

## Lesson 07 Demo 03

### Pareto Chart

**Objective:** To create a Pareto chart to show the top sub-categories that contribute to 80% of the sales

**Tools required:** Tableau Desktop

**Prerequisites:** None

**Note:** Download the **superstore-excel.xlsx** dataset from the resource section of the LMS

Steps to be followed:

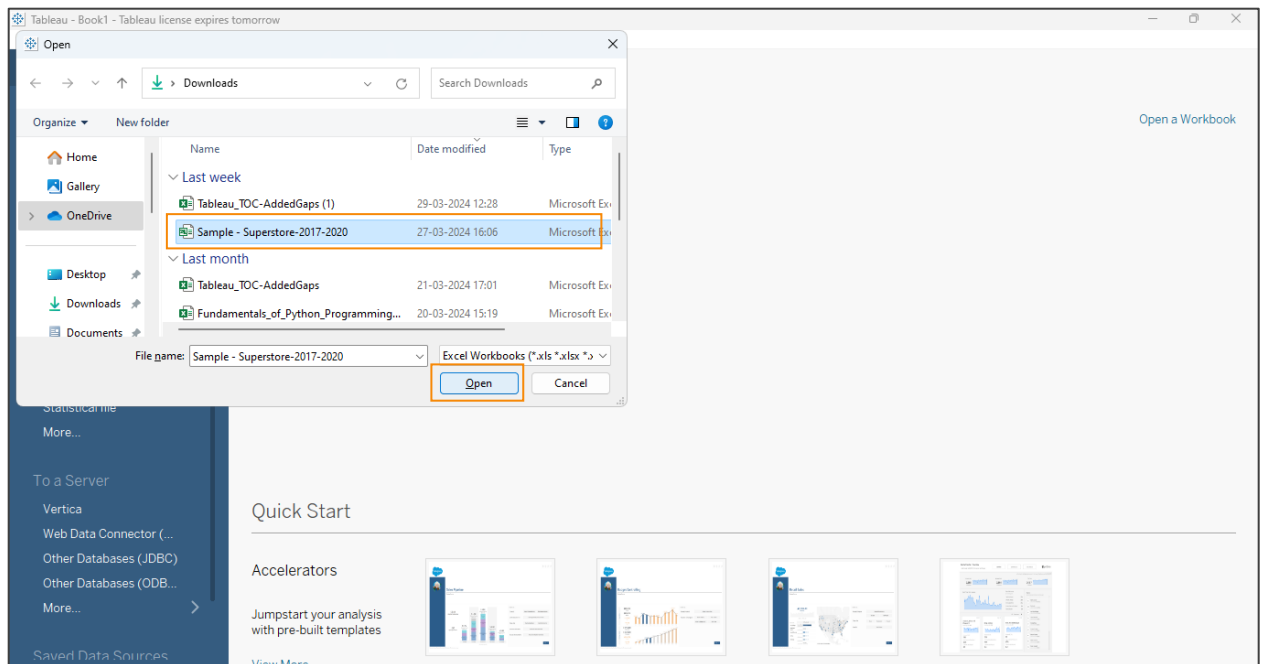
1. Import the Dataset
2. Create a basic chart and sort it in descending order
3. Add a second chart
4. Apply the Running Total to the second chart
5. Combine the charts using Dual Axis
6. Adjust the Marks type of first the Sum(Sales)
7. Check the Secondary Calculation
8. Show the Mark labels
9. Adding an 80% Reference Line to the Pareto chart

#### Step 1: Import the Dataset

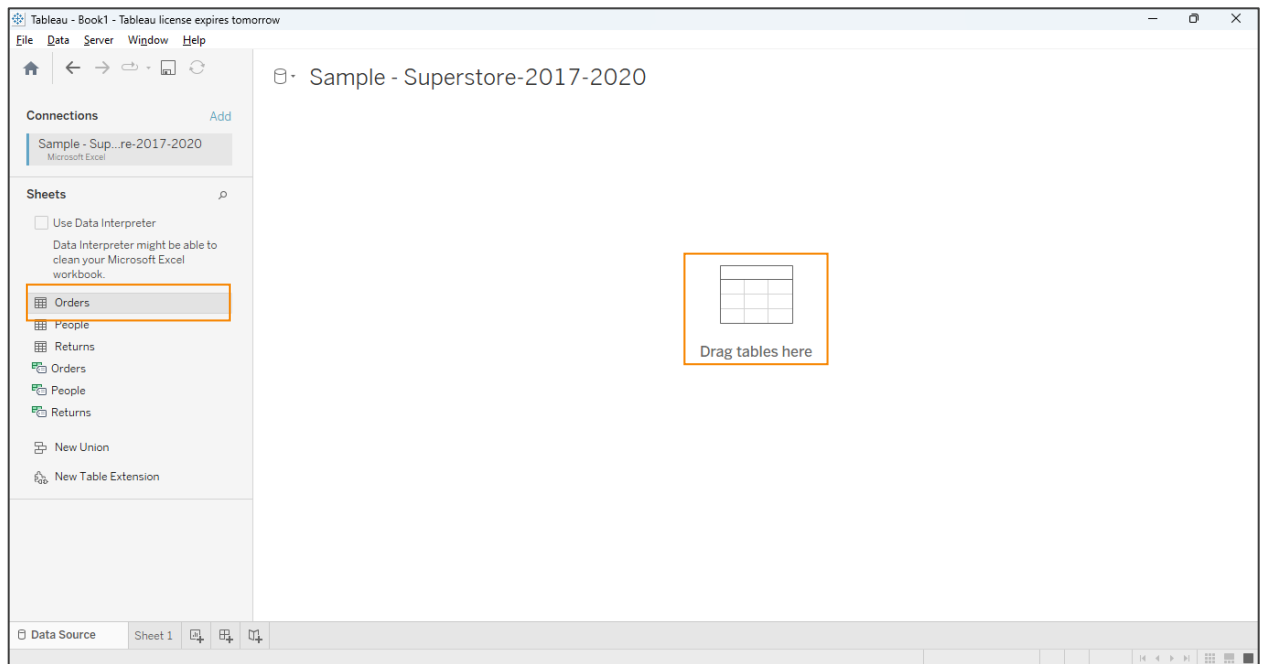
- 1.1 Go to the home page of Tableau Desktop and click on **Microsoft Excel** from the left side of the page to add the dataset



