
Before you begin: Log in to your Education sandbox

You have a shared sandbox environment to learn about, use, and experiment with MicroStrategy Web.

- 1 In your browser, navigate to **education.microstrategy.com/MicroStrategy/servlet/mstrWeb**.
- 2 Log in to the sandbox with your **MicroStrategy Account** credentials.
- 3 The MicroStrategy Landing page opens. Click the **MicroStrategy Tutorial** project.
- 4 Click **Go to MicroStrategy Web**.

The Shared Reports folder of the MicroStrategy Tutorial project opens.

In the sandbox environment, you cannot save items in the Shared Reports folder.

Exercise: Compare promotional and non-promotional revenue using conditional derived metrics

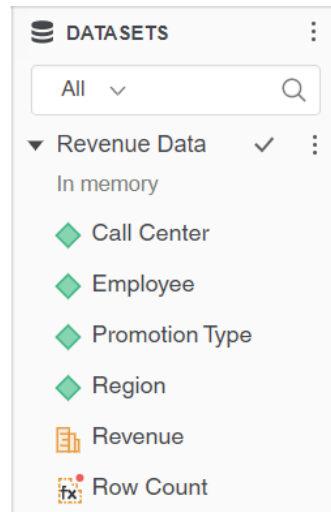
As a sales analyst at a big box store, you need to compare revenue generated during promotional sales periods to revenue generated during non-promotional periods. Use this information to determine if the store should run these promotions again. Applying filters to the Revenue metric allows you to create the calculations needed for the comparison.

High-level steps for the exercise

Challenge yourself: If you already know how to create a conditional metric, try to create the final bar chart using these high-level steps.

High-level steps are listed below. If you cannot complete a step, refer to the detailed steps for more information. Even if you are successful in creating the final bar graph, review the detailed steps, which contain additional information to help you understand and work with conditional metrics.

- 1 Create a new dossier named Regional Revenue Analysis dossier.
- 2 Use existing objects to create a dataset in the dossier. The dataset looks like the following:

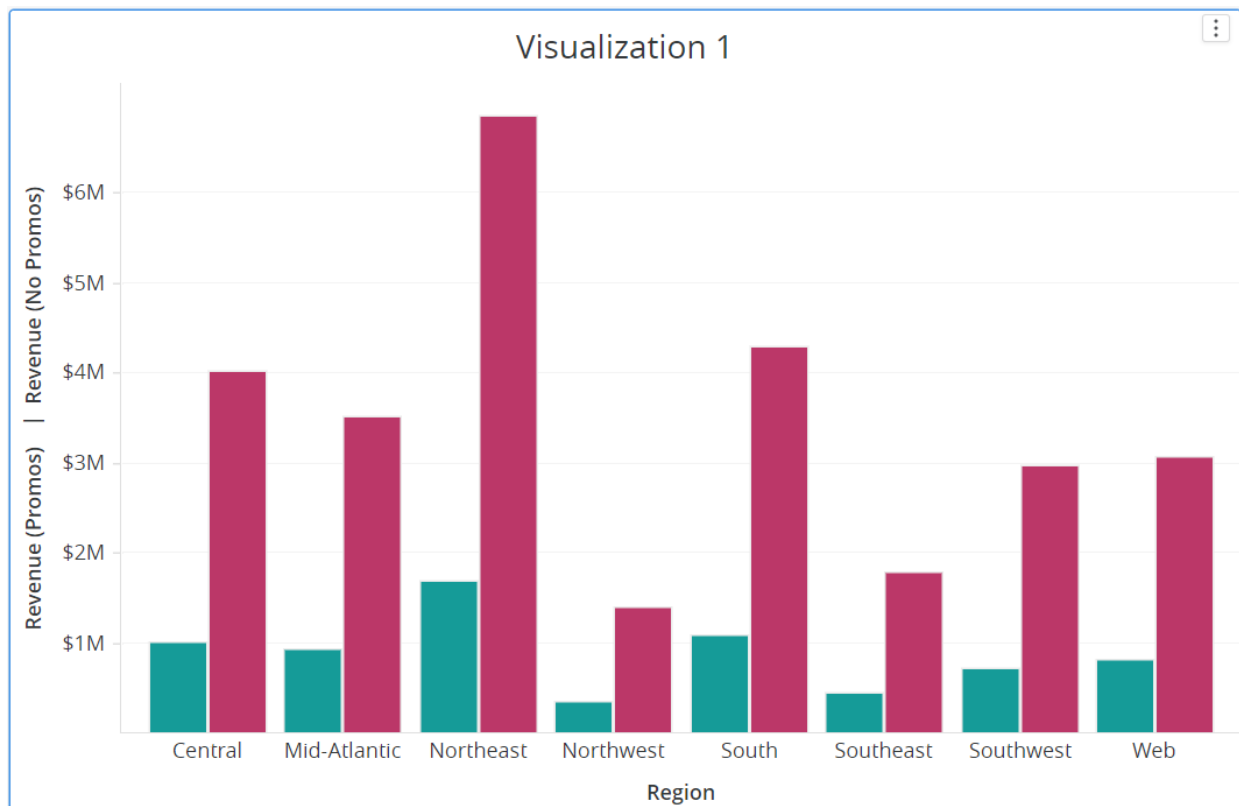


3 Create the conditional metrics:

- Revenue (Promos): Based on the Revenue metric, filtered for Seasonal Sale and Special Sale promotion types
- Revenue (Non-Promo): Based on the Revenue metric, filtered for the No Promotion promotion type

4 Create a bar chart using the conditional metrics.

Conditional metric bar graph




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- 5 Save the dossier.

Detailed steps

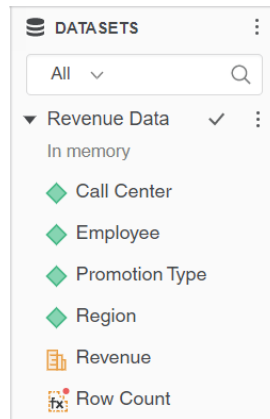
Create a new dossier

- 1 Access your Education sandbox. For a reminder on how to do this, see *Exercise: Access your Education sandbox*.
- 2 In the My Reports folder, click **Create**, and then select **New Dossier**.
- 3 Save the dossier as **Regional Revenue Analysis**, in the My Reports folder.

Create a dataset from existing objects

- 1 In the toolbar, click the **Add Data** icon  and select **Existing Objects**.
- 2 Open the **Geography** folder.
- 3 Add the following attributes:
 - **Call Center**
 - **Employee**
 - **Region**
- 4 Open the **Promotions** folder.
- 5 Add the **Promotion Type** attribute to the dataset.
- 6 From the drop-down list, select **Metrics**.
- 7 Open the **Sales Metrics** folder.
- 8 Add the **Revenue** metric.
- 9 Click **Add**.
- 10 Rename the dataset to **Revenue Data**.

The dataset looks like the following:

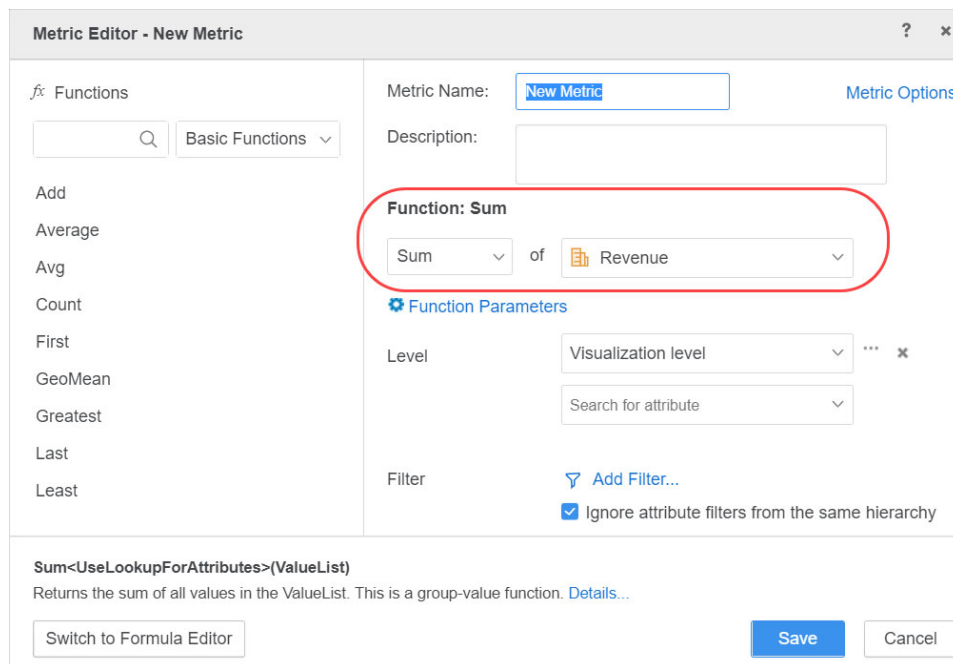


Create the conditional metrics

Create a revenue metric filtered for sales promotions

- 1 In the Datasets panel, right-click the **Revenue** metric and select **Create Metric**.

The Metric Editor opens. Since you selected Revenue, that metric is included in the metric formula Sum of Revenue.



- 2 In the **Metric Name** box, type **Revenue (Promos)**.
 - 3 Click **Add Filter**.
 - 4 Since you want to filter for specific promotions, from the **Based On** drop-down list, select **Promotion Type**.
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A list of all the available promotion types displays.

New Qualification ? x

◆ Promotion Type In List

Based on
◆ Promotion Type ▼

Choose elements by
Selecting in list ▼

☒ In List
☐ Not In List

Search View Selected ☐

Clear All

☐ No Promotion
☐ Seasonal Sale
☐ Special Sale

- The Based On drop-down list contains all the attributes and metrics from the dataset. Because you are creating a derived metric, you can filter only on the objects included in the dossier's datasets.
- By default, the filter type is a list of attribute elements, but you can change it to be a qualification, such as State ID equal to Alabama, State ID begins with A, or Latitude between 30 and 35.

- 5 Select the **Seasonal Sale** and **Special Sale** check boxes, since these are the promotion types used for sales. Notice that the filter is being built as you select options, as shown below:

New Qualification ? x

◆ Promotion Type In List Seasonal Sale, Special Sale

Based on
◆ Promotion Type ▼

Choose elements by
Selecting in list ▼

☒ In List
☐ Not In List

Search View Selected ☐

Clear All


☐ No Promotion
☒ Seasonal Sale
☒ Special Sale

- 6 Click **OK**.

You have now created the filter to use on the metric. The metric calculates revenue values during sales promotions.

Metric Editor - Add Filter

Add New Qualification

 **Promotion Type** In List Seasonal Sale, Special Sale

If you want to add another filter qualification to further narrow the metric calculation, click **Add New Qualification**. For example, you can add a list of customers or a specific item.


- 7 Click **Save**. The filter that you created is applied to the metric.


Metric Name: Revenue (Promos) [Metric Options](#)

Description:

Function: Sum

Sum of

 Revenue

 [Function Parameters](#)

Level


Visualization level

...

x

Search for attribute

Filter

 **Filter Applied**

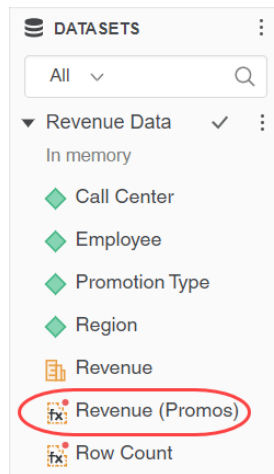
[Clear](#)

☒ Ignore attribute filters from the same hierarchy

- 8 In the **Description** box, type **Revenue filtered for seasonal and special sales**.

While the metric name indicates that the revenue values are calculated for promotions only, the description reminds you of the specific promotions selected for the filter. The description can be helpful, especially if you add another promotion to your project data at a later date.

