

Accessibly Create & FAIR(ly) Share Visualizations

Tableau Activity Guide

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Preliminary tasks:

- Download the Sample-Superstore Excel file and import it into Tableau.
- Open Tableau – this guide is prepared using the Tableau Desktop Public edition 2024.3.0. Under Connect, click on Microsoft Excel. Select your data file: “sample_-_superstore.xls” and click Open.



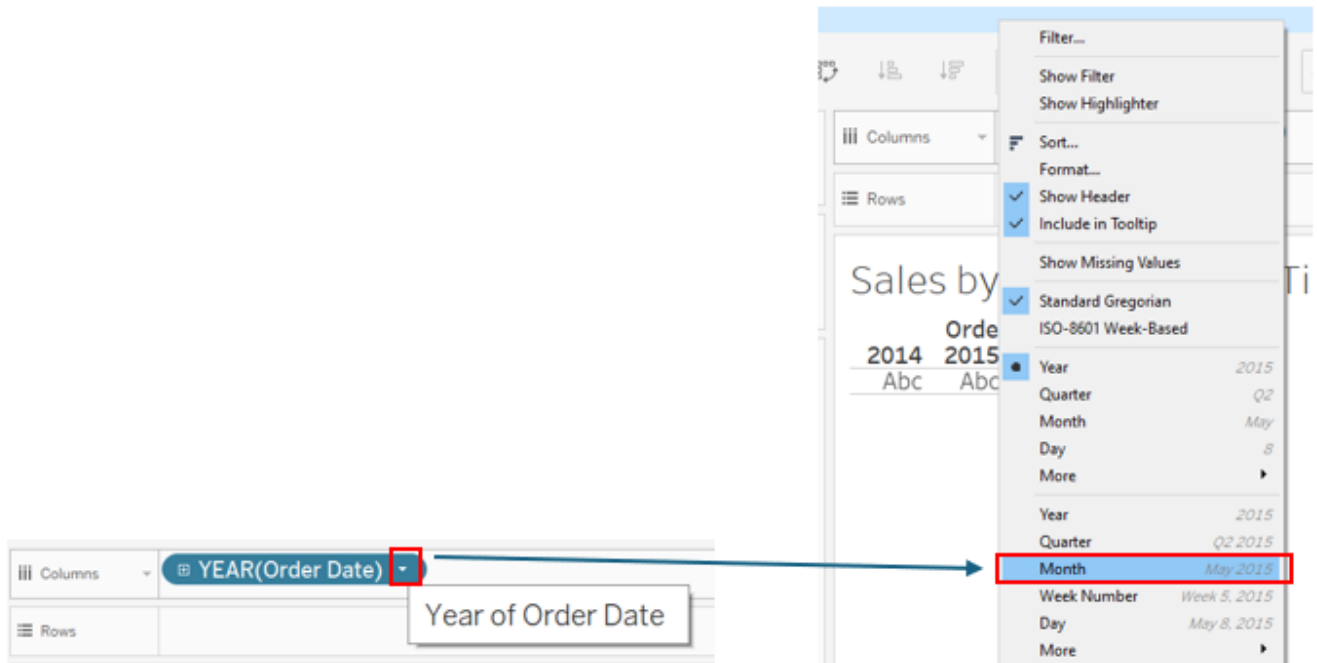
- Double click on Orders under Sheets (or drag it to the Drag Tables here area). You will see all the variables from your file on the left column under “Tables”. You will notice that Tableau divides the categorical and numerical variables.

Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	Segment	Country	City
1	CA-2016-152156	11/8/2016	11/11/2016	Second Class	CG-12520	Claire Gule	Consumer	United States	Henderson
2	CA-2016-152156	11/8/2016	11/11/2016	Second Class	CG-12520	Claire Gule	Consumer	United States	Henderson
3	CA-2016-138688	6/12/2016	6/16/2016	Second Class	DW-13045	Darrin Van Huff	Corporate	United States	Los Angeles
4	US-2015-108966	10/11/2015	10/18/2015	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale
5	US-2015-108966	10/11/2015	10/18/2015	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale
6	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles
7	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles
8	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles
9	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles
10	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles

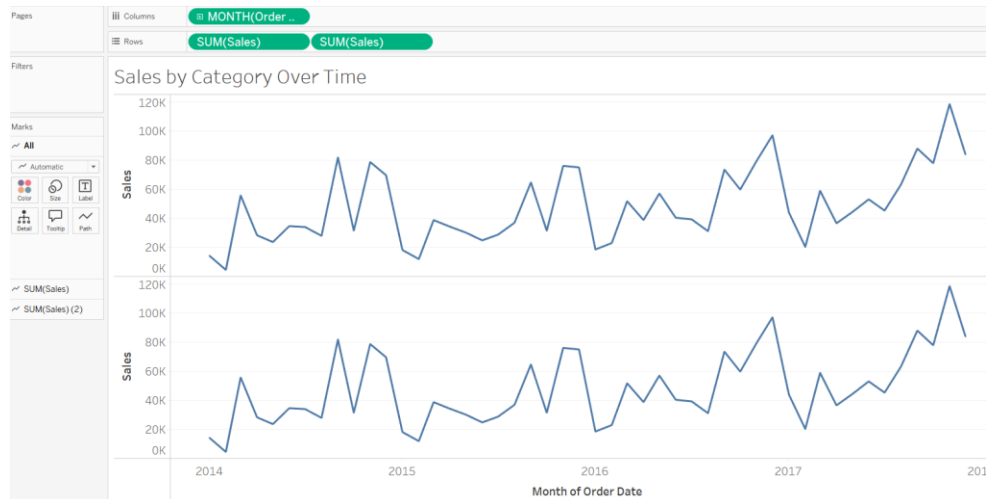
- Click on Sheet 1.