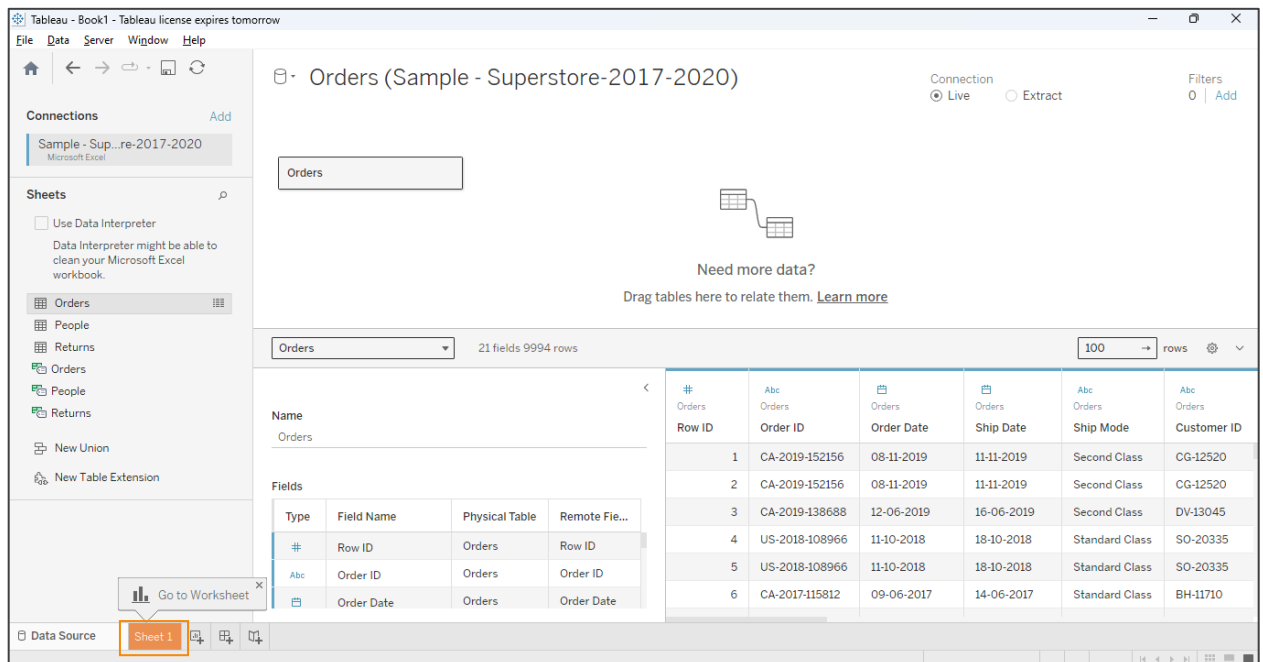
1.2 Select the given dataset and click on **Open**



1.3 The opened file will look like the following. Drag **Orders** into the center of the page to **Drag tables here**.

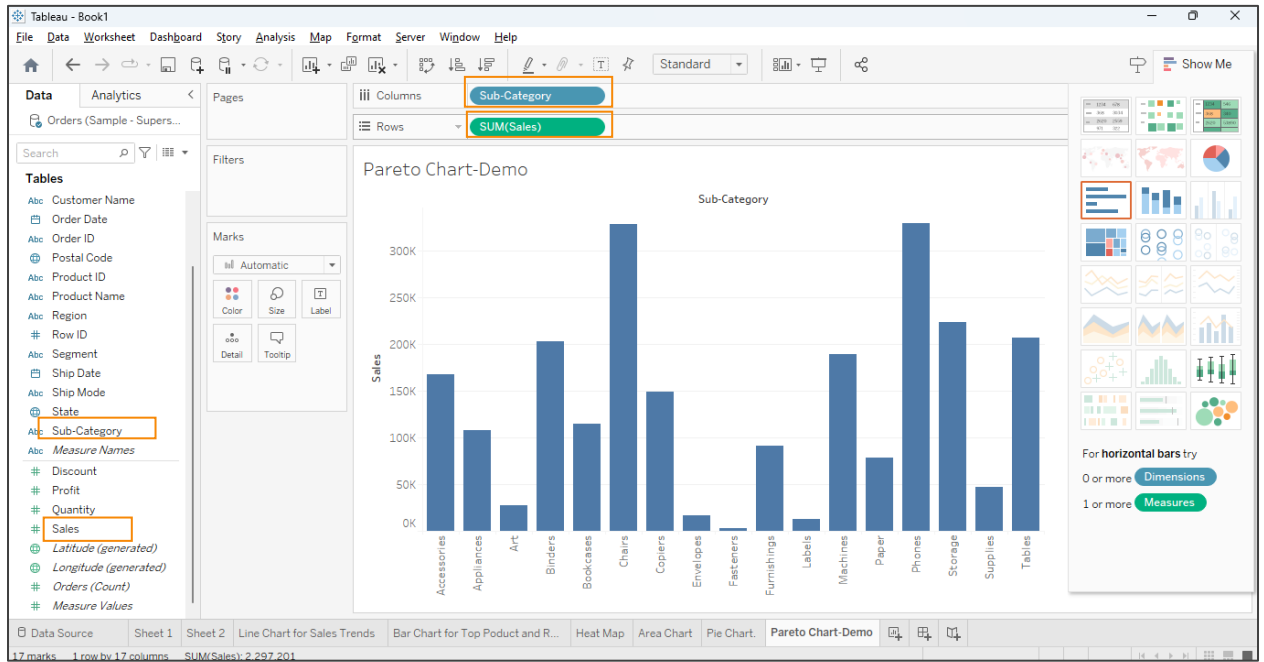


1.4 Click on **Sheet 1** present at the bottom to get started

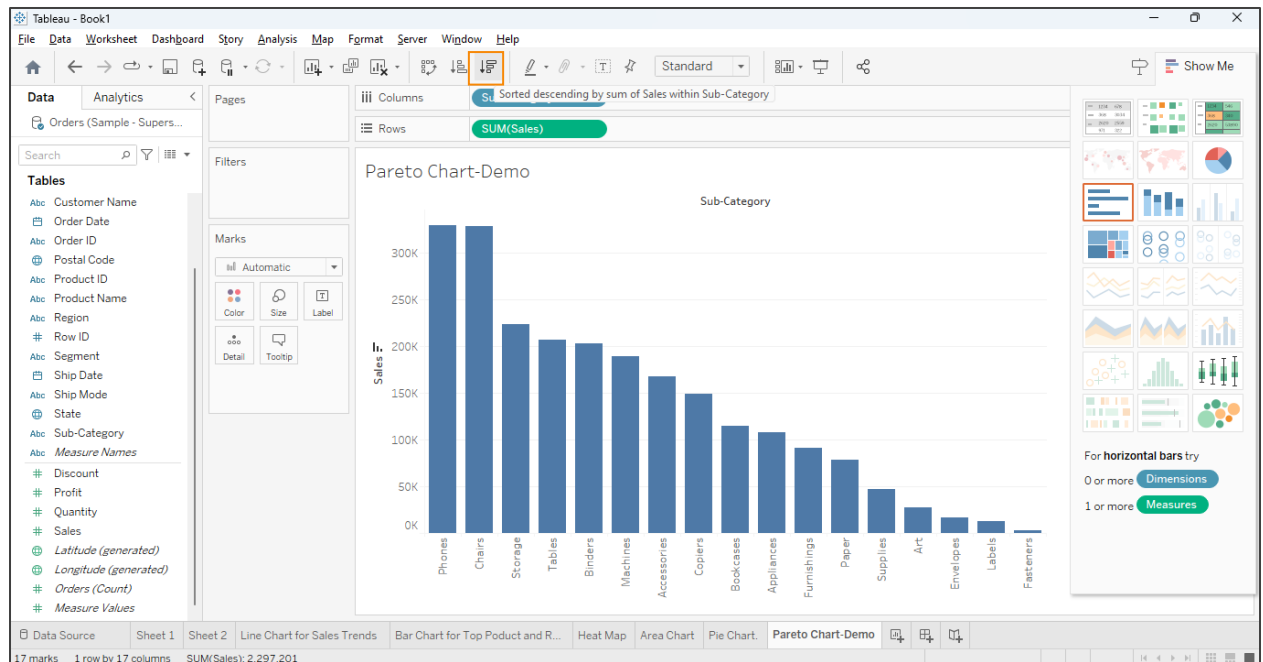


## Step 2: Create a basic chart and sort it in descending order

- 2.1 From **Tables**, drag and drop **Sub-Category** in **Columns** and **Sales** onto the **Rows** section

