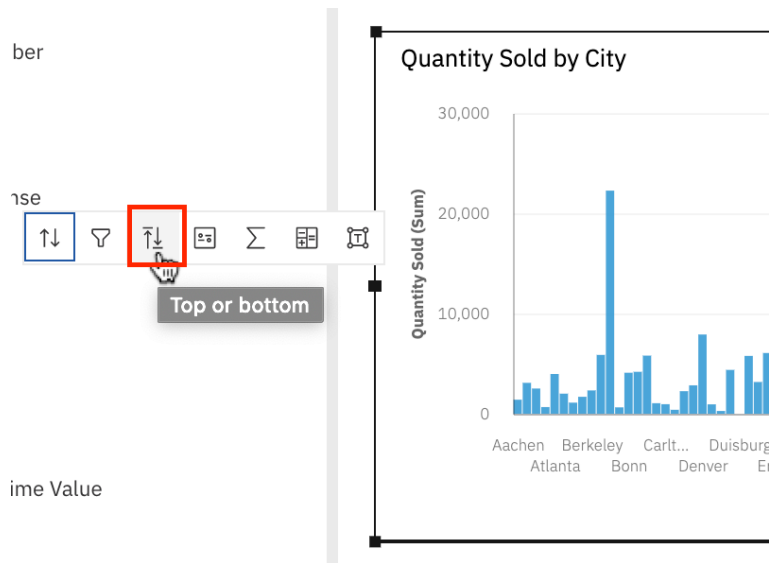
- To save the current work in the dashboard, press **CTRL+S**.
- Your **Panel 3 widget** should look like the one below:



Task C : Set Top/Bottom on a Visualization

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

- Click the **Change Visualization** button in the on-demand toolbar. Use the **arrow ">"** to expand **All Visualizations**. Find and select **Column**.
- 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**.



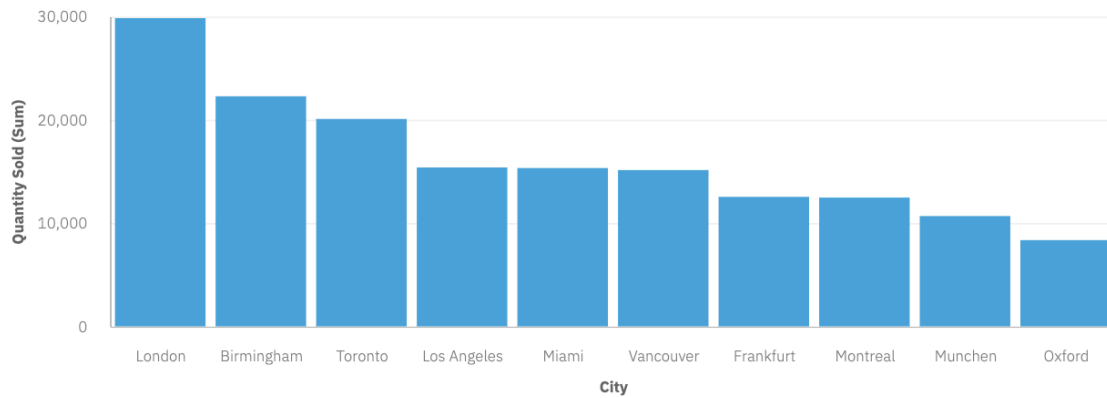
- Set the **value of Number of results** as **10**. Select **Top count**.

The configuration panel shows the following settings:

- Number of results:** 10 (The value can be 1 - 100)
- Show:**
 - ☒ Top count
 - ☐ Bottom count
- Clear** button