I. Sheet 1: Sales by Category Over Time

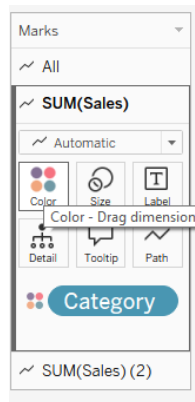
1. Rename sheet by double-clicking on the name “Sheet 1” at the bottom tab to “Sales by Category Over Time”. This also changes the title at the top, which can be double-clicked to format.
2. Drag the “Order Date” variable to the Columns shelf and change it to Month format followed by Year.



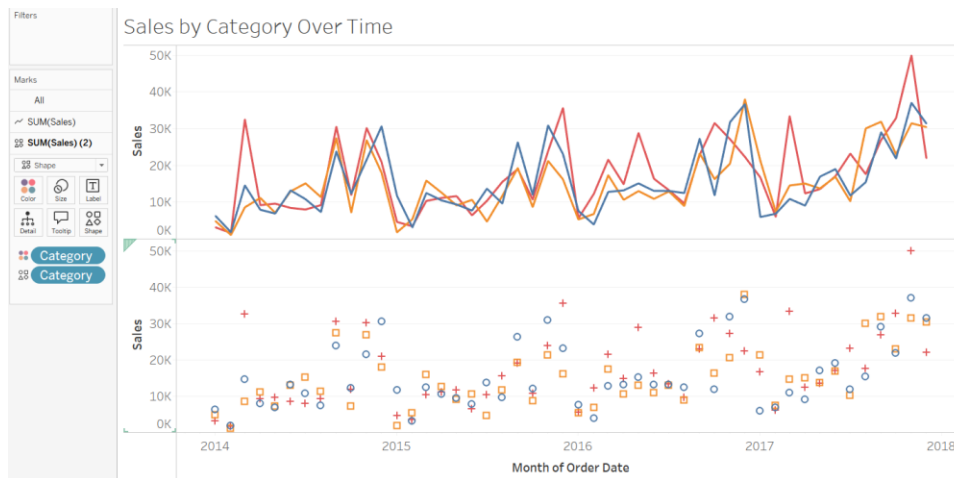
3. Drag the Sales variable to the Rows shelf. Do this twice so we obtain two line charts like below:



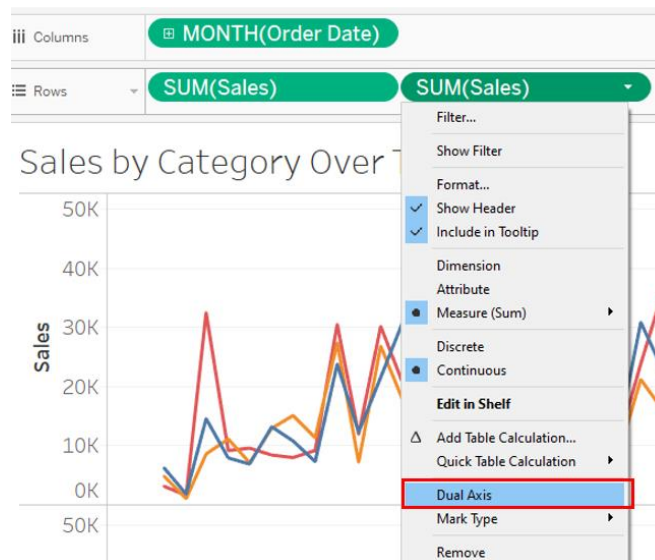
4. Click on the first SUM(Sales) card on the Marks shelf. Drag Category to the Color card.



- Click on SUM(Sales) (2) under Marks and change the type from “Automatic” to “Shape”. Drag Category to Color as well as to Shape for the below view



- Click on the downward arrow on one the SUM(Sales) variable in the Rows shelf and select “Dual Axis”.



