SCM 4750 In-Class Group Activity
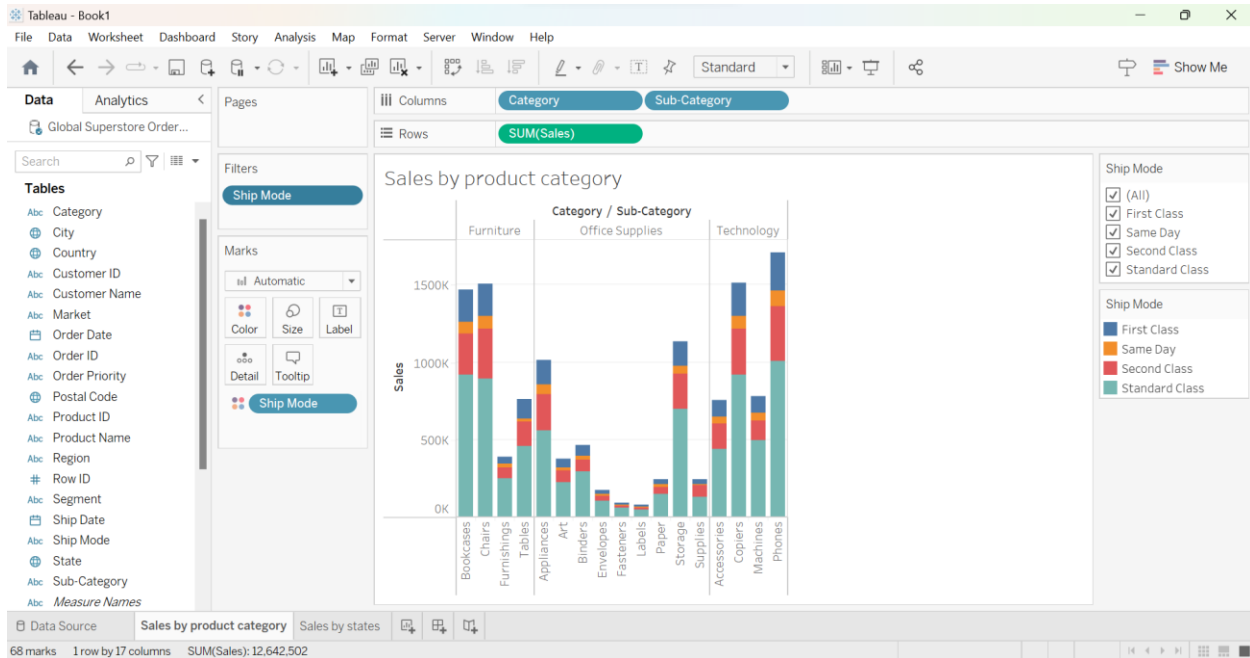## Data Visualization in Tableau (Points 100)

Team Members: Ashley Larrondo

Objective: Implement different types of charts in Tableau and summarize the trends in the dataset; Create a dashboard based on selected KPIs; Assess various scenario outcomes using filtering options in a dashboard to help the decision-making process.

Tasks: This is a team-based assignment. You will create three data visualizations and transfer them to a dashboard page to create an interactive dashboard in Tableau and answer two business questions. **Each team should submit one Tableau file and this Word file to receive their points.**
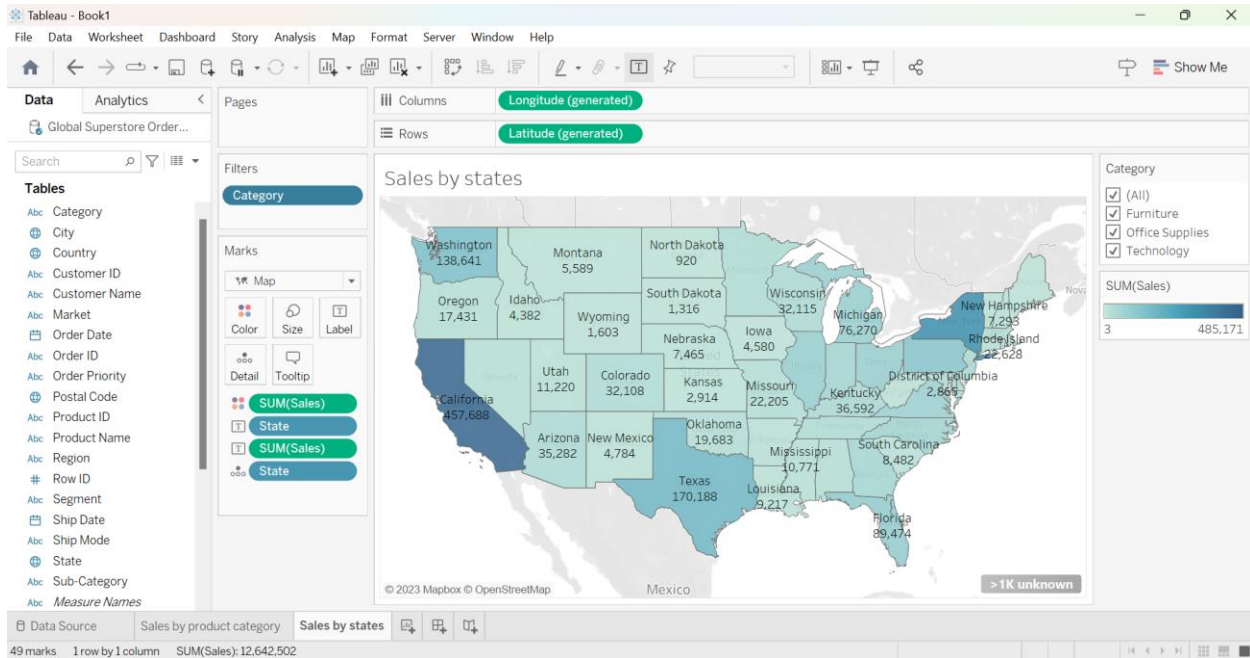
To complete this assignment, follow these steps:

0. Download the dataset and connect your Tableau to the dataset.
1. In the Data Source, drag and drop "Orders" to the connection space to set up your dataset.
2. Go to "Sheet 1" in Tableau and create a visualization:
    - Add Category to Columns.
    - Add Sub-Category to Columns after Category.
    - Add Sales to the Rows. It should be displayed as the SUM(Sales).
    - Drag and drop Ship Mode to the colors.
    - Drag and drop the Ship Mode in the filter area. Click on the drop-down icon of the Ship Mode and select Show Filter. Now, you should be able to see the Ship Mode as a filter on the right-hand side of your screen.
    - Rename the Sheet to "Sales by product category"
    - ✓ **Take a screenshot of your visualization or export the sheet as an image and place it below.**
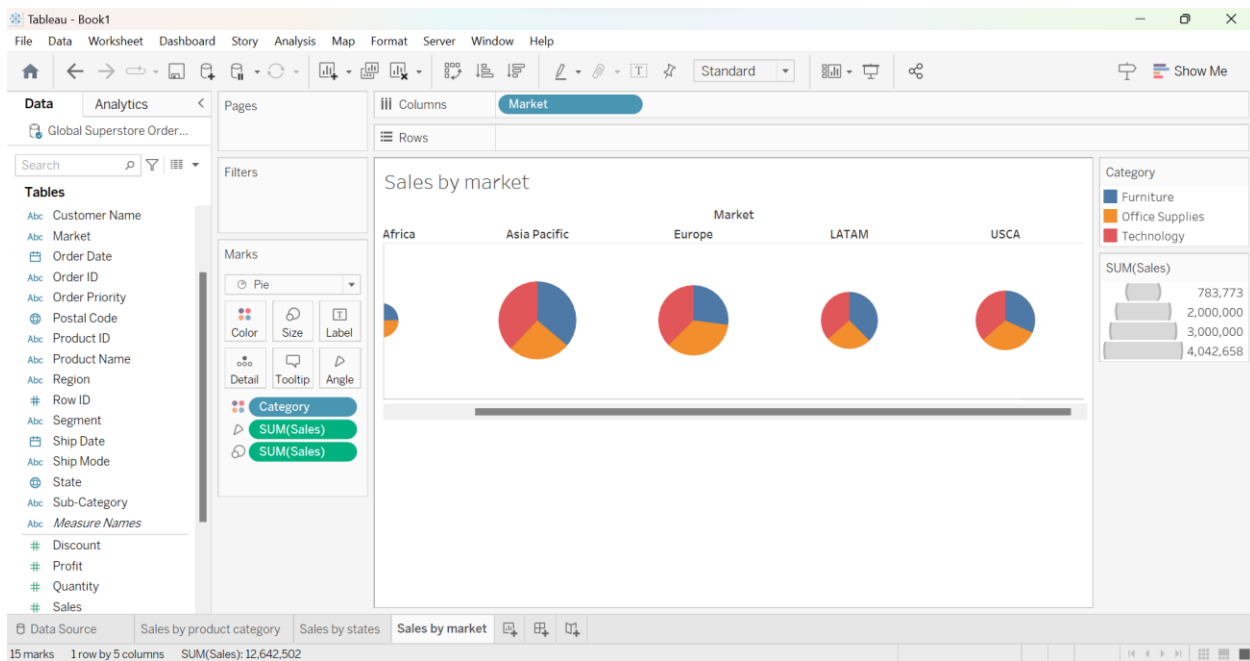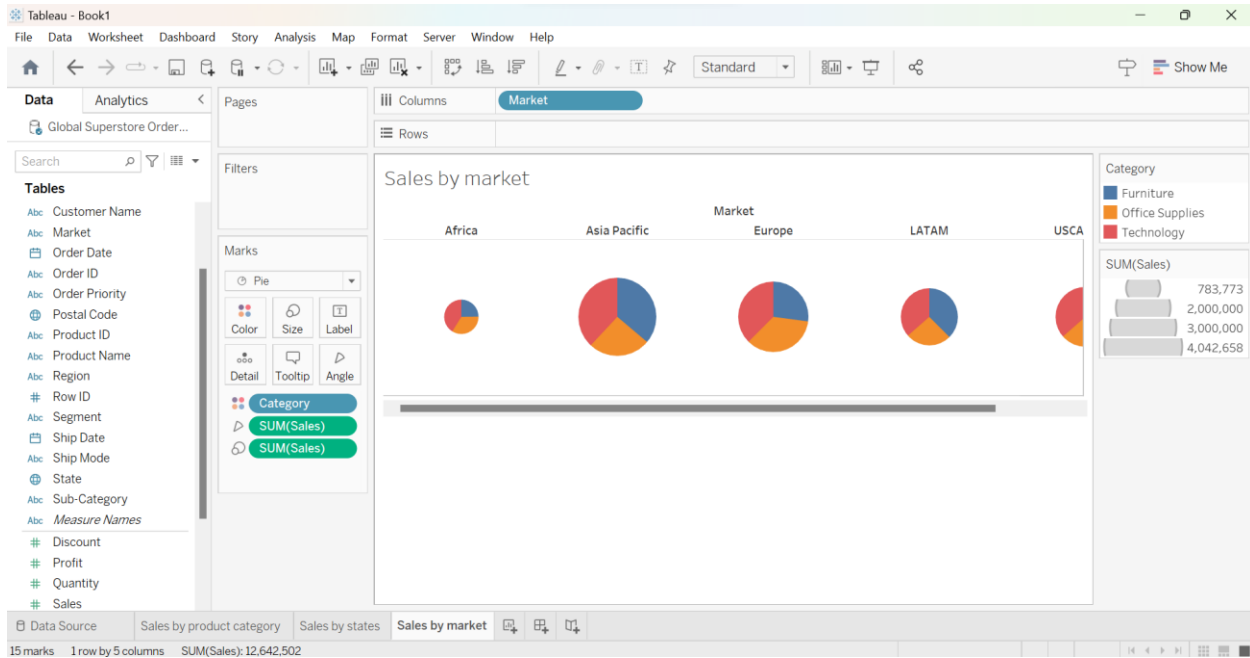
3. Create a new sheet in Tableau and create a visualization:
   - Double click on State. You should be able to see a map.
   - In the Marks window on the left-hand side of your map, click on the drop-down menu of the visualization types and select "Map". This will make your visualization a filled map.
   - Drag Sales and put in in the Colors in the Marks window.
   - Drag and drop the States in the Labels in the Marks window to see the state labels on the map.
   - Drag and drop Sales in the Labels in the Marks window to see the sales of each state on the map.
   - Drag and drop Category in the filter area. Click on the drop-down icon of the Category and select Show Filter. Now, you should be able to see the Category as a filter on the right-hand side of your screen.
   - Rename the Sheet to "Sales by states"
   - ✓ **Take a screenshot of your visualization or export the sheet as an image and place it below.**