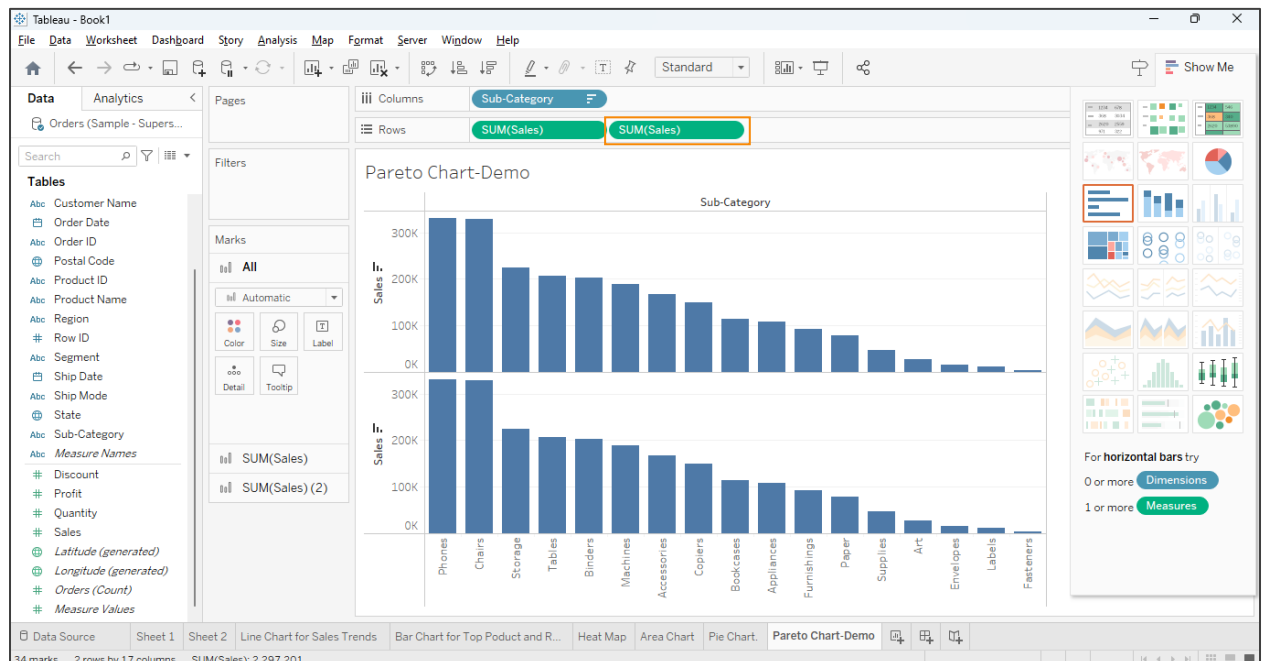


- 2.2 Click on the descending icon from the menu present at the top row to sort in descending order



### Step 3: Add a second chart

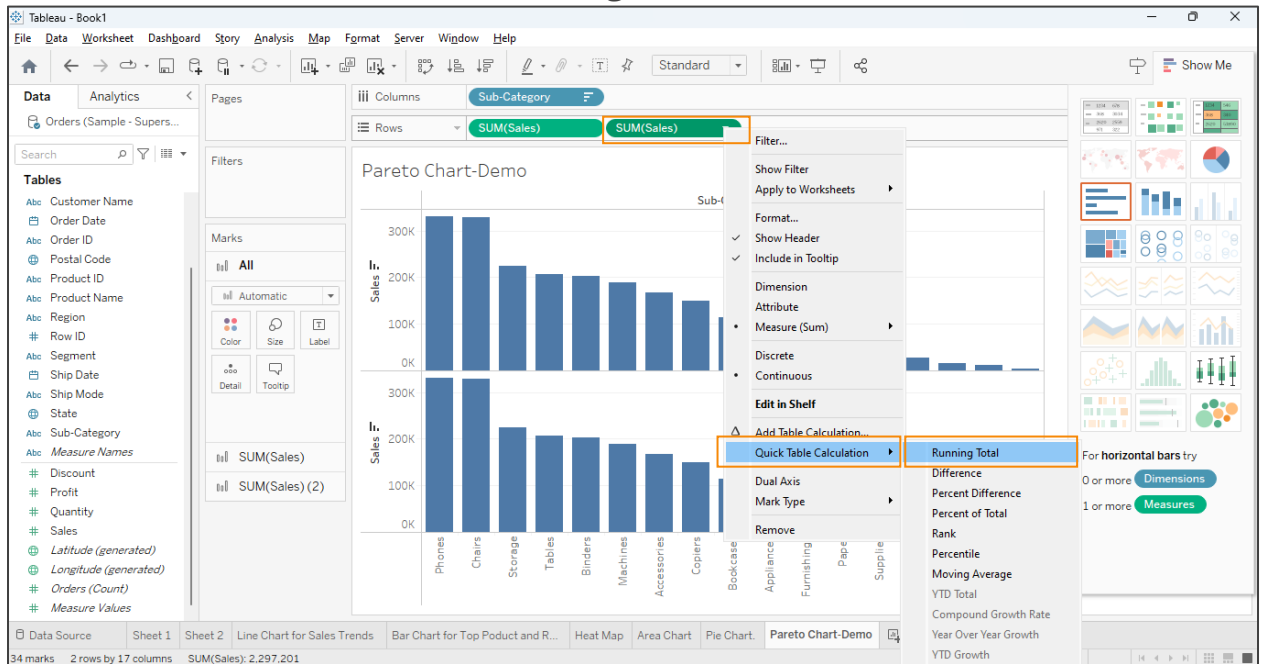
3.1 Drag and drop **Sales** once again in the rows section. Now, two charts will start to appear on the screen as shown below:



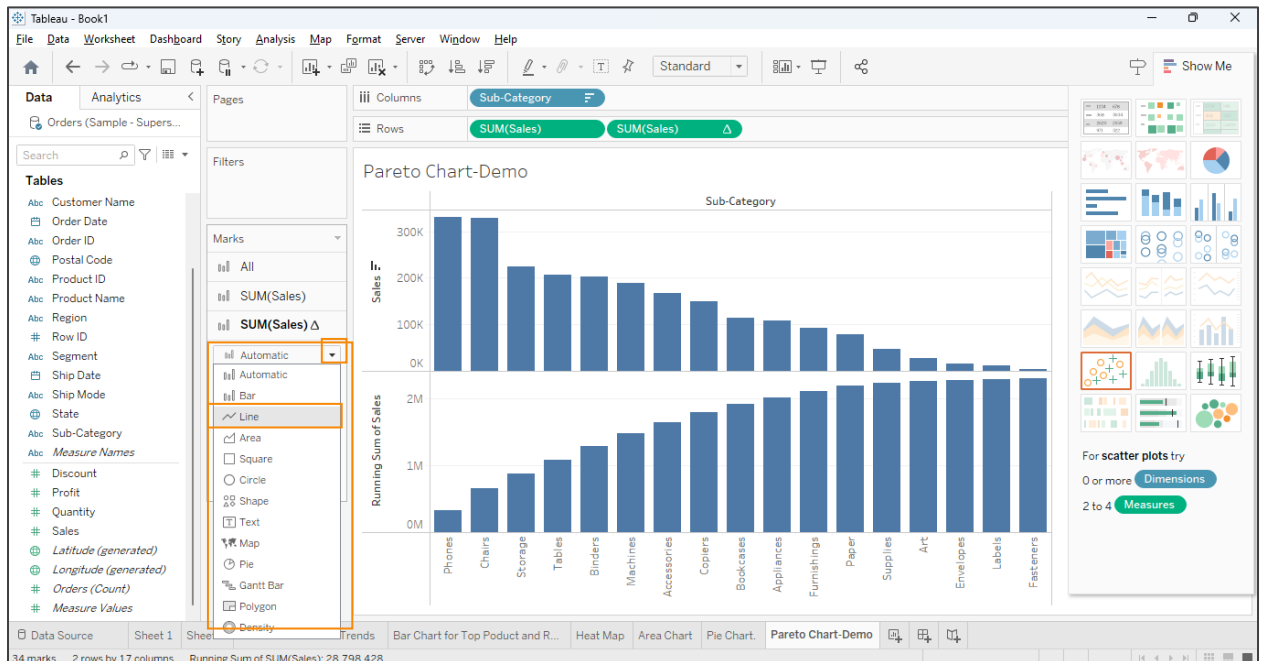
### Step 4: Apply a Running Total to the second chart

