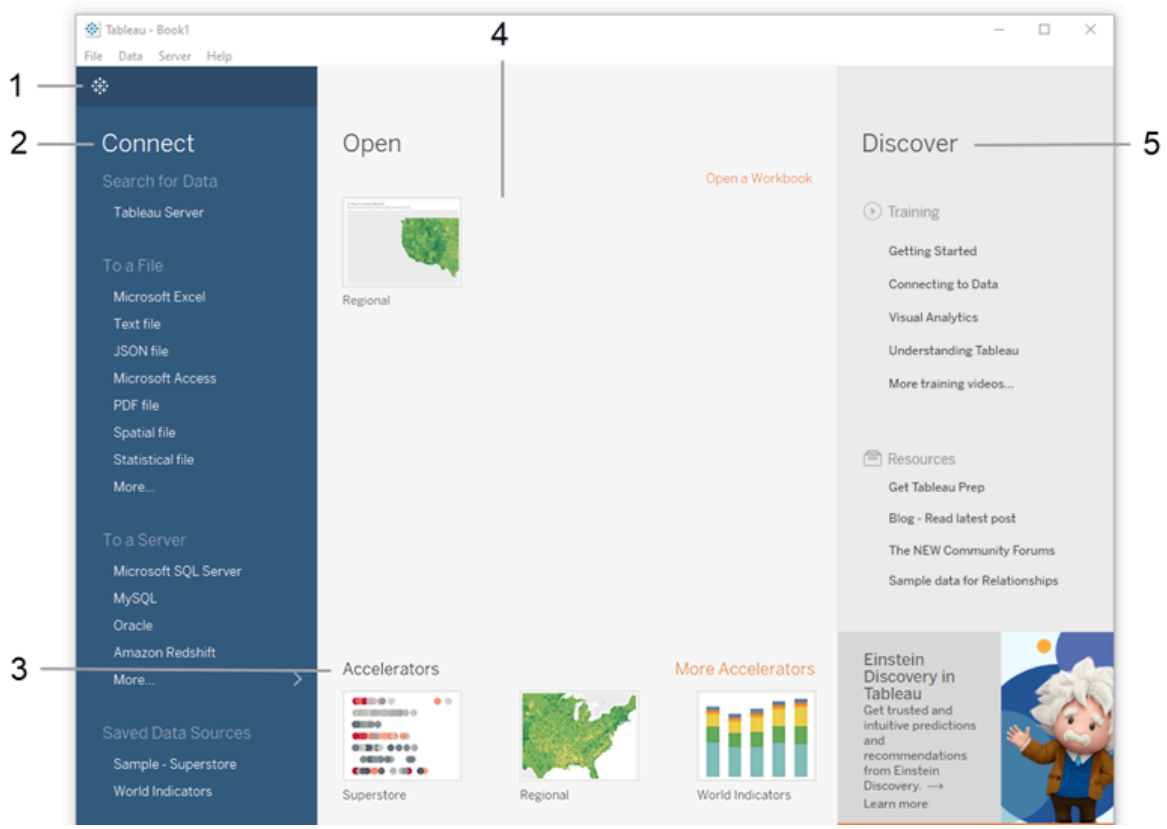
Experiment 1: Connecting to the data

Open Tableau Desktop and begin

The first thing you see after you open Tableau Desktop is the Start page(Link opens in a new window). Here, you select the connector (how you will connect to your data) that you want to use.



The start page gives you several options to choose from:

1. Tableau icon. Click  in the upper left corner of any page to toggle between the start page and the authoring workspace.

