

5. How would you structure a dashboard that compares sales performance across multiple regions, considering positioning, proximity, and grouping of visual elements?

Step1: Open the tableau

Step2: select file menu ->new ->ok

Step3: click on connect to data -> again click the micro soft excel file

Step4: its open the another window from there we need to select the excel file which you want to create the reports(sample supper store)

Step5: that's gets added to our tableau now drag the order table from the left side to right side

Step 6: that display the all the data of the table bellow in the right side of down

Step 7: select sheet1

Step 8: drag and drop the salse in to the rows

Step 9: drag and drop the region in to the columns

Step 10: by default it display the clustered column chart

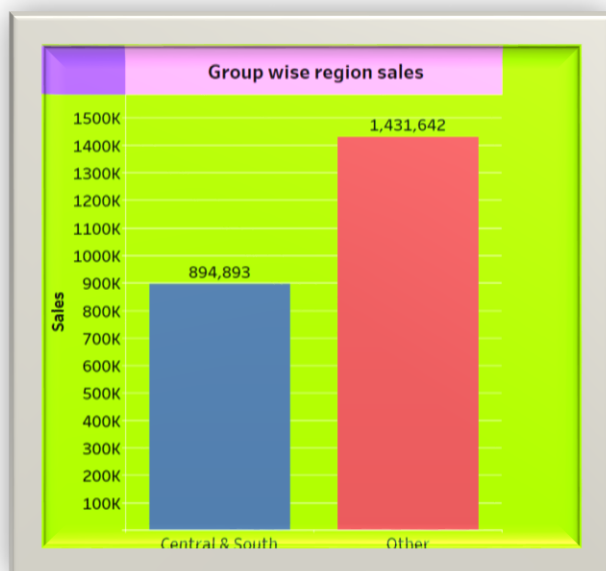
For creating the Groups

Step 11: select the Number of region with control and right click select group

Step 12: now it create with new group with that combination and rest with other group

Step 13: now remove the region from the column and add new region group in the column it will be as follows

Step 14: change the color,font,title apply the label



6. What factors influence the choice of graph types (e.g., bar chart, line chart, scatter plot) when designing a visualization?

Theory write

7. Design a simple dashboard layout that presents key metrics, ensuring that the most critical information is placed where users are most likely to look first.

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Step5: that's gets added to our tableau now drag the order table from the left side to right side

Step 6: that display the all the data of the table bellow in the right side of down

Step 7: select sheet1 → drag the sales in to the text then it display the sum of the sales

Step 8: select sheet2 → drag the sales in to the text then it display the sum of the sales and change it to Max of sales

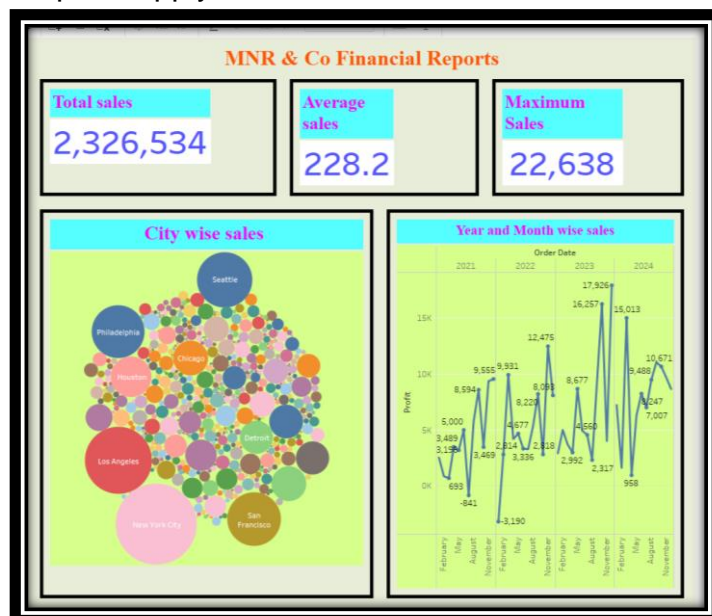
Step 9: select sheet3 → drag the sales in to the text then it display the sum of the sales and change it to average of sales

Step 10: select sheet4 → drag the sales in to the rows and city into the columns then change the report to packed bubbles chart

Step 11: select sheet5 → drag the profit in to the rows and order date into the column and add months and select the line chart and select T display the values

Step 12: select the dashboard drag and drop the shee1,sheet2,sheet3,sheet4,sheet5 and design the sheet and edit the title of sheet and border

Step 13: apply the title worksheet → show title → edit title



9. Create a mock-up of a layout that includes a mix of charts (e.g., bar chart, line graph) to show monthly sales and profit margins. Explain your choices.