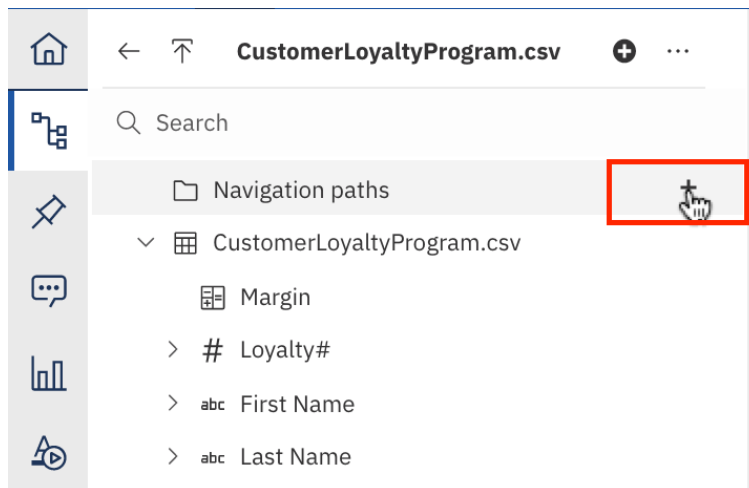
- From the on-demand toolbar, click **Edit the title**. Enter the title **"Top 10 Quantity Sold by City"** to the visualization.
- To save the current work in the dashboard, press **CTRL+S**.
- Your **Panel 4 widget** should look like the one below:

Top 10 Quantity Sold by City



Task D : Create and Leverage Navigation Paths

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



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**.

Create navigation path

CustomerLoyaltyProgram.csv

Loyalty#

abc First Name

abc Last Name

abc Customer Name

📍 Country

📍 Province or State

📍 City

📍 Latitude

📍 Longitude

📍 Postal code

abc Gender

abc Education

abc Location Code

Name Order Year - City

Select and order the columns to use in the navigation path.

① Order Year
CustomerLoyaltyProgram.csv

② Quarter
CustomerLoyaltyProgram.csv

📍 Country
CustomerLoyaltyProgram.csv

📍 City
CustomerLoyaltyProgram.csv

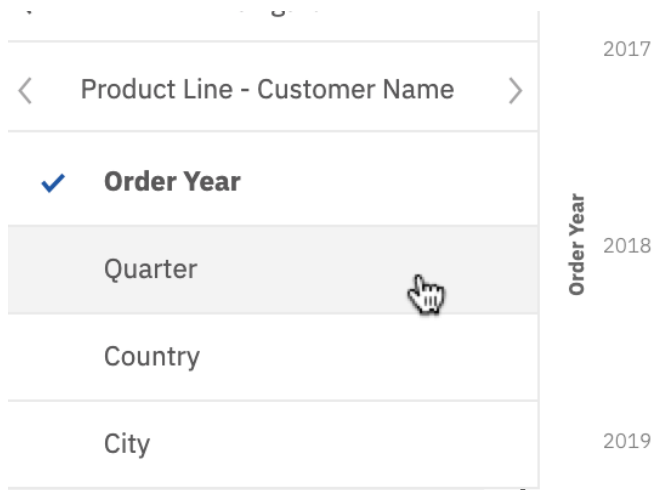
OK

Cancel

- 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.
- Click on the **chart in panel 5** to bring it into focus and render the **on-demand toolbar**.
- Click the **Change Visualization** button in the on-demand toolbar. Use the **arrow ">"** to expand **Recommended visualizations**. Find and Select **Bar**.
- Right-click on the axis label **Order Year**. Select **Navigate**.

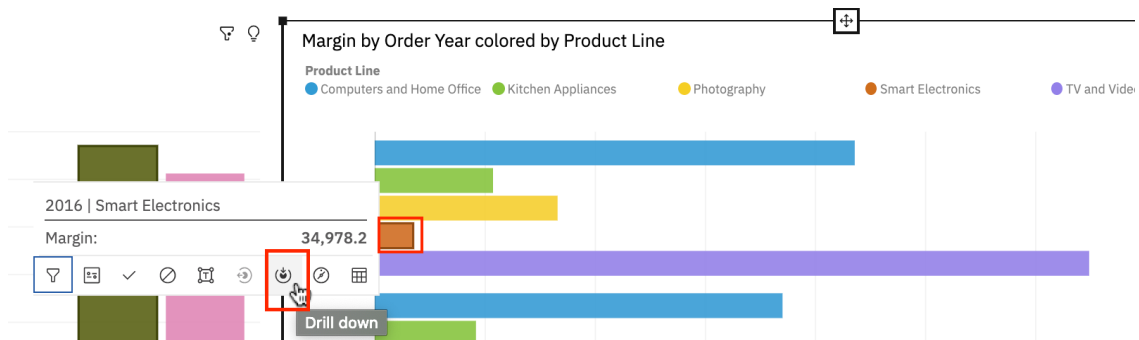


- One by one select **Order Year, Quarter, Country, City** to navigate among the columns of the navigation paths and observe the resulting panel 5 visualization. Lastly, keep the **Order Year** selected.