4. Create a new sheet in Tableau and create a visualization:
   ▪ Drag and drop Category into the Colors in the Marks window.
   ▪ Drag and drop Sales into the Size in the Marks window.
   ▪ Click on "Show Me" on the right corner of your screen and select the pie chart.
     You see that a new feature has been automatically added to the Marks window as
     Angle. It shows the angle of each area in the pie chart based on the sum of sales.
     A larger sum of sales has a larger angle and area.
   ▪ Drag and drop Market in the Columns.
   ▪ Rename the Sheet to "Sales by market".
   ✓ **Take a screenshot of your visualization or export the sheet as an image and place
     it below.**

5. Create a dashboard page and drag and drop all three visualizations to the screen. Organize visualizations in a way that is easy to read and interact with. You can adjust the size of your dashboard if needed.

6. **On the dashboard page, select each visualization one by one and click on their filter icon to connect them all.**

7. Provide your answers to the following business questions in this Word document:
   - a) Based on the state map, California has the highest sales. A regional manager in California wants to know which **product subcategory** has the **highest sales** in

California so that they can keep enough inventory for that item. Help the regional manager by finding out the answer.

The product subcategory with the highest sales in California are **phones**, specifically phones with a standard class ship mode.

- ▪ The **same day shipping** is an expensive option for a business although it can bring customer satisfaction. The manager should find out if it is worth offering the same-day delivery option for a product. To help the manager, find out which **office supply** in **Europe** with **the same-day delivery option** has the **lowest sales**? Do you suggest keeping the same-day delivery for this item based on the sale value?

The office supply with the lowest sales with same-day delivery in Europe are **fasteners.** I do not suggest same-day delivery for this item since the sales are low compared to the other shipping methods for fasteners. For example, there are 764 sales for same day delivery for fasteners, whereas other forms of shipping such as second class and first class have sales of roughly 4,000. Continually, fasteners sell better when shipped in standard delivery mode because those sales are 13,597, which is almost double of same-day delivery for fasteners.

8. Save and submit your **Tableau file** as well as this **Word document** with your answers in Canvas. To save the Tableau worksheet, go to files, click on save as, select a destination for your file, and press ok.
9. **Take a screenshot of your full dashboard or export the sheet as an image and place it below.**