
Before you begin: Access Library in the Education sandbox

The Education sandbox is a shared, cloud-based environment to help you learn about and experiment with MicroStrategy Web and Library.

Use the Education sandbox to complete various report and dossier exercises. Complete the steps below to access the sandbox.

Access Library in the Education sandbox

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



MicroStrategy Tutorial

MicroStrategy Tutorial project and application set designed to illustrate the platform's rich functionality. The theme is an Electronics, Books, Movies and Music store. Employees, Inventory, Finance, Product Sales and Suppliers are analyzed.
Server name ENV-218880LAIOUSE1

The MicroStrategy Tutorial home page opens.

- 4 Click **Go to MicroStrategy Library**.
- 5 If prompted, enter your **MicroStrategy Account** credentials, and then click **Log in with Identity**.

Your Library home page displays.

Exercise: Create a basic grid

As a result of your excellent work and analysis as a store manager, you have been promoted to Vice President. In this new position, you want to understand how employee and customer satisfaction at each store location might affect revenue and profit. You want to start by exploring the details of this information in a grid so that you can easily view specific values before deciding what other types of visualizations can be helpful for your analysis.

By quarter and store, you want to display in your grid:

- Customer survey results (if the total customer satisfaction for the quarter is 75% or higher, customers are considered satisfied)
- Employee survey results (if the total employee satisfaction for the quarter is 75% or higher, employees are considered satisfied)
- Percentage of employees promoted
- Revenue
- Profit

Additionally, within each quarter, you want to sort the store location rows by descending profit values so that you can easily assess which stores generated high or low profits.


Create a grid to analyze the detailed data. Your completed grid looks like the image below (only a portion is shown).

Sample grid

Satisfaction and Performance						
Quarter	Store	Customer Survey	Employee Survey	% of Employees Promoted	Revenue	Profit
2019 Q1	New York	Customers Not Satisfied	Employees Satisfied	2.32%	\$360,349	\$63,938
	Philadelphia	Customers Satisfied	Employees Satisfied	6.22%	\$215,379	\$38,189
	Fairfax	Customers Satisfied	Employees Satisfied	5.69%	\$168,243	\$29,955
	Charlotte	Customers Satisfied	Employees Satisfied	3.06%	\$167,536	\$29,641
	Augusta	Customers Not Satisfied	Employees Not Satisfied	4.00%	\$159,882	\$28,375
	Raleigh	Customers Satisfied	Employees Satisfied	8.84%	\$95,044	\$16,728
	Scranton	Customers Satisfied	Employees Satisfied	8.14%	\$82,037	\$14,407
	Boston	Customers Satisfied	Employees Satisfied	10.39%	\$80,160	\$14,102
	Charleston	Customers Satisfied	Employees Satisfied	11.16%	\$71,492	\$12,656
	Providence	Customers Not Satisfied	Employees Not Satisfied	8.98%	\$58,089	\$10,078
	Pittsburgh	Customers Not Satisfied	Employees Satisfied	2.92%	\$51,935	\$9,271
	Atlanta	Customers Satisfied	Employees Not Satisfied	6.41%	\$45,859	\$7,939
	Syracuse	Customers Not Satisfied	Employees Satisfied	7.97%	\$45,452	\$7,879
	Buffalo	Customers Not Satisfied	Employees Satisfied	17.48%	\$41,347	\$7,257
	Richmond	Customers Not Satisfied	Employees Satisfied	12.84%	\$39,852	\$7,012
2019 Q2	New York	Customers Not Satisfied	Employees Not Satisfied	2.47%	\$433,638	\$64,929
	Philadelphia	Customers Satisfied	Employees Satisfied	6.10%	\$227,517	\$33,630

Create a grid

- 1 In the Education sandbox Library, open the **Visualization Types** dossier in Edit mode, if not already there. For a reminder on how to do this, see *Exercise: Access Library in the Education sandbox*, and *Exercise: Add the Visualization Types dossier to MicroStrategy Library*.
 - 2 In the Contents panel on the left, in the Data Details chapter, click the **Grid** page.
 - 3 By default, a new page displays a blank grid visualization on the canvas.
 - 4 The data you need for this analysis is stored in the Satisfaction and Performance dataset. In the Datasets panel, click the arrow icon ▶ to the left of the **Satisfaction and Performance** dataset to expand it, if it isn't already. The dataset's attributes and metrics display.
 - 5 To focus on the objects in the Satisfaction and Performance dataset rather than the other datasets, collapse any other datasets that are expanded by clicking the arrow icon ▼ to the left of the dataset name.
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- 6 Click the **Editor** icon  to display the Editor panel, if not already displayed.
 - 7 From the **Satisfaction and Performance** dataset, double-click the following attributes, in the following order, to add them to the **Rows** drop zone in the Editor panel.
 - **Quarter**
 - **Store**
 - **Customer Survey**
 - **Employee Survey**

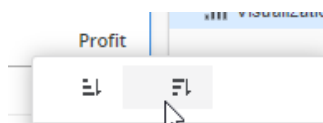
The attributes display in the rows of the grid.

metrics, in the following order, to add them to the **Metrics** drop zone in the Editor panel.