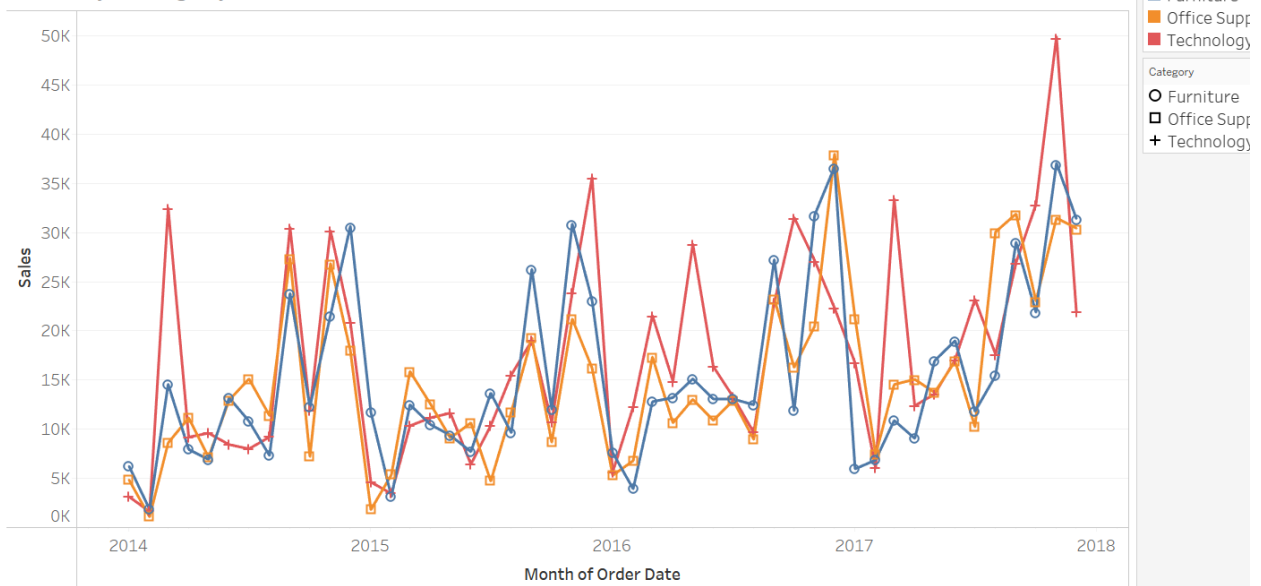
- Since there are two y-axes, right click on one side and uncheck the “Show Header” option.

