EXERCISE 01: Creating Bar Charts

As a business analyst for your organization, one of the stakeholders has asked you to create a report displaying the total sales and profits across categories and segments using bar charts. You will be using the **Sample – Superstore** dataset to visualize the data.

> **NOTE**
> In Tableau, **continuous** fields are **green**, and when they're **discrete**, they're **blue**.

Perform the following steps to complete the exercise:

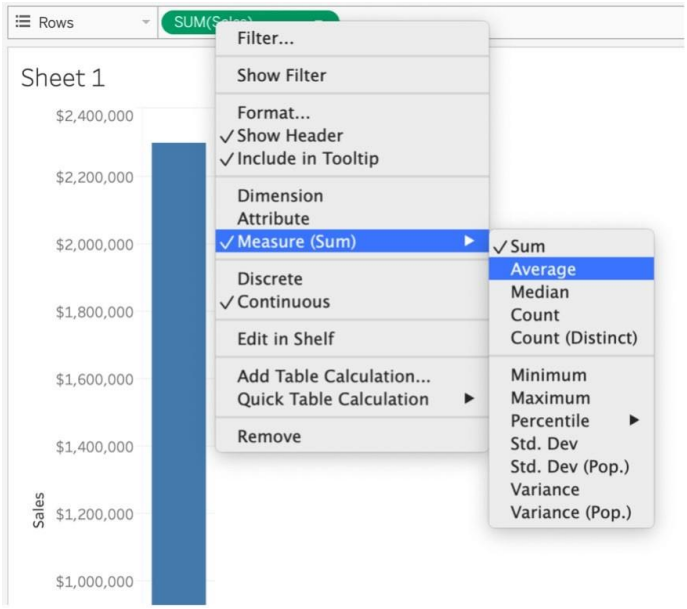
1) Load the **Orders** table from the **sample Superstore** dataset in your Tableau instance.
2) Click on the **Show Me** panel in the top-right corner and hover over the bar chart. You will observe that it says **For horizontal bars try 0 or more Dimensions | 1 or more Measures**.

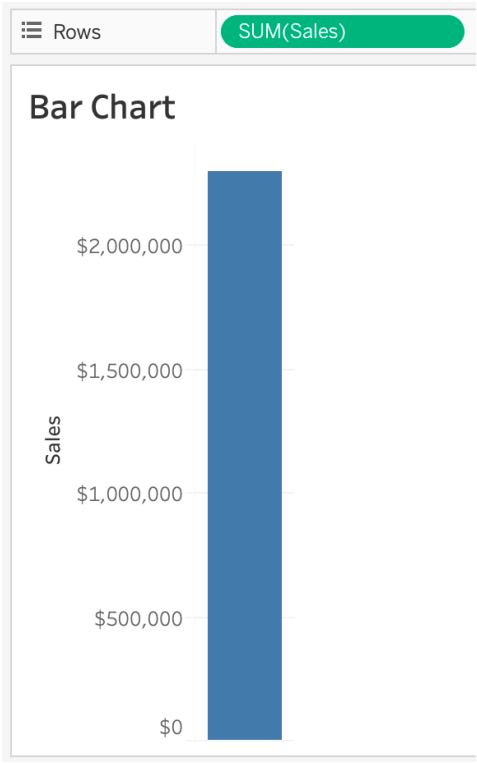
In this exercise, you will begin with no dimensions and only one measure, before moving on to adding dimensions to your view.

3) Drag **Sales** to **Rows** (for a vertical bar chart) or **Columns** (for a horizontal bar chart).

When you drag **Sales** to the **Columns**/**Rows** shelf, the default aggregation changes to **SUM(Sales).**

4) Click on the **SUM(Sales)** capsule in the **Columns**/**Rows** shelf and change the aggregation from **SUM(Sales)** to any other aggregation **average**.

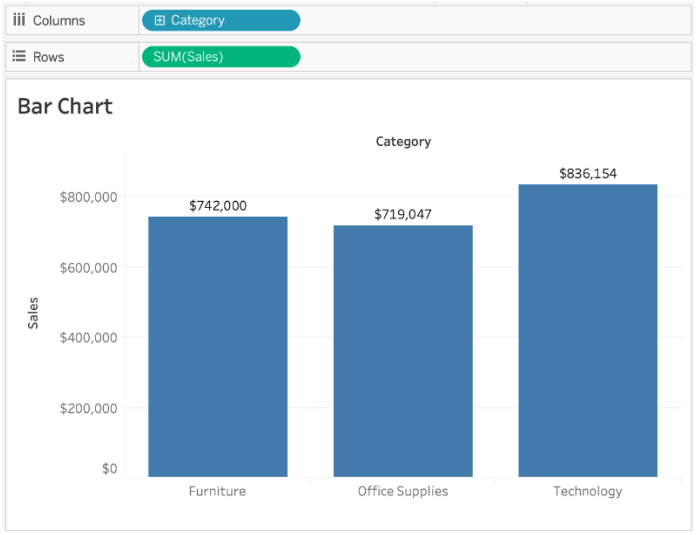




In the preceding screenshot, note that the total sales figure is around **$2.3M** for the whole store, which is the least granular metric in our sample Superstore dataset. **Next, you will change the granularity of your bar chart.**

