#### Parameters:

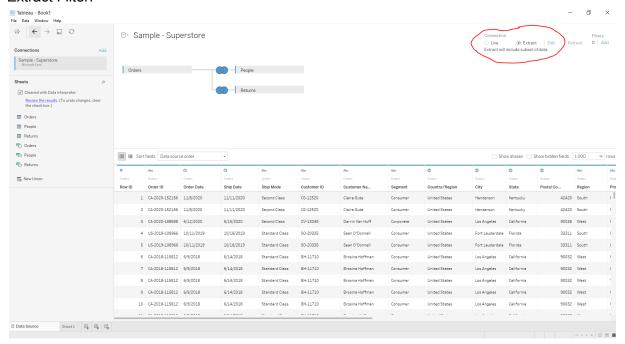
1. Allow users to filter out top N products subcategories by average discount

# **Tableau Connections (Live / Extracts)**

- 1. Live and extracts are two ways you can make the data connection to the tableau. Live allows you real-time data while extracts are kind of batch which needs to be refreshed from time to time to get the updated data.
- While in case of extracting any changes made in the data source won't reflect in the
  report immediately. It will be reflected when the extract will be refreshed. Tableau Public
  only supports extract connections, while Tableau Desktop (professional) supports both
  live and extract connections.

#### Different kinds of filters:

1. Extract Filter:



- 2. Data Source Filter
  - a. Go to the blank space on top and you can see filter on top right -> this is a data source filter
  - b. Filters edit- add [whatever attribute filter]
- Context Filter:

1.

- a. Show top 5 furniture category item by sales
- b. Incorrect Method:
  - Drag category to rows -> Drag subcategory to rows -> Drag sales to measures
  - ii. Drag subcategory to filter -> "top" tab -> by field -> top 5 by sum(Sales)
  - iii. Notice how the top 5 has a mix of all categories
  - iv. Drag category to filter -> "general" tab -> select from list -> filter for

#### furniture

- v. Now the 5 subcategories further reduced to have only filter
- vi. How do we prevent this from happening?
- vii. Drag category to filter -> right click -> Add to context
- viii. Now it shows the right values
- 4. Dimension Filter Dragging a dimension to filter
  - a. Show how you can use filter to exclude values by clicking on exclude check box in the filter window
- 5. Measure Filter Dragging a measure to filter
  - a. Eg: Show subcategories whose average profit is > 50
  - b. Drag subcategories to rows -> Drag Profits to measures
  - c. Drag profit to filter -> click "Average" instead of "All Values"

#### **Text Tables**

- 1. Drag category to rows -> Drag Sales to row
- 2. Click worksheet on top tab -> Duplicate as cross tab

## **Highlight Tables**

- 1. Display sales of for each subcategories by region for all the years in a table format and highlight values that has the highest and lowest sales
- Drag order date to columns (it will become year) -> drag subcategory to rows -> drag region to rows -> Drag sum(Sales) to measures
- 3. Click standard on top -> fit width
- 4. Now we have to color based on sales text
- 5. Drag sales to color -> Go to marks tab on the left -> Click automatic drop down -> click square

HEAT MAP with size and color:

- 6. Display sales and profit for each subcategory by region for all the years in a table format
- 7. Drag order date to columns (it will become year) -> drag subcategory to rows -> drag region to rows
- 8. Drag sales -> color
- 9. Drag profit to size -> click on size and adjust the range as you see fit

### **Area Chart**

- 1. Create an area chart which displays the total number of quantities sold and the mode of shipping for each month for the year 2022
- 2. Drag order date to columns -> click on order date (in columns) -> Click month ->

- 3. Drag quantity to rows -> Drag order date to filter -> filter for 2022 (its a line chart)
- 4. Go to marks -> click automatic -> click area
- 5. Drag ship mode to color

# **Sparkline Chart**

- 1. Create a chart to analyze trend in profit, sales and discount
- 2. Drag measure names to rows -> Drag measure values to rows -> drag order date to columns -> click drop down on orderdate and make it month
- 3. Remove the measure values from marks that you dont want -> right click on the "value" axis -> edit axis -> click Independent axis range for each row or columns
- 4. right click on the "value" axis -> uncheck "show header"

## Multiple measures on single axis

- 5. Displaying profit, sales and discount on the single axis
- 6. Drag order date to columns -> click drop down on orderdate and make it month
- 7. Drag sales to rows -> drag profit to the y axis (near the numbers) [you will see two parallel lines] -> drag discount to y axis

### Scatter plot

- 1. Find order id that has the highest sales and highest profit value
- 2. Drag sales to columns -> drag profits to rows
- 3. To disaggregate the measure for each order ID:
- 4. Drag order ID to detail in marks

# **Tree Map**

- 1. Find the subcategory that has the highest sales and highest profit. Tree maps need 1 dimension and 1 or more measures
- 2. Drag subcategory to columns -> Drag sales to rows -> click on "show me" (top

### right) -> click on tree map

3. Drag profit to size

### **Combined Axis Chart**

- 1. Compare sales and profit for each category in a single plot
- Drag category columns -> Drag sales to rows -> Drag profit to y axis -> Drag measure names to mark (color)
- 3. Click on standard ->drop down -> click entire view

### **Dual Axis Chart**

- 1. Find product that has the lowest discount but has the highest profit
- 2. Drag subcategory to columns -> drag profit to row -> drag discount to rows
- 3. Right click on discount in rows -> click on dual axis
- 4. Click on profit in marks -> make it bar -> Click on sales in marks and make it line

### **Calculated Fields**

- 1. Number function:
- 2. Calculation formula MIN([Sales])
- 3. Drag Category to cols -> and calc field to rows
- 4. String Function:
- 5. Calculation formula RIGHT([Order ID],6)
- Drag order ID to columns -> drag calc field to columns -> drag sales to rows