Sales by Category Over Time

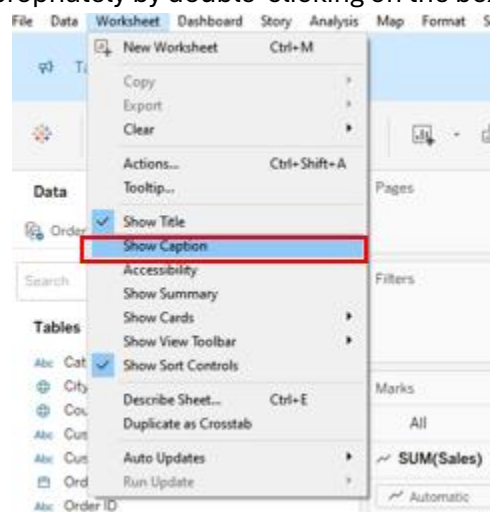


8. Final view:

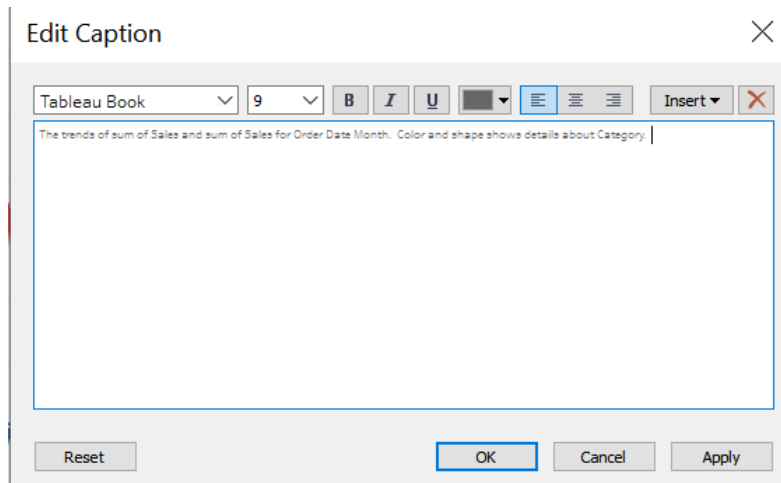
Sales by Category Over Time



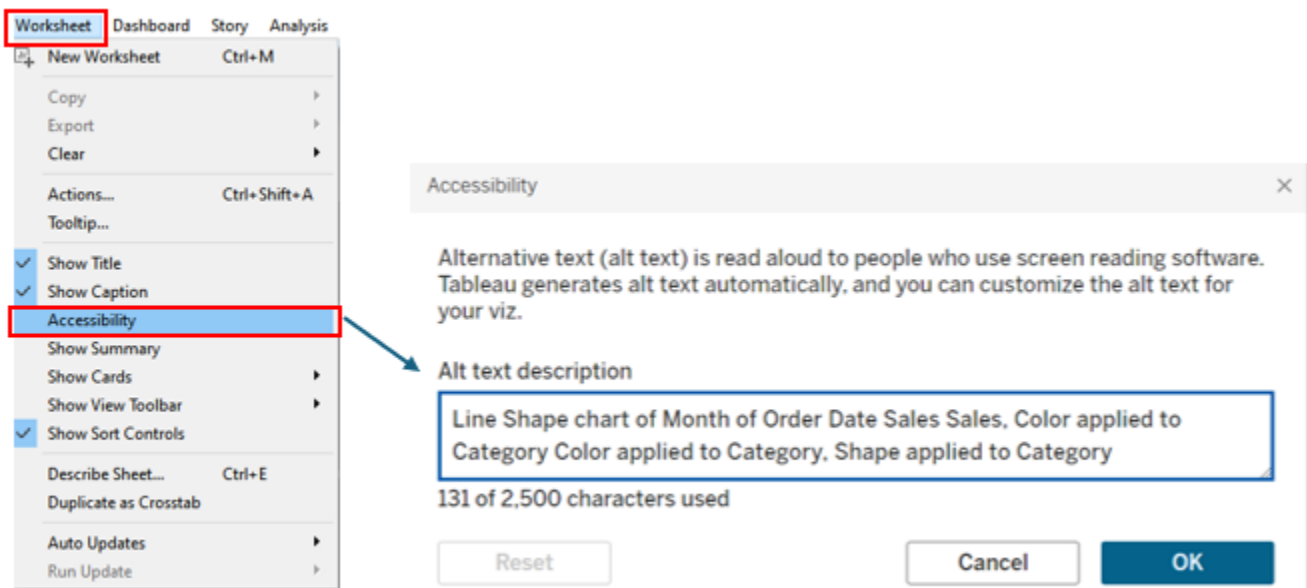
- From the main menu, go to the Worksheet option and select “Show Caption”, which generates a text box below the graph. Edit the text appropriately by double-clicking on the box.



Caption
 The trends of sum of Sales and sum of Sales for Order Date Month. Color shows details about Category. For pane Sum of Sales (2): Shape shows details about Category.

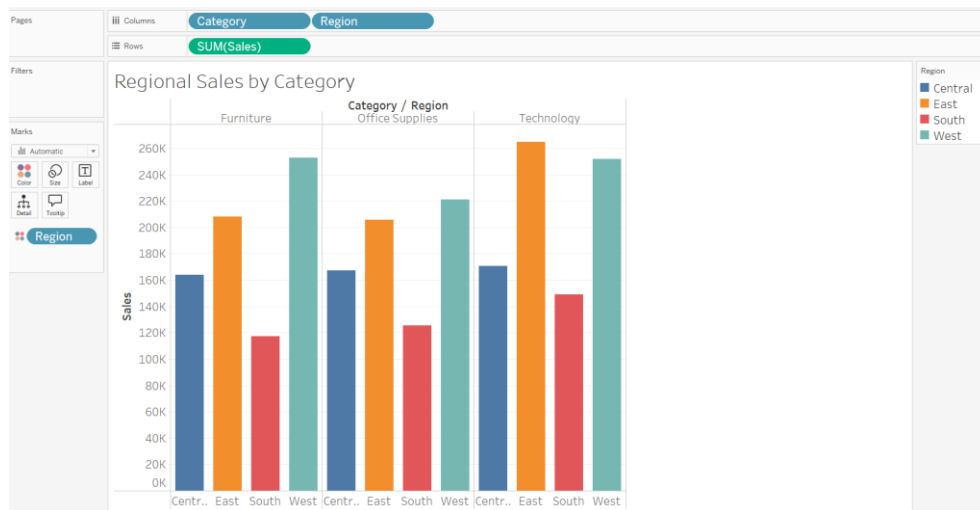


- Again, go to Worksheet and select “Accessibility”. In the box that pops-up, customize the alternative text for the visualization as appropriate.