Step1: Open the tableau

Step2: select file menu ->new ->ok

Step3: click on connect to data -> again click the micro soft excel file

Step4: its open the another window from there we need to select the excel file which you want to create the reports(sample supper store)

Step5: that's gets added to our tableau now drag the order table from the left side to right side

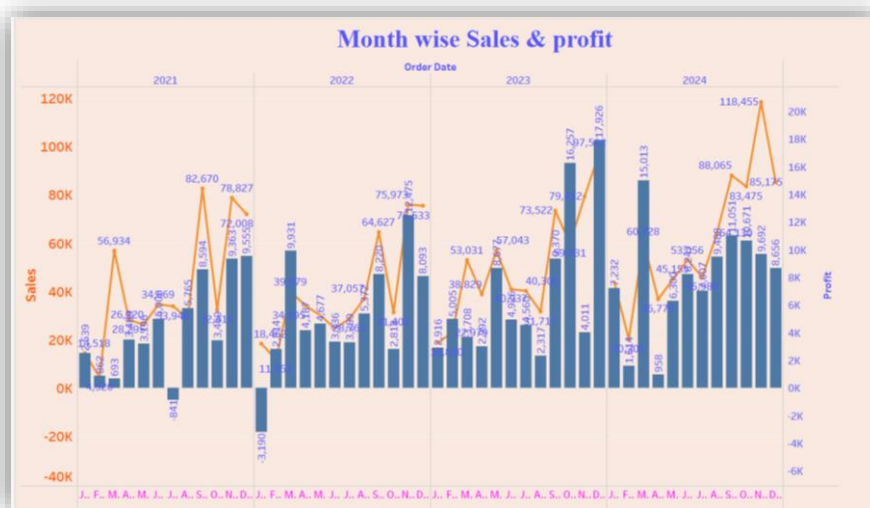
Step 6: that display the all the data of the table bellow in the right side of down

Step 7: select sheet1 → drag the sales in to the rows order date into the columns and convert order date to months and select the bar chart

Step 8: drag the profit in to the rows and select the line chart

Step 9 : go to profit chart right click on it and select the dual axis

Step 10 change the color of text background color and title etc



13. In a scatter plot comparing sales and profit, how can you use different shapes to represent different product categories? Why might this be useful?

Step1: Open the tableau

Step2: select file menu ->new ->ok

Step3: click on connect to data -> again click the micro soft excel file

Step4: its open the another window from there we need to select the excel file which you want to create the reports(sample supper store)

Step5: that's gets added to our tableau now drag the order table from the left side to right side

Step 6: that display the all the data of the table bellow in the right side of down

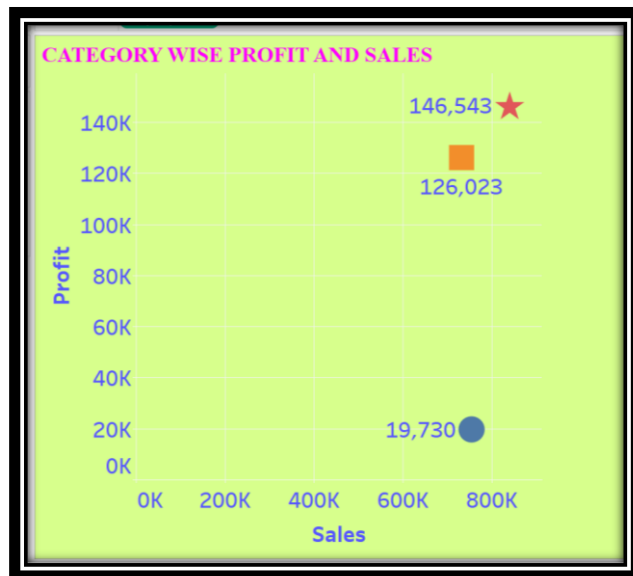
Step 7: select sheet1

Step 8 select product category to column and sales and profit to the rows

Step 9: now select the scatter plot

Step 10: change the shapes and increase the size

Step 11: add the title and change the color of text and background



Why might this be useful?