2. Connect pane. Under **Connect**, you can:

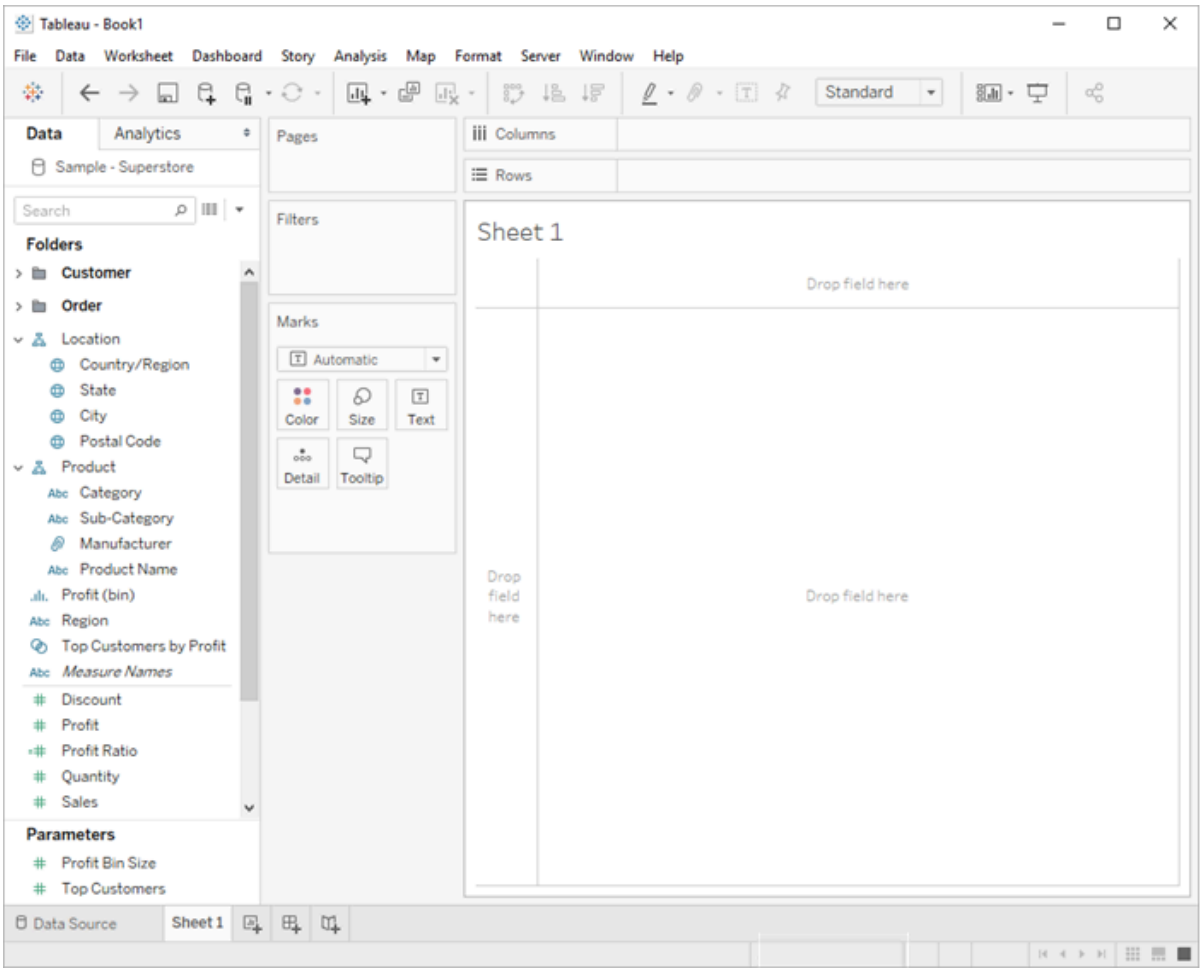
- Connect to data that is stored in a file, such as Microsoft Excel, PDF, Spatial files, and more.
- Connect to data that is stored on Tableau Server, Microsoft SQL Server, Google Analytics, or another server.
- Connect to a data source that you've connected to before.

Tableau supports the ability to connect to a wide variety of data stored in a wide variety of places. The Connect pane lists the most common places that you might want to connect to, or click the More links to see more options.

3. Under **Open**, you can open workbooks that you've already created.

4. In the Connect pane, under Saved Data Sources, click **Sample - Superstore** to connect to the sample data set.

After you select **Sample - Superstore**, your screen will look something like this:



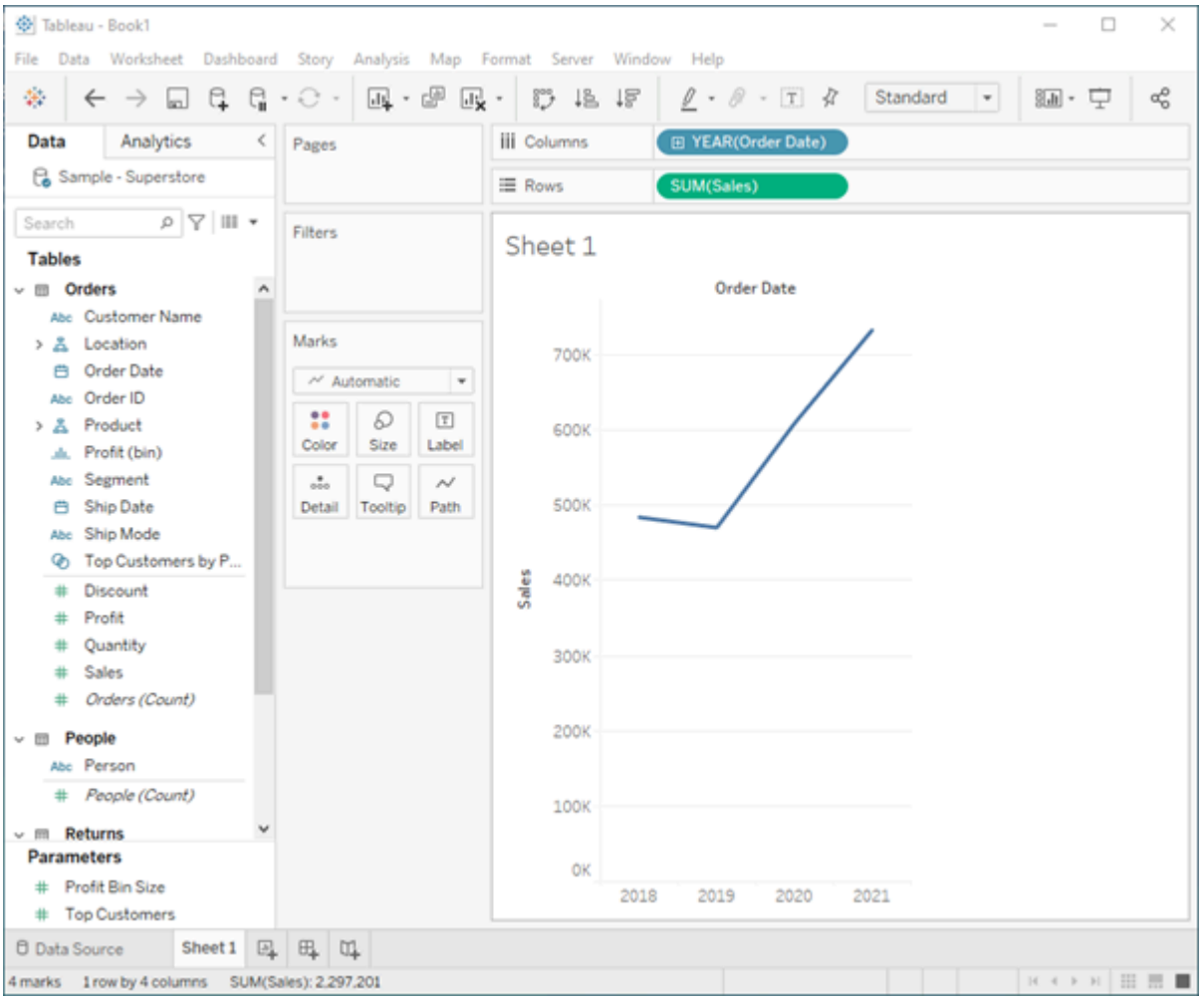
The Sample - Superstore data set comes with Tableau. It contains information about products, sales, profits, and so on that you can use to identify key areas for improvement within this fictitious company.

Step 2: Drag and drop to take a first look

Create a view

You set out to identify key areas for improvement, but where to start? With four years' worth of data, you decide to drill into the overall sales data to see what you find. Start by creating a simple chart.

1. From the **Data** pane, drag **Order Date** to the **Columns** shelf.
2. From the **Data** pane, drag **Sales** to the **Rows** shelf.
3. Tableau generates the following chart with sales rolled up as a sum (aggregated). You can see total aggregated sales for each year by order date.



When you first create a view that includes time (in this case Order Date), Tableau automatically generates a line chart.