- 9 Click **Save**. The metric that you created (Revenue (Promos)) displays in the Datasets panel.
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Create a revenue metric filtered for no promotions

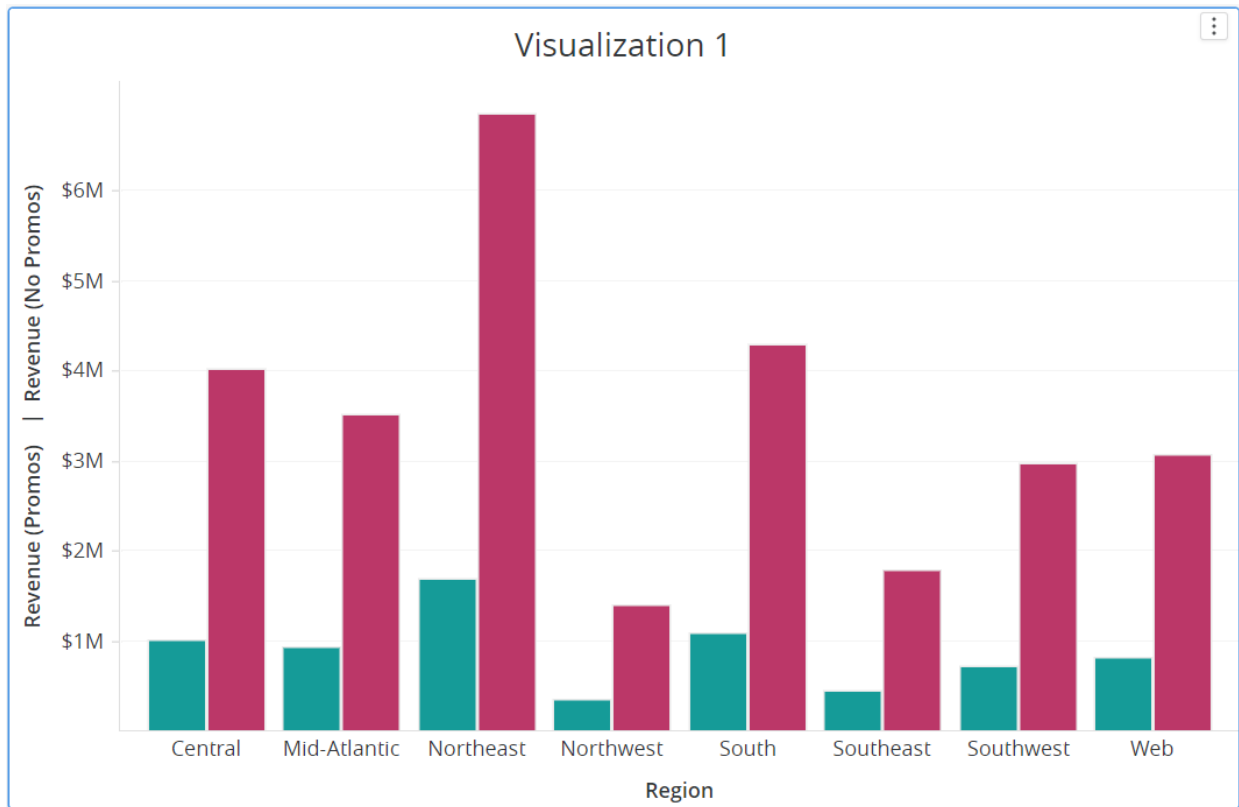
Challenge yourself: Try to create the **Revenue (No Promos)** metric.

Hint: If you have problems, repeat the steps in *Create a revenue metric filtered for sales promotions*, selecting No Promotion for the promotion type and naming the resulting metric Revenue (No Promos).

Create a bar chart using the new metrics

- 1 Change the default blank grid to a vertical clustered bar chart .
- 2 On the Datasets panel, double-click **Region** to display the regions on the horizontal axis.
- 3 On the Datasets panel, double-click **Revenue (Promos)** and then **Revenue (No Promos)** to add the metrics to the vertical axis of the graph.

The bar chart looks like the following:



4 Save and close the dossier.