1. **Clarity and Comparison:** By differentiating product categories with shapes, you make it easier for viewers to quickly identify how each category performs in terms of sales and profit, without relying solely on color. This is especially useful if the plot has a lot of data points or if colors could be confusing (e.g., in a plot viewed in black-and-white or by someone with color blindness).
2. **Pattern Recognition:** Using different shapes allows you to identify patterns or outliers within each category, as viewers can track the performance of each type of product separately. For example, a category might have consistently high profits but lower sales, while another category may show the opposite trend.
3. **Enhanced Data Segmentation:** If you need to present segmented data for analysis or presentation, using shapes can provide a visual cue that separates different product categories, helping to avoid misinterpretation of the data points.
4. **Ease of Interpretation:** Adding shape variation alongside color (if color is also used to represent something like market region or time period) can give a clearer, multifaceted view of the data, especially when you want to present multiple dimensions of the data at once.

15 How can you merge data from multiple sources in Tableau? Provide an example scenario.

Step1: Open the tableau

Step2: select file menu ->new ->ok

Step3: click on connect to data -> again click the micro soft excel file

Step4: its open the another window from there we need to select the excel file which you want to create the reports(emp table)

Step5: that's gets added to our tableau now drag the emp table from the left side to right side

Step 6: that display the all the data of the table bellow in the right side of down

Step 7: now click on add in the data source-> again click the micro soft excel file its open the another window from there we need to select the excel file which you want to create the reports(dept table)

step 8: drag the dept table to the right side window and make the relation ship between them (by selecting the common column from then both table)

step 9: select the deptname to the column and ename and salary into the rows and select the table chart

Data from Both table		
Deptname	Ename	
finance	geetha	67,000
	krish	90,000
purchase	kiran	78,000
	sony	89,000
	vani	45,000
sales	balu	56,000
	karnakar	90,000
	sai	45,000
	siddu	80,000

16.Connect to a text file containing sales data. How would you clean and prepare this data for analysis in Tableau?

Step1: Open the tableau

Step2: select file menu ->new ->ok

Step3: click on connect to data ->click the text file file

Step4: its open the another window from there we need to select the text file which you want to create the reports(one.txt)

Step5: that's gets added to our tableau now drag the one table from the left side to right side

Step 6: that display the all the data of the table bellow in the right side of down with null and no proper heading

Step 7 : for removing the null values and for proper heading click on **use data interpreter**

Step 8 rename the column, split the column, change the data type hide the columns etc

18)Generate a histogram of customer age distribution. What insights can you derive from this chart?

Step1: Open the tableau

Step2: select file menu ->new ->ok

Step3: click on connect to data -> again click the micro soft excel file

Step4: its open the another window from there we need to select the excel file which you want to create the reports(age demo file)

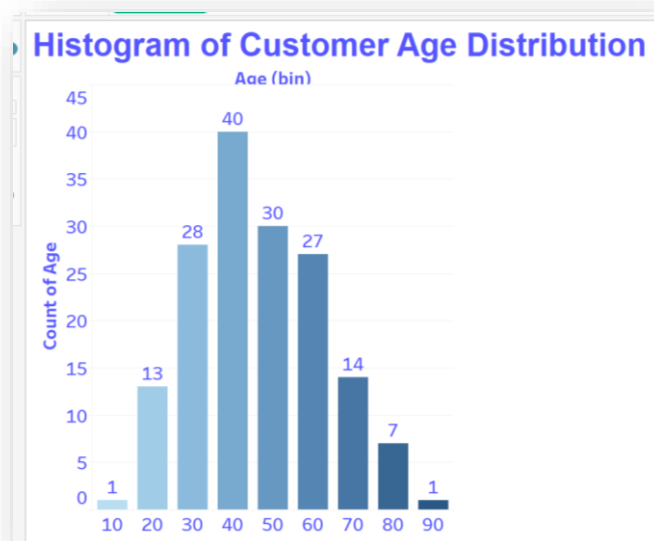
Step 5: select the sheet1

Step 6: create age bin by right click on age and select create bins and specify the range and click on ok then new measure will be created with new age bin