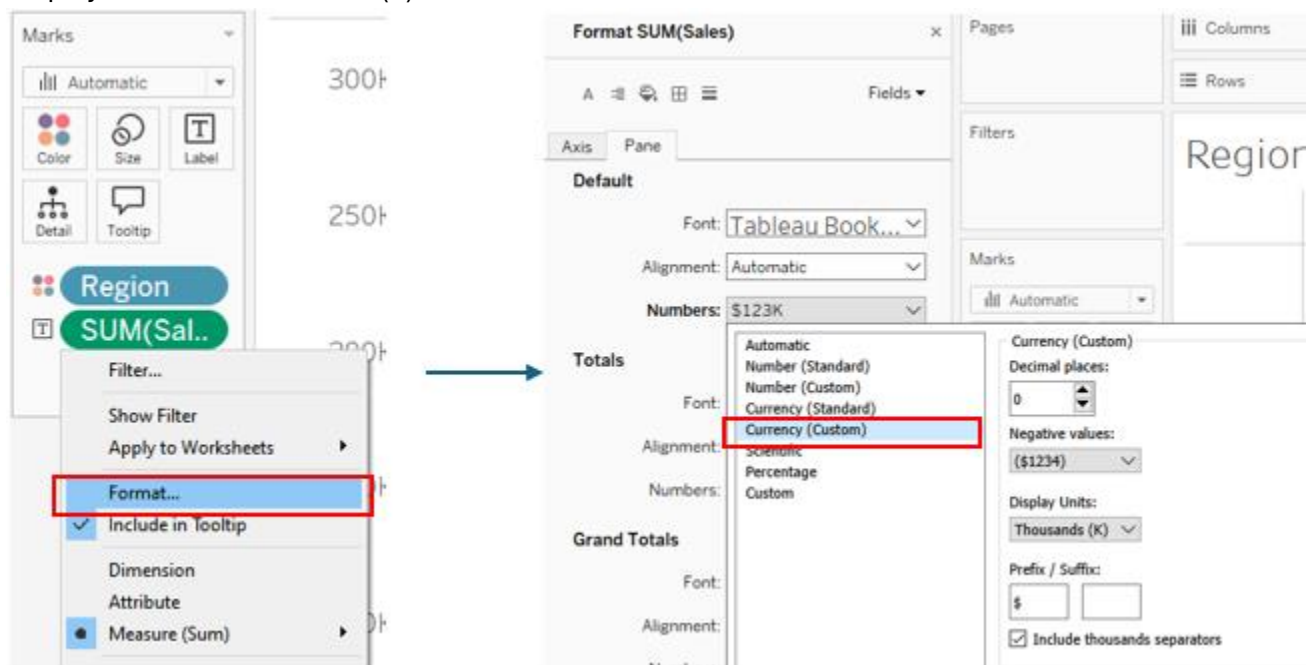


II. Sheet 2: Regional Sales by Category

1. Insert a new sheet from the bottom tab and rename it to “Regional Sales by Category”.
2. Drag variables “Category” and “Region” to the Columns shelf and “Sales” to the Rows shelf.
3. Drag “Region” to the Color card on the Marks shelf for the below view

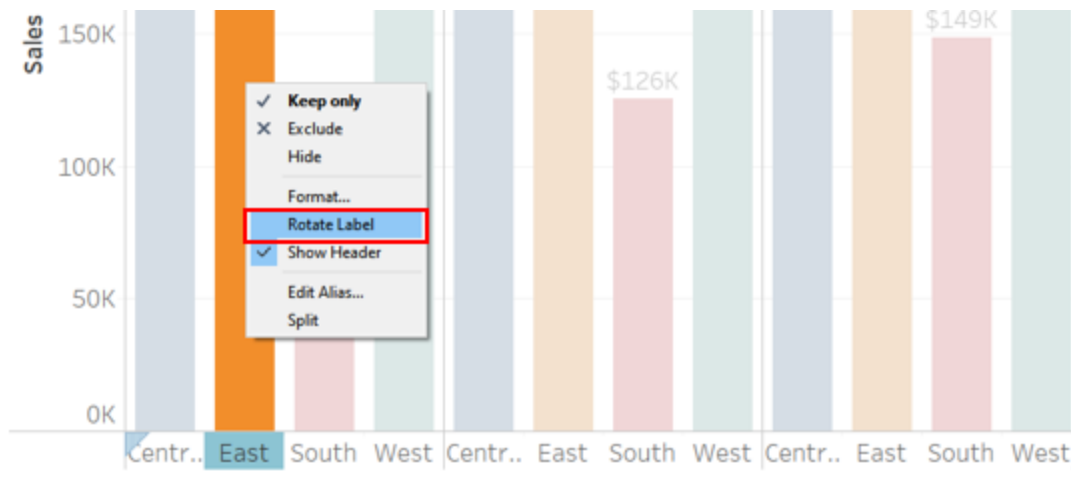


4. Drag the “Sales” variable to the Label card on the Marks shelf. Click on the arrow next to variable name under Marks and select “Format...”. This opens a new menu on the left column containing all variables. Under Default change the “Numbers” to “Currency (Custom)”, so it contains 0 decimal places, and the Display Units is in Thousands (K).

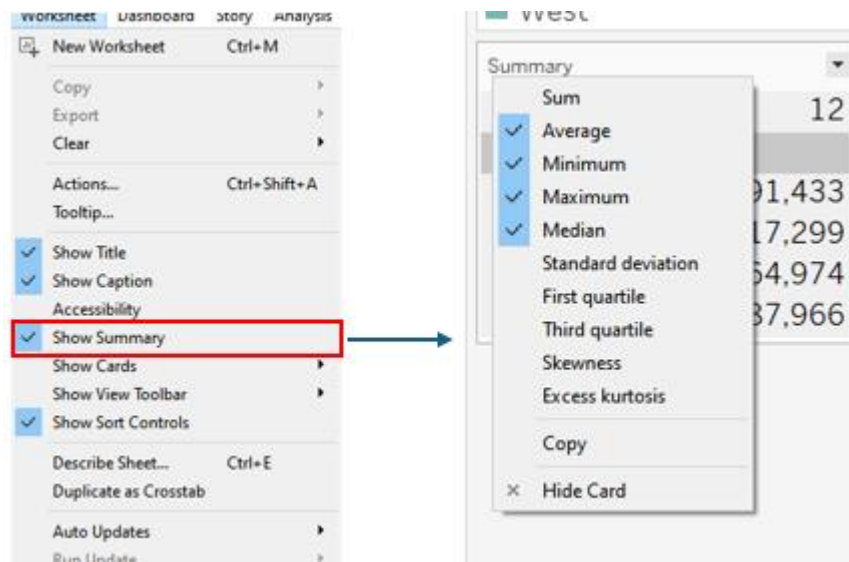


Note: You can close the Format menu after this by clicking on the “x” at the top right.