4.1 Right-click on the **second Sales** present in Rows, go to **Quick Table**

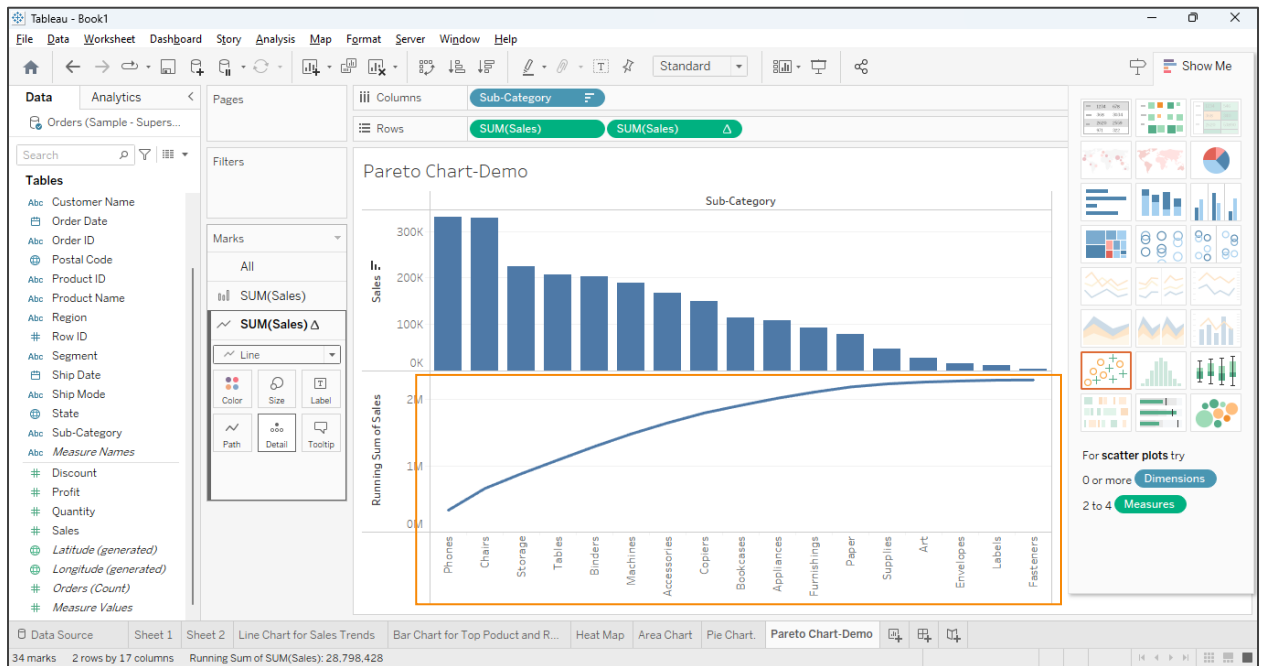
## Calculation, and click on Running Total



4.2 Also, click on dropdown of the **Marks** card (last changed card) to change the mark type from **Automatic** to **Line**

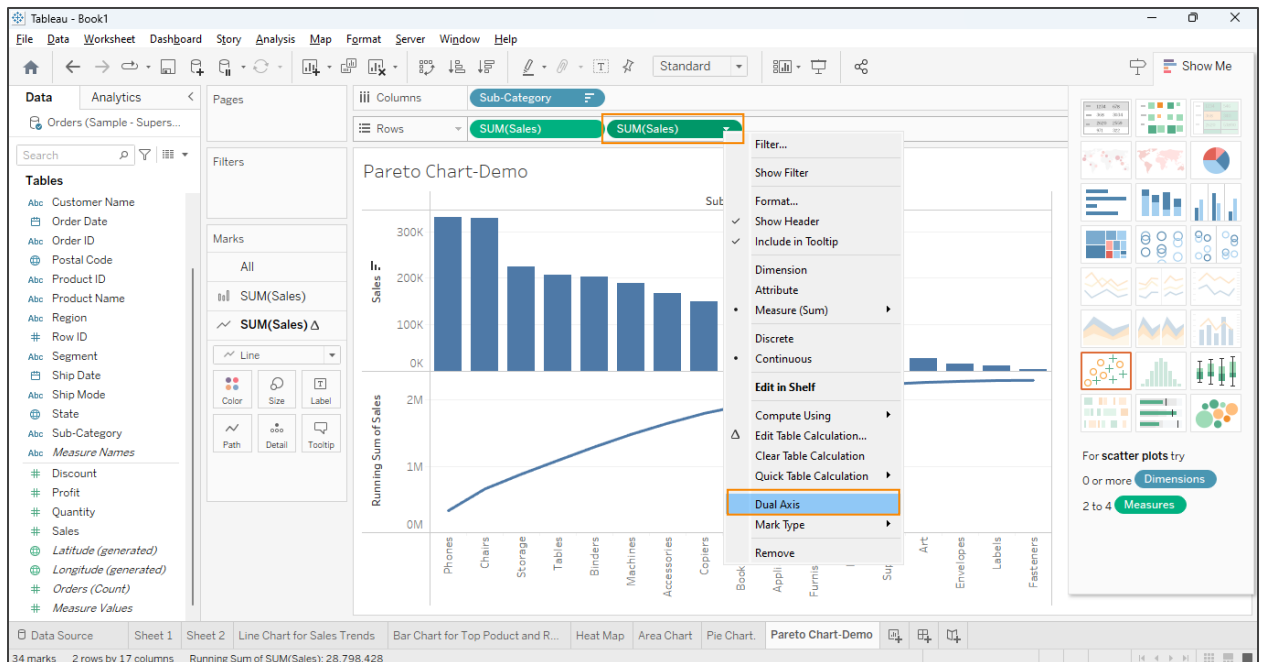


The output will appear as shown below:

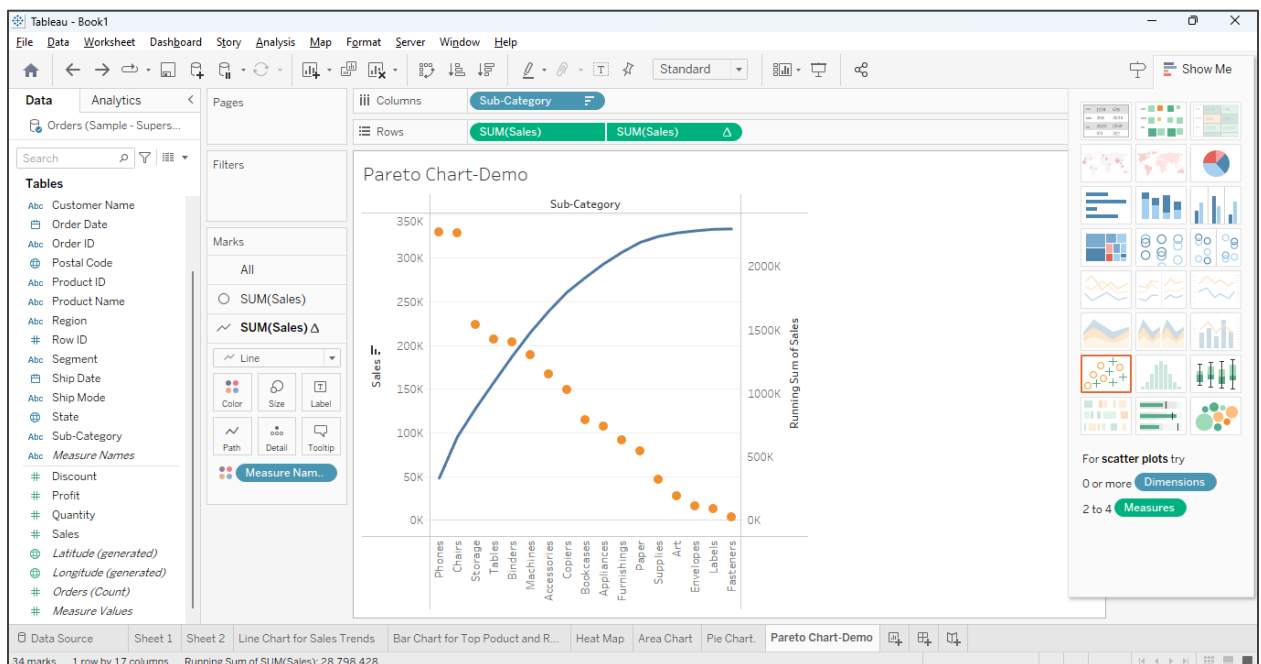


## Step 5: Combine charts using Dual Axis

- 5.1 Click on **SUM(Sales)**, which you have added later in the Rows section, and select **Dual Axis** from the dropdown menu



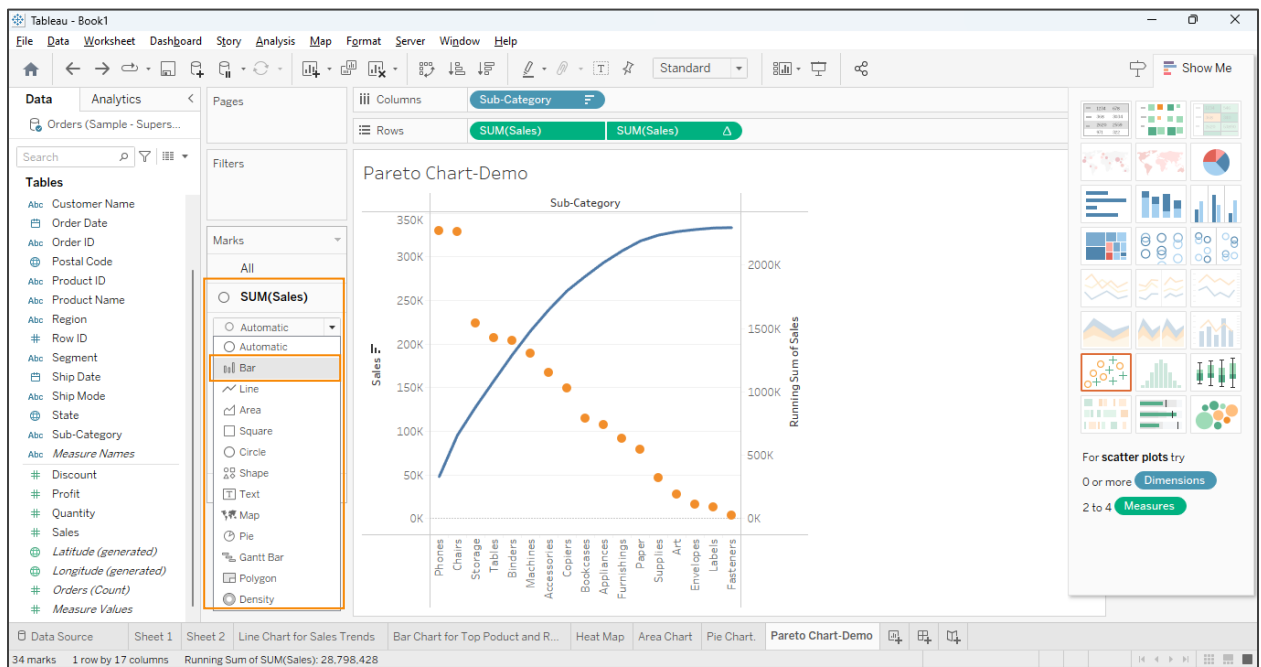
The output will appear as shown below:



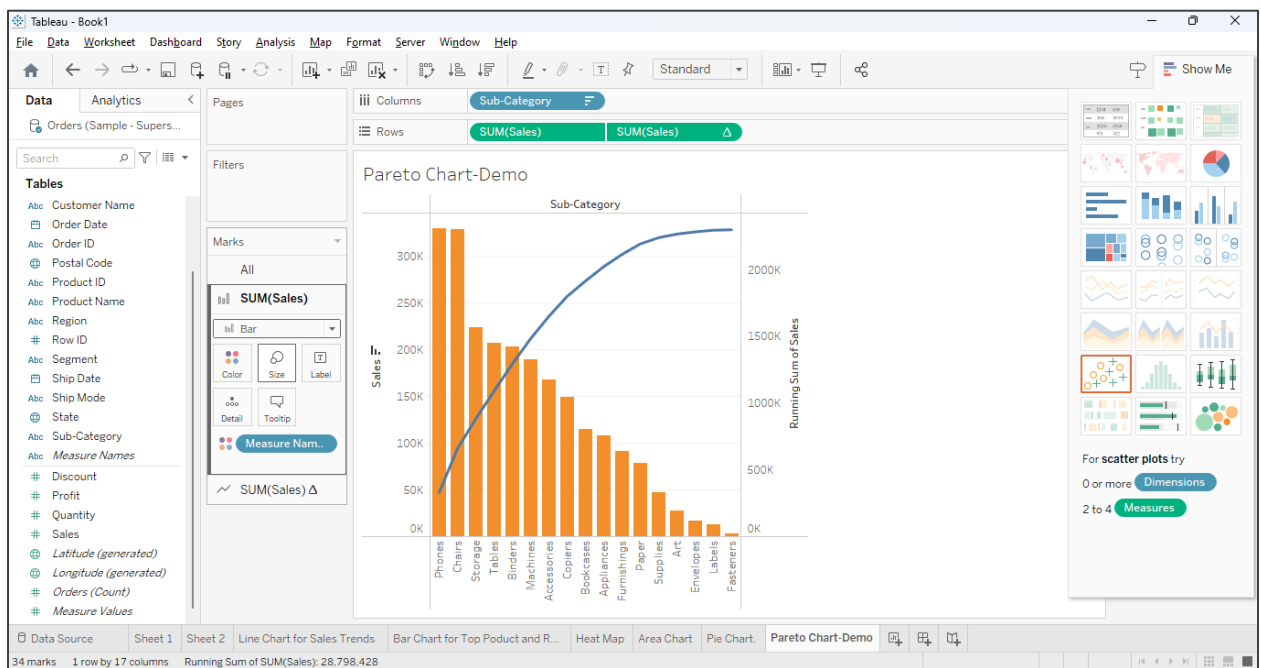
## Step 6: Adjust the Marks type of the first Sum(Sales)