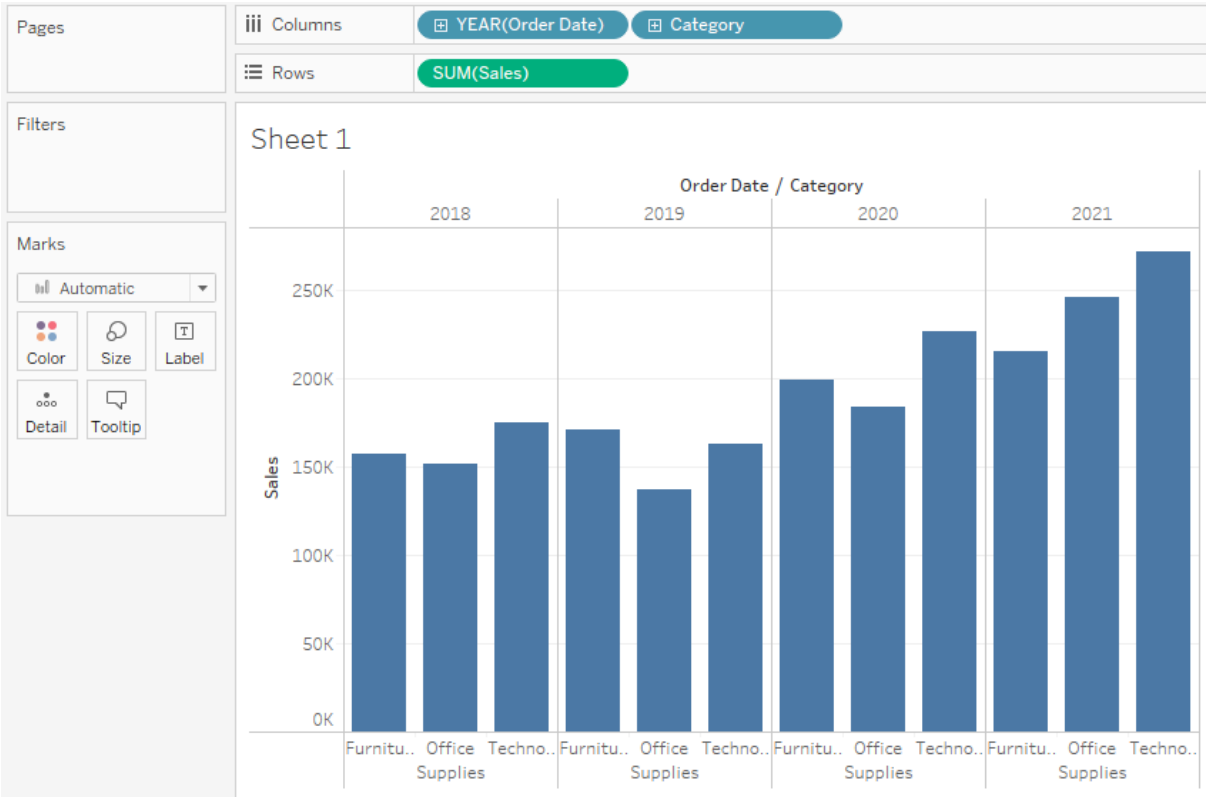
This line chart shows that sales look pretty good and seem to be increasing over time. This is good information, but it doesn't really tell you much about which products have the strongest sales and if there are some products that might be performing better than others.

Refine your view

To gain more insight into which products drive overall sales, try adding more data. Start by adding the product categories to look at sales totals in a different way.