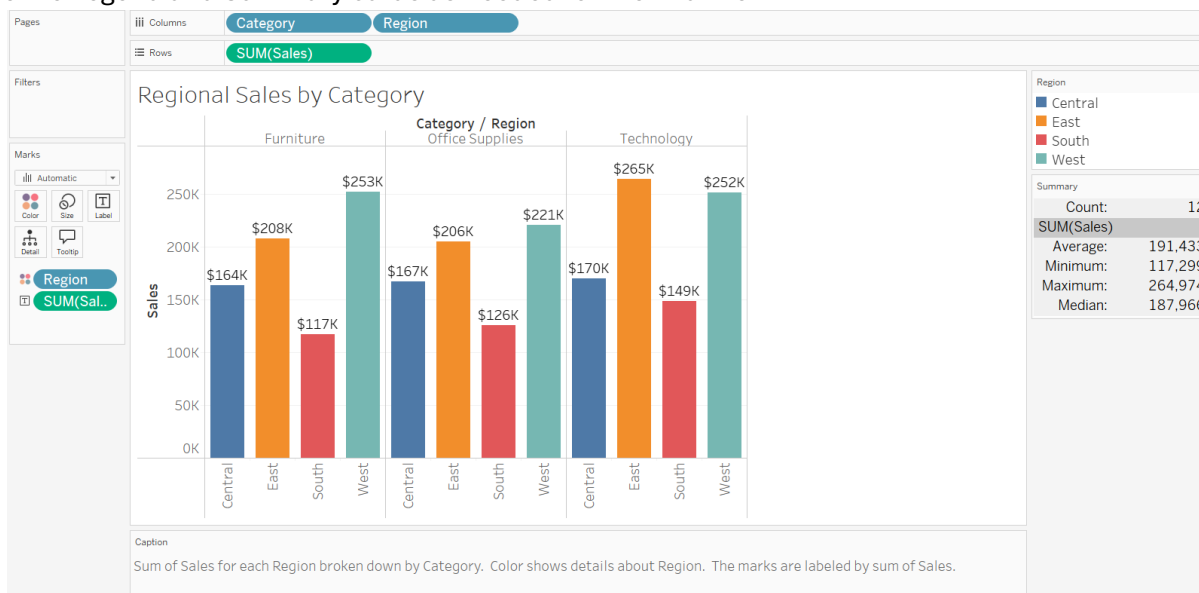
5. Right-click on any of the labels on the x-axis and click on “Rotate Label” so the text is not cut-off.



- In the main menu, click on Worksheet and select “Show Caption” and click on Accessibility to edit alternative text, similar to the first sheet.
- Under Worksheet, check the “Show Summary” option. This generates a Summary card on the right of the chart. Click on the downward arrow on it to edit values generated in the Summary.



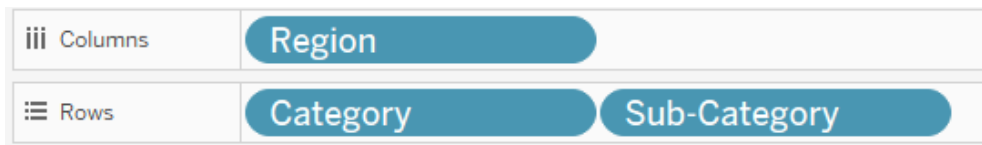
- Resize the Legend and Summary cards as needed for the final view:



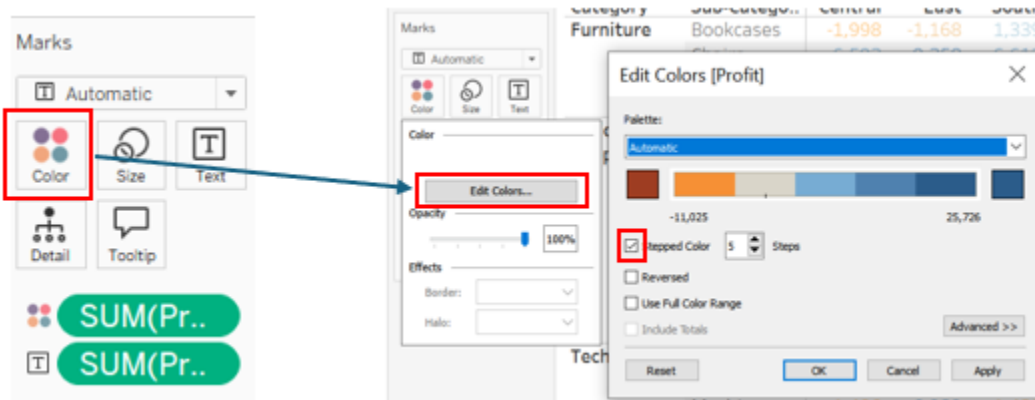
III. Sheet 3: Regional Sales and Profit over Category & Sub-Category

Note: This sheet is inspired by Tableau's documentation on accessibility. Learn more [here](#).