The metrics display in the columns of the grid.

Quarter	Store	Customer Satisfaction	Employee Satisfaction	% of Employees Promoted	Revenue	Profit
2019 Q1	Atlanta	Customers Satisfied	Employees Not Satisfied	6.41%	\$45,859	\$7,939
	Augusta	Customers Not Satisfied	Employees Not Satisfied	4.00%	\$159,882	\$28,375
	Boston	Customers Satisfied	Employees Satisfied	10.39%	\$80,160	\$14,102
	Buffalo	Customers Not Satisfied	Employees Satisfied	17.48%	\$41,347	\$7,257
	Charleston	Customers Not Satisfied	Employees Satisfied	11.16%	\$71,492	\$12,656
	Charlotte	Customers Satisfied	Employees Satisfied	3.06%	\$167,536	\$29,641
	Fairfax	Customers Satisfied	Employees Satisfied	5.69%	\$168,243	\$29,955
	New York	Customers Not Satisfied	Employees Satisfied	2.32%	\$360,349	\$63,938
	Philadelphia	Customers Satisfied	Employees Satisfied	6.22%	\$215,379	\$38,189
	Pittsburgh	Customers Not Satisfied	Employees Satisfied	2.92%	\$51,935	\$9,271
	Providence	Customers Not Satisfied	Employees Not Satisfied	8.98%	\$58,089	\$10,078
	Raleigh	Customers Satisfied	Employees Satisfied	8.84%	\$95,044	\$16,728
	Richmond	Customers Not Satisfied	Employees Satisfied	12.84%	\$39,852	\$7,012
	Scranton	Customers Satisfied	Employees Satisfied	8.14%	\$82,037	\$14,407
2019 Q2	Syracuse	Customers Not Satisfied	Employees Satisfied	7.97%	\$45,452	\$7,879
	Atlanta	Customers Satisfied	Employees Satisfied	3.53%	\$64,466	\$9,748
	Augusta	Customers Not Satisfied	Employees Satisfied	4.05%	\$172,694	\$24,289
	Boston	Customers Satisfied	Employees Satisfied	4.82%	\$97,249	\$14,708

- 9 Within each quarter, you want the store locations to display by descending profit values. Right-click the **Profit** column header on the grid, and click the **Sort Descending** icon .



The store locations with the highest profits display at the top of each quarter row, as shown in the sample below. This makes it easy for you to quickly assess which stores had high or low profits in each quarter. *You learn more about manipulating grids to meet your analysis needs in the [Optimizing Visualizations to Guide Analysis](#) chapter of the [Departmental Analyst](#) learning path.*

Quarter	Store	Customer Survey	Employee Survey	% of Employees Promoted	Revenue	Profit
2019 Q1	New York	Customers Not Satisfied	Employees Satisfied	2.32%	\$360,349	\$63,938
	Philadelphia	Customers Satisfied	Employees Satisfied	6.22%	\$215,379	\$38,189
	Fairfax	Customers Satisfied	Employees Satisfied	5.69%	\$168,243	\$29,955
	Charlotte	Customers Satisfied	Employees Satisfied	3.06%	\$167,536	\$29,641
	Augusta	Customers Not Satisfied	Employees Not Satisfied	4.00%	\$159,882	\$28,375
	Raleigh	Customers Satisfied	Employees Satisfied	8.84%	\$95,044	\$16,728

- 10 To rename the visualization, double-click the **Visualization 1** title, and type **Satisfaction and Performance**. Your grid now looks like *Sample grid*.

11 Click **Save** in the upper right of the dossier toolbar.

Analyze the grid

- 1** As you examine and interact with the network visualization, answer the following questions:
- What is the benefit of quickly viewing the detailed data values in a grid? In what scenarios might you find this helpful?
 - Is it easy or difficult to identify trends using the grid? For example, is it easy to determine if revenue and profit values are higher when customers are satisfied?
 - Can you rearrange the data columns and rows or manipulate the data in any way to ease your analysis or address a specific business question?
 - What visualizations might you create next to further your analysis?
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