1. From the **Data** pane, drag **Category** to the **Columns** shelf and place it to the right of YEAR(Order Date).

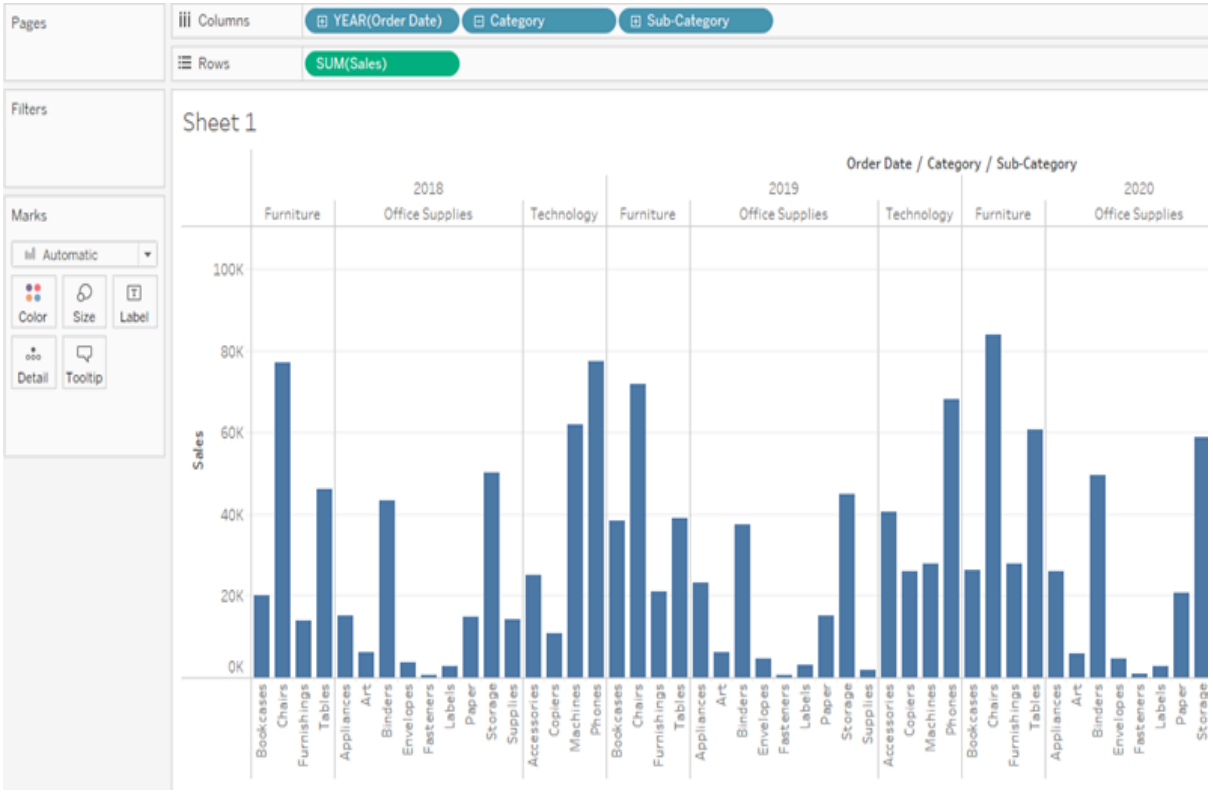
   Your view updates to a bar chart. By adding a second discrete dimension to the view you can categorize your data into discrete chunks instead of looking at your data continuously over time. This creates a bar chart and shows you overall sales for each product category by year.



Your view is doing a great job showing sales by category—furniture, office supplies, and technology. An interesting insight is revealed!

2. Double-click or drag **Sub-Category** to the **Columns** shelf.

Sub-Category is another discrete field. It creates another header at the bottom of the view, and shows a bar for each sub-category broken down by category and year.



Steps to be Followed

1. **Open Tableau Desktop:**
   - Launch Tableau Desktop on your computer.
2. **Connect to Data:**
   - In Tableau, go to the "Connect" pane, usually located on the left side of the screen.
   - Select the appropriate data source type. If your data is in an Excel spreadsheet or CSV file, choose "Microsoft Excel" or "Text File" respectively. If your data is in a database, select the relevant database option.
   - Navigate to the location of your lab experiment data file and select it.
3. **Choose Your Data:**
   - Once connected, Tableau will display a preview of your data.
   - Review the data fields to ensure Tableau has interpreted them correctly. You can make adjustments to data types if necessary.
4. **Load Data into Tableau:**
   - After confirming the data looks correct, click on the "Sheet" tab to start analyzing your data.
5. **Create Visualizations:**
   - Drag and drop fields from the Data pane onto the Rows and Columns shelves to create visualizations.
   - Experiment with different chart types and combinations to explore your data effectively.
6. **Build Dashboards (Optional):**
   - If you want to combine multiple visualizations into a single view, you can create a dashboard.

    - Click on the "Dashboard" tab and drag your visualizations onto the dashboard canvas.
    - Arrange and resize them as needed to create a cohesive dashboard layout.
7. **Analyze and Iterate:**
    - Explore your data using Tableau's interactive features like filters, parameters, and tooltips.
    - Iterate on your visualizations and dashboards based on your analysis and insights.
    - Experiment with Tableau's advanced features to enhance your data exploration and storytelling capabilities.
8. **Save Your Work:**
    - Once you're satisfied with your analysis and visualizations, save your Tableau workbook (.twb or .twbx file) to preserve your work for future reference.