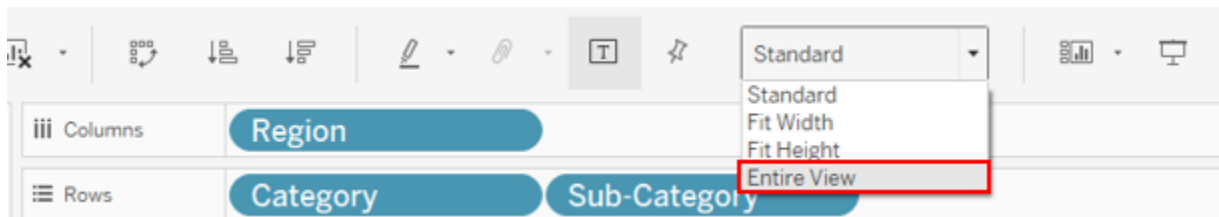
1. Insert a new sheet and rename to “Regional Sales and Profit over Category & Sub-Category”.
2. Drag “Region” to the Columns shelf and “Category” and “Sub-Category” to the Rows shelf.



3. Drag “Profit” to the Text card on the Marks shelf.
4. Drag “Profit” to the Color card. Click on the Color card and choose “Edit Colors...”. Check the Stepped Color option.



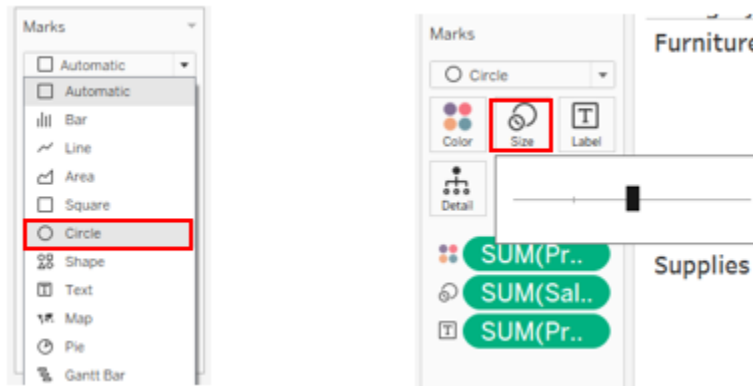
5. Drag “Sales” to the Size card on the Marks shelf.
6. On the tool bar option above the Columns shelf, change the view from “Standard” to “Entire View” for the below view.



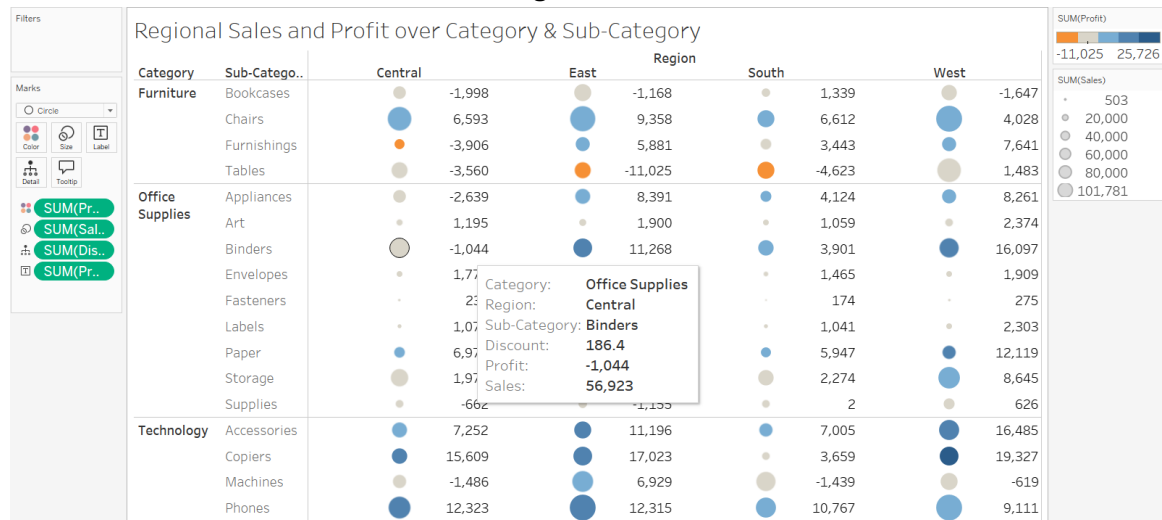
Regional Sales and Profit over Category & Sub-Category

Category	Sub-Catego..	Region				SUM(Profit)
		Central	East	South	West	
Furniture	Bookcases	-1,998	-1,168	1,339	-1,647	-11,025 25,726
	Chairs	6,593	9,358	6,612	4,028	
	Furnishings	-3,906	5,881	3,443	7,641	
	Tables	-3,560	-11,025	-4,623	1,483	
Office Supplies	Appliances	-2,639	8,391	4,124	8,261	SUM(Sales) 503 20,000 40,000 60,000 80,000 101,781
	Art	1,195	1,900	1,059	2,374	
	Binders	-1,044	11,268	3,901	16,097	
	Envelopes	1,778	1,812	1,465	1,909	
	Fasteners	237	264	174	275	
	Labels	1,073	1,129	1,041	2,303	
	Paper	6,972	9,015	5,947	12,119	
	Storage	1,970	8,389	2,274	8,645	
	Supplies	-662	-1,155	2	626	
Technology	Accessories	7,252	11,196	7,005	16,485	
	Copiers	15,609	17,023	3,659	19,327	
	Machines	-1,486	6,929	-1,439	-619	
	Phones	12,323	12,315	10,767	9,111	