5) To do that, add a dimension to your view. Add a **Category** dimension to our **Columns** shelf. When you add the **Category** dimension to the view, you get three bars to represent each category. Thus, you've just changed your granularity from the sum of sales for all the data to the sum of sales for each category.

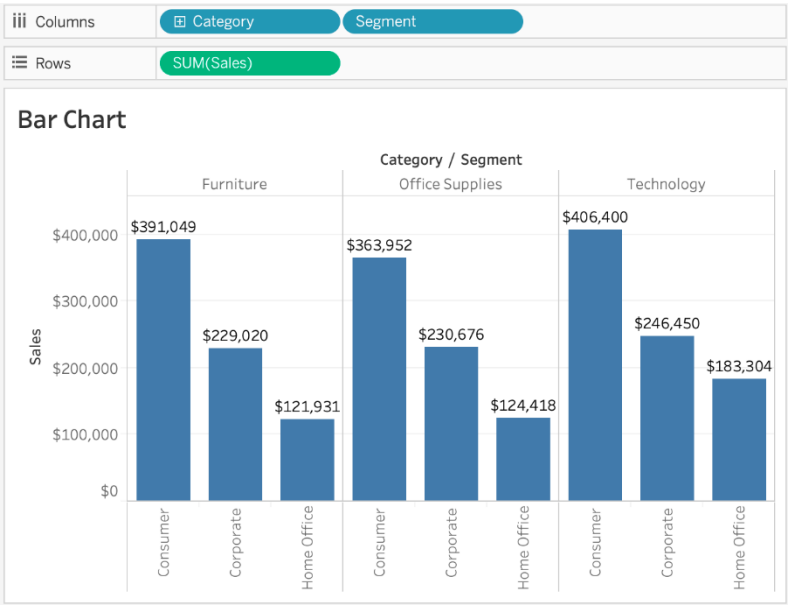
For better readability, also add **Sales** from the **Measures** data pane to the **Label Marks** card. As we can see, **SUM(Sales)** is now divided by category:



The preceding chart uses one dimension and one measure, so we can see that the total sales of Furniture, Office Supplies, and Technology are **$742,000**, **$719,000**, and **$836,000**, respectively. However, what if we want to study the total sales for each of these categories in more detail? We can make it more granular by adding more dimensions or measures. Let's explore our options in the next step.

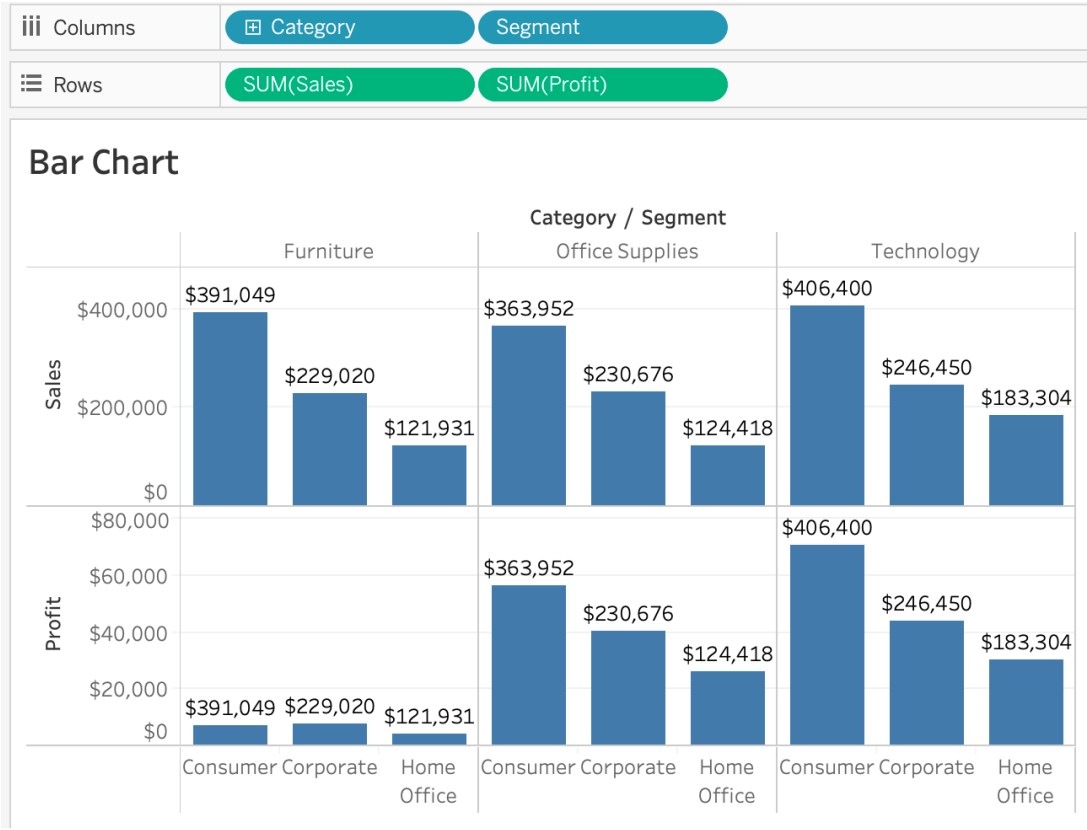
6) Drag **Segment** to the **Columns** shelf.