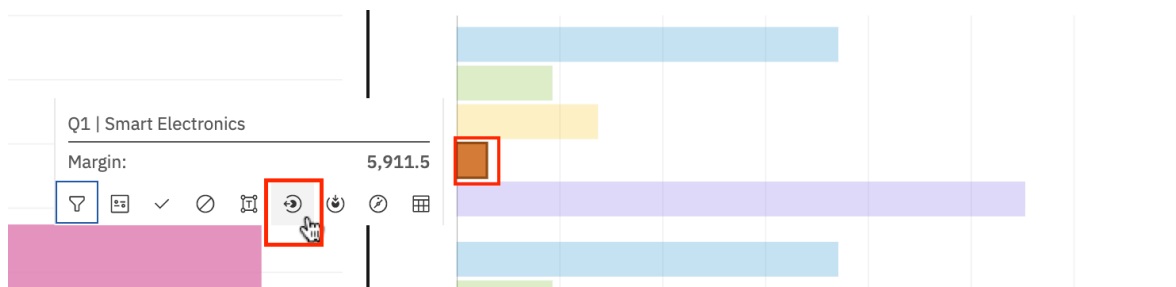


- Alternative interactive way with Drill down/back:
 - Click on the **chart in panel 5** to bring it into focus if needed.
 - Right-click on **2016 Smart Electronics bar** of the bar chart.

- Select **Drill down**.

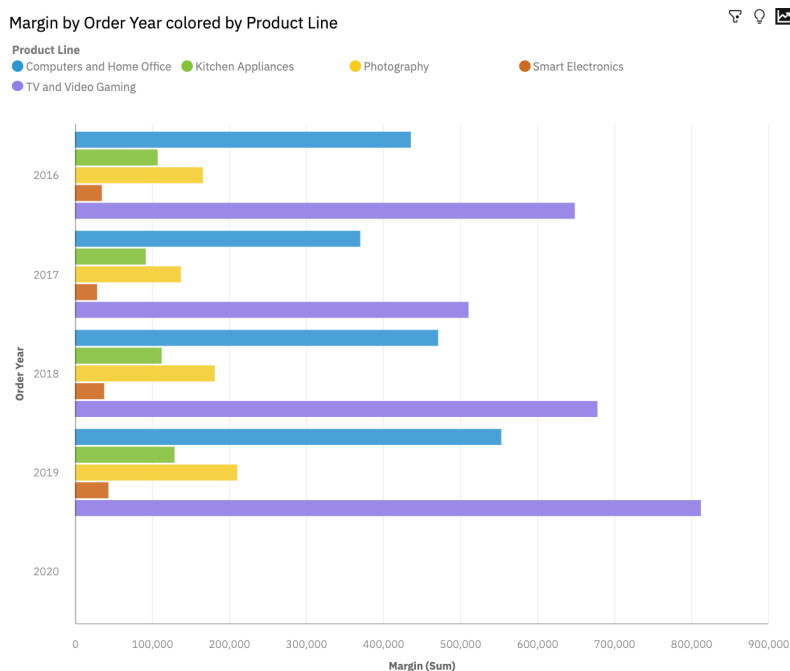


- Now right-click on **Q1 Smart Electronics** bar of the bar chart.
- Select **Drill back**.



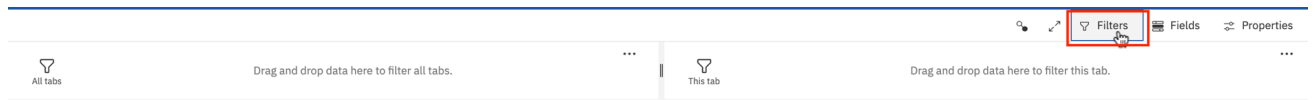
9. To save the current work in the dashboard, press **CTRL+S**.