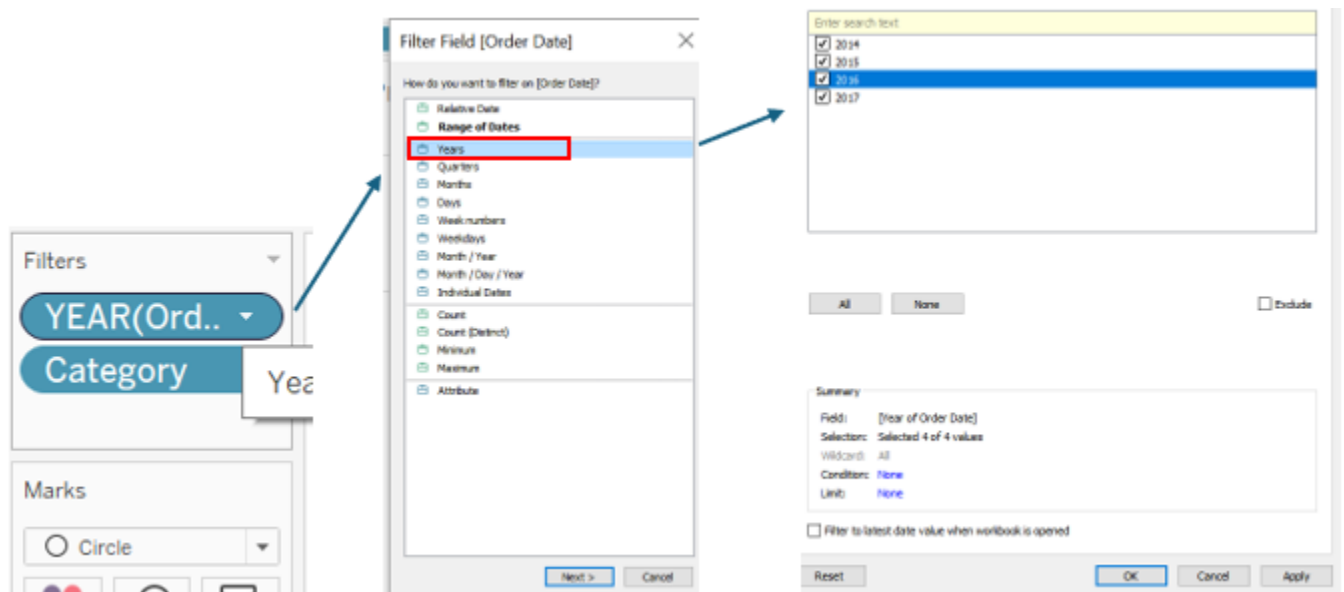
- On the Marks card, click on “Automatic” and change to “Circle”. Click on the “Size” card and drag the slider to make the circles bigger.



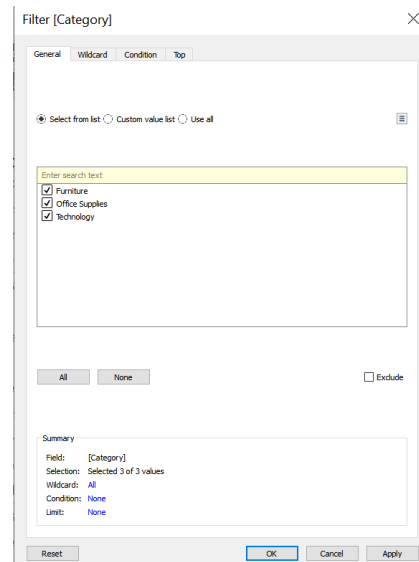
- Drag “Discount” to the Detail card for the following view



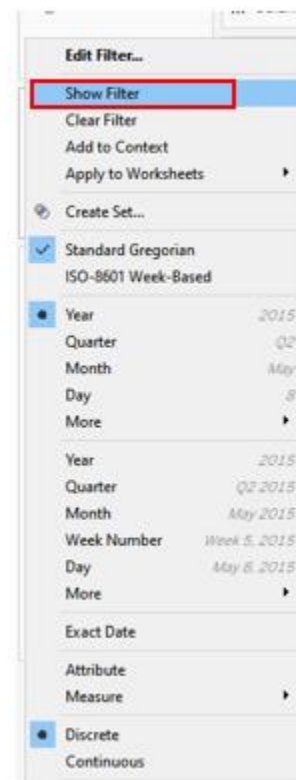
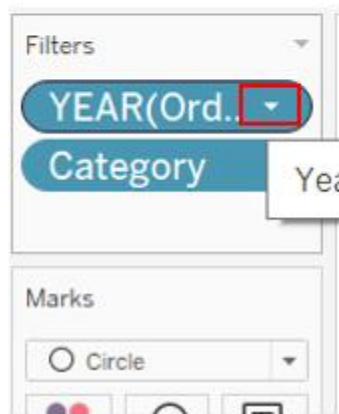
- For additional filtering options, drag “Order Date” to the Filters card and select Years then click on Next then select all years and click on OK.



- Similarly, drag Category to filters and check all options and click on OK.



11. For both variables on the Filters card click on the downward arrow and click on “Show Filter” to show the filter options on the right.



12. Finally, click on Worksheet in the main menu and add Caption, and alternative text through Accessibility.