6.1 On the marks card of the first Sales, change the type from **Automatic** to **Bar**





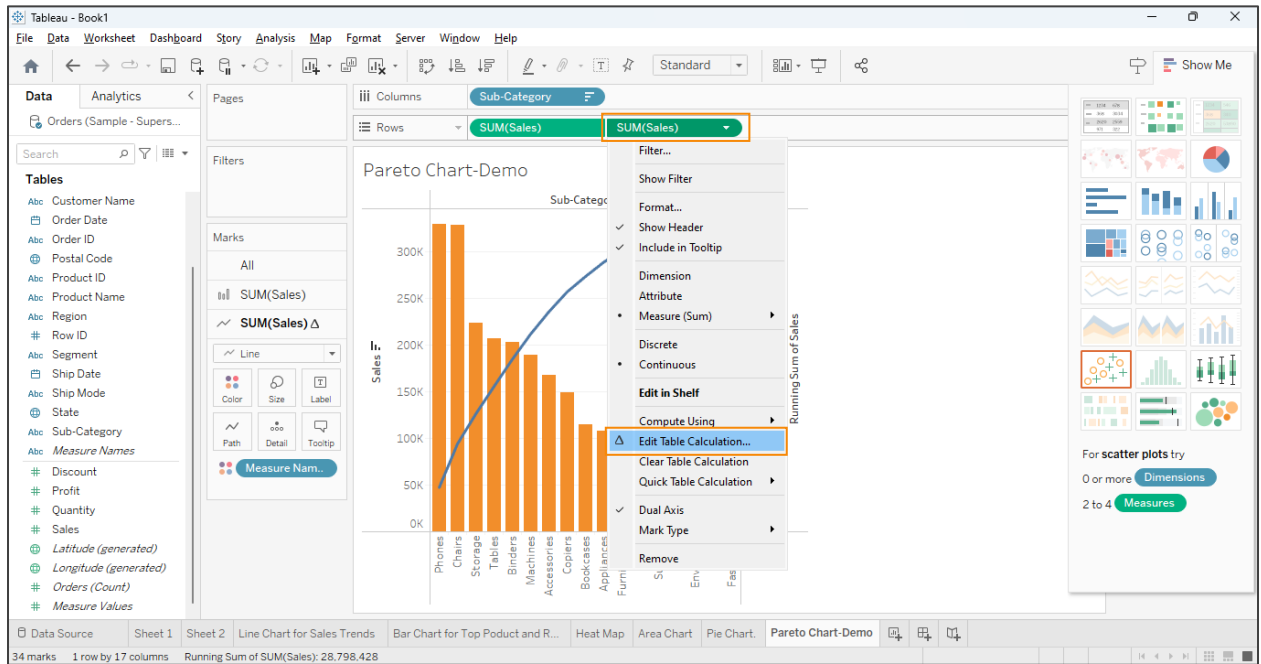
The output will appear as shown below:



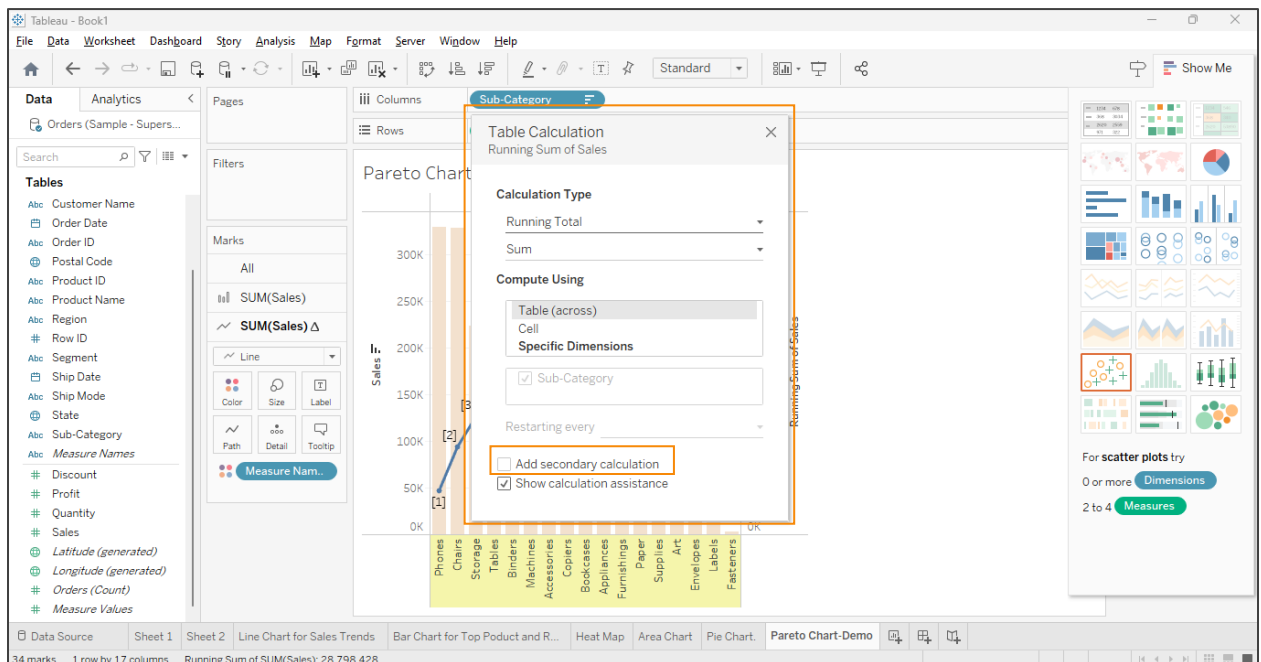
**Note:** The Marks type for the Running Sum of Sales shows a Line graph. The left Axis shows the Sum of Sales. The right axis shows the Running Total of Sales or Cumulative Sales.

## Step 7: Check the Secondary Calculation

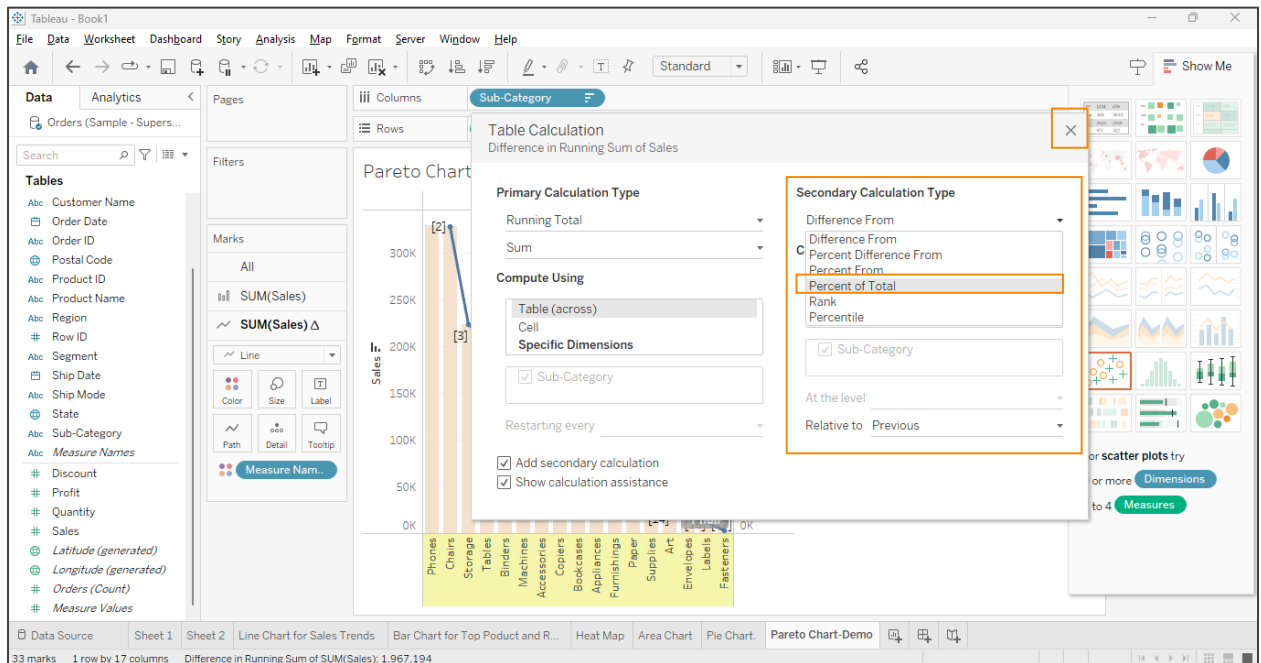
### 7.1 Right-click on the second **Sales** pill and click on **Edit Table Calculation**



### 7.2 After clicking on Edit Table Calculation, the window, as shown below, opens. Click on the checkbox of **Add secondary calculation**.