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

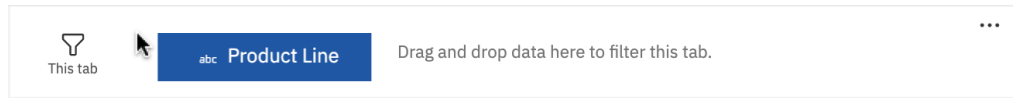


Task E : Filter Data in the Current Tab

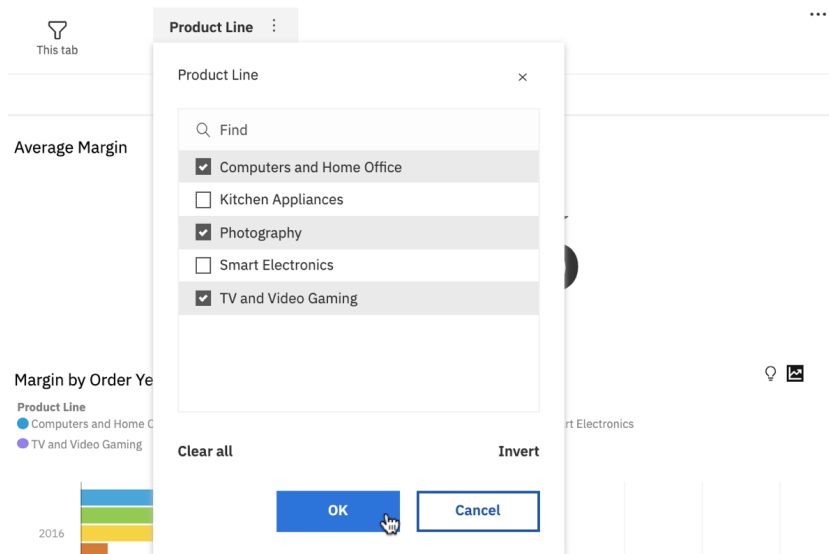
1. If required, click **Filters** in the **Dashboard Toolbar** to display the filters pane.



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



- Click on the **Product Line** filter tab of **This tab** filter panel. Select **Computers and Home Office**, **Photography**, **TV and Video Gaming**. Click **OK**.



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

Finally, your dashboard should look like below:

Average Revenue



Average Margin

\$93.29

Margin

1 = 100 Revenue

Revenue by Product Line colored by Location Code

Location Code

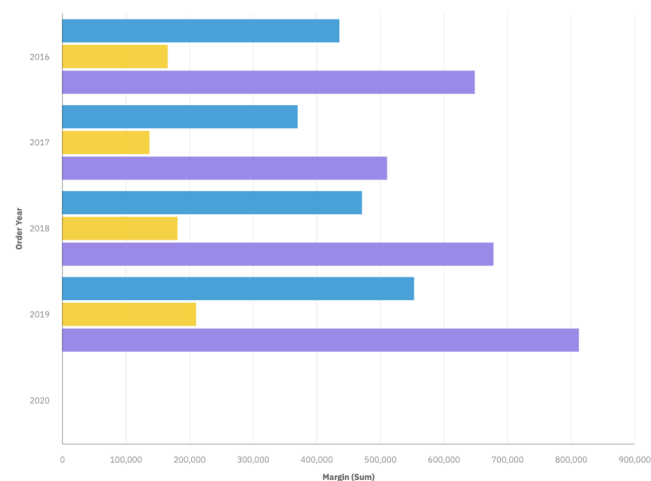
Rural Urban



Margin by Order Year colored by Product Line

Product Line

Computers and Home Office Photography TV and Video Gaming



Top 10 Quantity Sold by City



Congratulations! You have completed Lab 6, and you are ready for the next topic.

Author(s)

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Other Contributor(s)

- [Steve Ryan](#)

Changelog

Date	Version	Changed by	Change Description
2021-06-18	1.2	Malika Singla	Updated Screenshots
2020-10-02	1.1	Steve Ryan	ID review
2020-09-24	1.0	Sandip Saha Joy	Initial version created

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