You will notice that the sales by category are now divided into sales by segment and category. We just added another level of granularity to our view:



In the preceding figure, you can see that even though **Technology** had the highest sales, the **Corporate** and **Home Office** segments of all three categories are not so performing well and will require attention. As the total sales of the categories are now bifurcated, it gives you more visibility as to how many sales you have in each of the segments (that is, **Consumer**, **Corporate**, and **Home Office**). Now that you know the sales values in greater detail, you can also find out the amount of profit gained in each of the categories and segments.

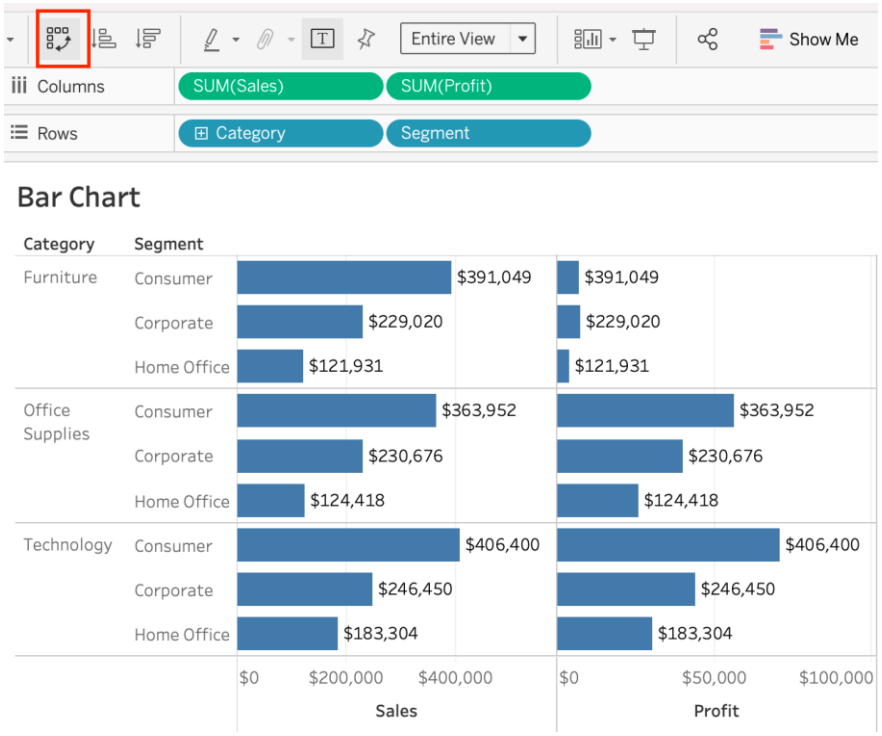
7) Add another **measure**, **Profit**, to the **Rows** shelf. As soon as you drop the measure onto the **Columns** shelf, you can see that a new row was added for profits:



As you can see, there is very little profit gained from **Furniture** and a huge amount of profit from **Technology**. This will help in making great business decisions as we now know that investing more in **Technology** and **Office Supplies** is more profitable.

When you create a bar chart one way, either horizontally or vertically, you will on occasion find that your dashboard design or storyboard design (a storyboard is where you use multiple visualizations/dashboards to convey a story) would be more aesthetically pleasing if the alignment was different—say, vertical instead of horizontal. There are multiple ways to change the alignment; the manual method is demonstrated in the next step.

8) Drag both the **Columns** dimensions to the **Rows** shelf and vice versa. Alternatively, Tableau makes it easy to swap things around by giving us a **Swap** button in our tool menu. The final output is as follows:



In this exercise, we explored how adding more granularity to our views can help add more context and data to our views without over cluttering.