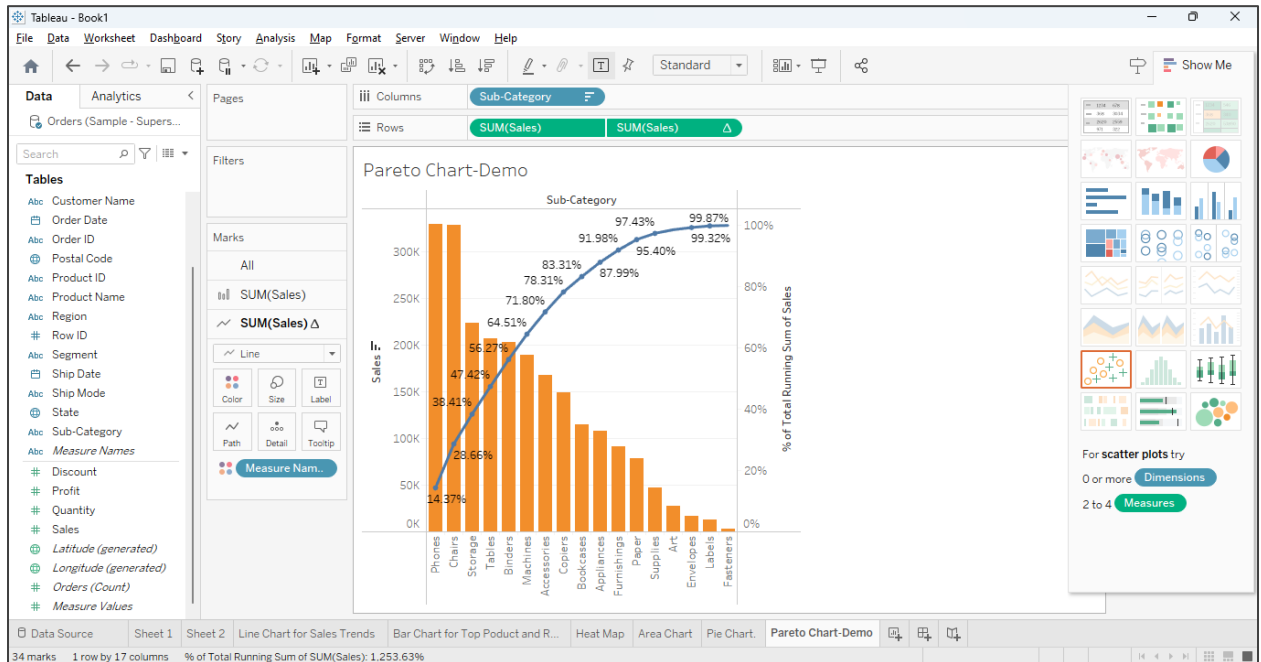
7.3 The **Secondary Calculation Type** window opens. Select **Percent of Total** and click on the cross icon (at the top) to close it.



**Note:** Vertical axis present at right side shows the **% of Running Total of Sales**.

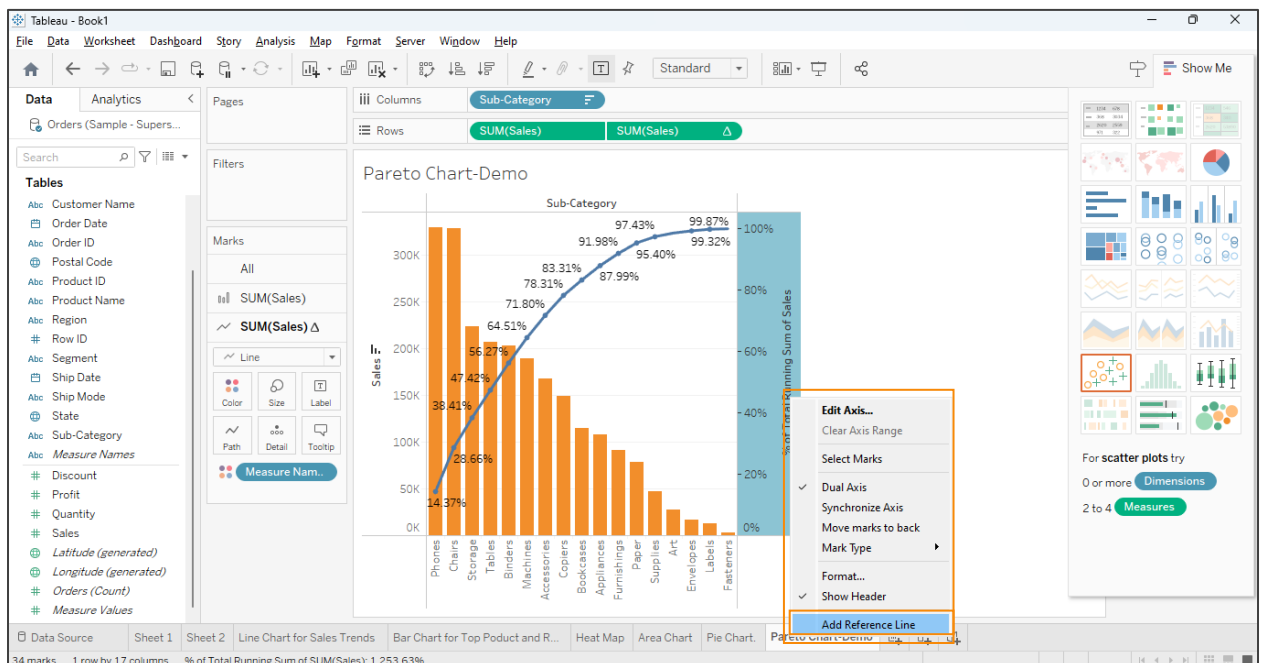


The output will appear as shown below:

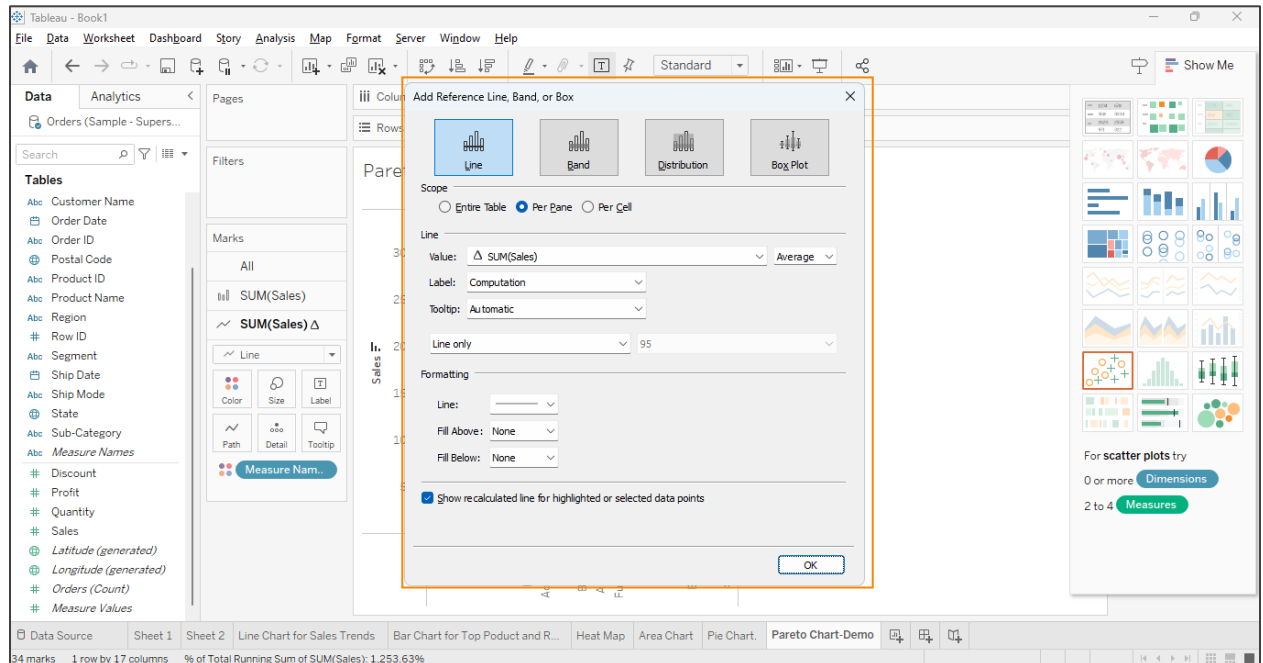


## Step 9: Adding an 80% Reference Line to the Pareto chart

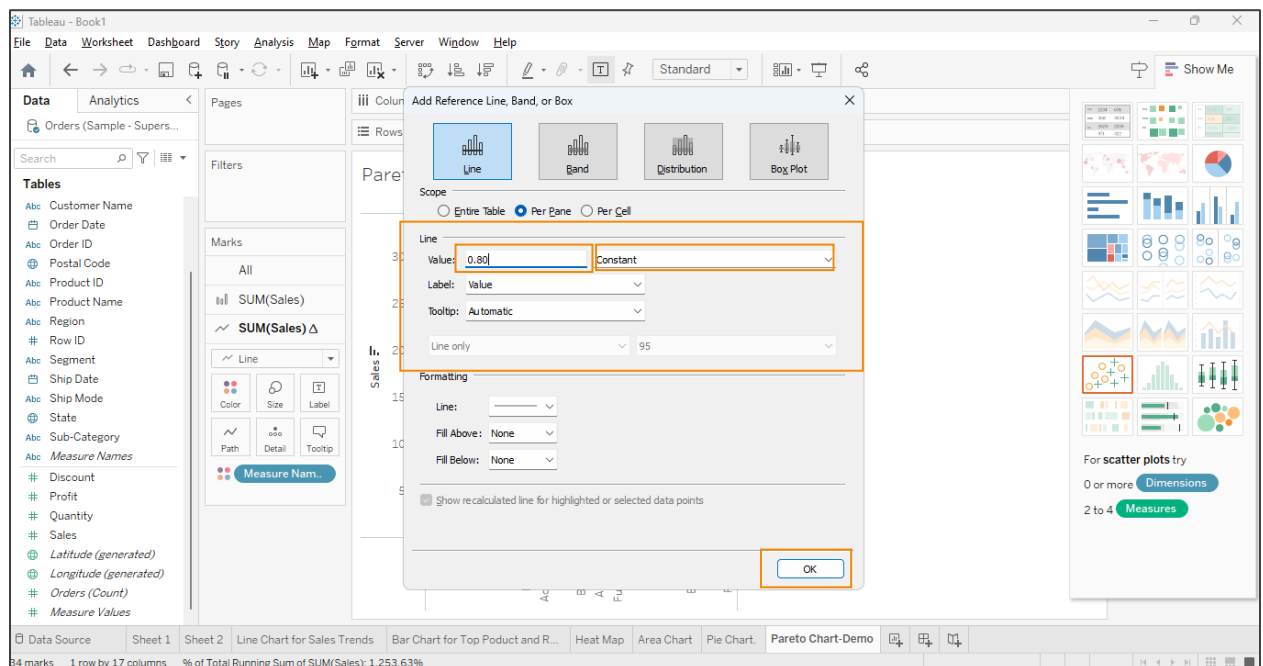
9.1 Right-click on the right vertical axis named **% of Total Running Sum of Sales**. Click on the **Add Reference Line** option present at the bottom.



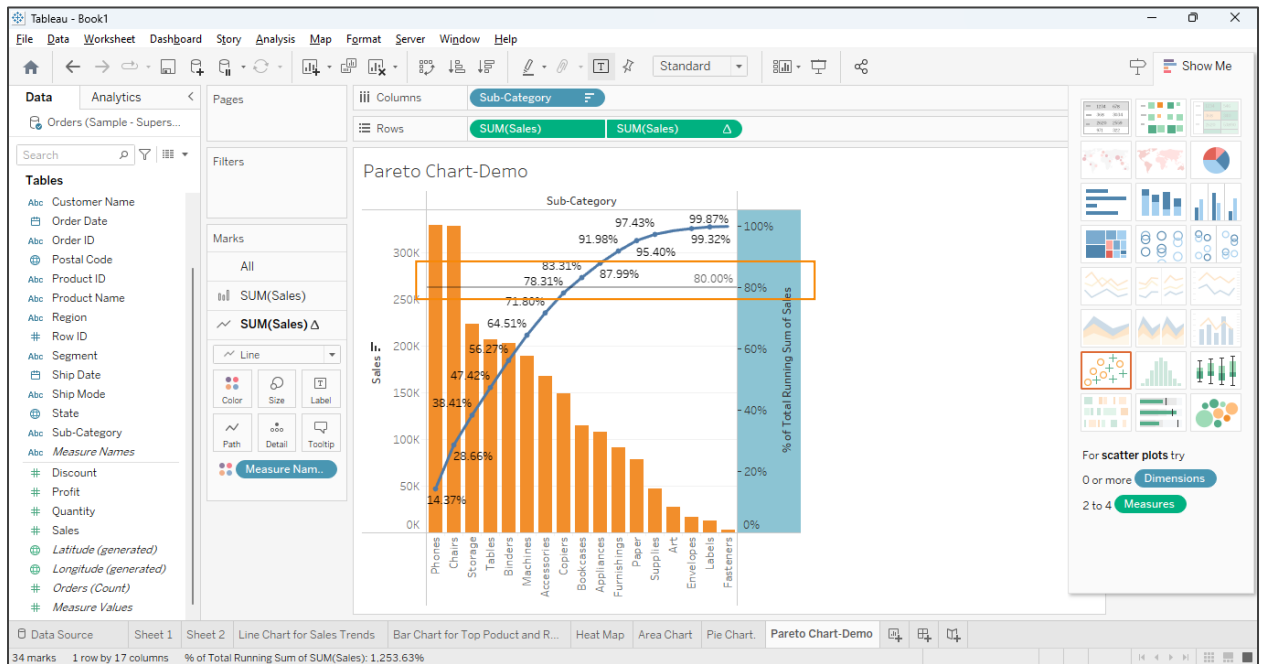
The pop-up window appears as shown below:



9.2 In the **Add Reference Window**, go to the **Line** section. Select **Value** from the dropdown as **Constant** and add **0.8** to the **Value** field. Click on **OK**.



The final Pareto chart will appear as shown below:



**Observation:** The sub-categories from Phones to Copiers contribute to 80% of the sales.

By following these steps, you have successfully created a Pareto Chart to show the top sub-categories that contribute to 80% of the sales.