Step 7 drag the newly created measure into columns and age in to rows and add label

And change the age sum measure to count

Step 8 add title and format the sheet with your choice



29. Create an interactive dashboard that allows users to filter data by region and product category. What features would you add to enhance user interaction?

Step1: Open the tableau

Step2: select file menu ->new ->ok

Step3: click on connect to data -> again click the micro soft excel file

Step4: its open the another window from there we need to select the excel file which you want to create the reports(sample supper store)

Step5: that's gets added to our tableau now drag the order table from the left side to right side

Step 6: that display the all the data of the table bellow in the right side of down

Step 7: select sheet1 and design report year wise sales with line chart

Step 8: select sheet2 and design report region wise profit with pie chart

Step 9: select sheet3 and design report subcategory wise sales with bar chart

Step 10: select sheet4 and design report country wise sales with map chart

Step 11 go to any sheet and select region drag and drop in to the filter

Step 12 go to any sheet and select product category drag and drop in to the filter

step 13

go to filter pan and click on region and select apply to worksheet all using related data source

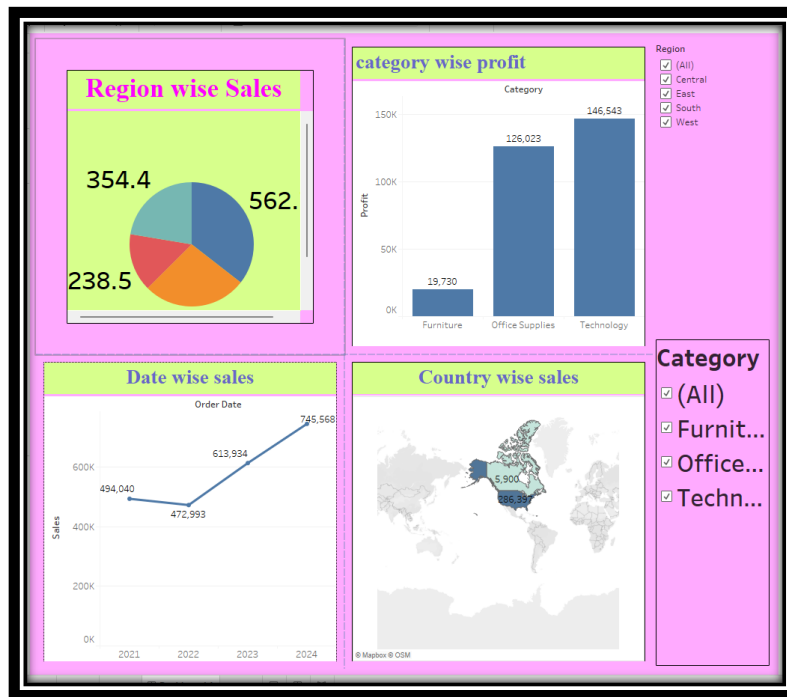
step 14

go to filter pan and click on product category and select apply to worksheet all using related data source

step 15

select dashboard drag and drop all sheets in to the dashboard and design properly with filters

and use the filter and see the dashboard



30)How would you style a dashboard to ensure it is both visually appealing and easy to read? Include considerations for font size, colors, and layout.

Step1: Open the tableau

Step2: select file menu ->new ->ok

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Step4: its open the another window from there we need to select the excel file which you want to create the reports(sample supper store)

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Step 6: that display the all the data of the table bellow in the right side of down

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step 13

go to filter pan and click on region and select apply to worksheet all using related data source

step 14

go to filter pan and click on product category and select apply to worksheet all using related data source

step 15

select dashboard drag and drop all sheets in to the dashboard and design properly with filters

and use the filter and see the dashboard

for changing the font size, colors, and layout

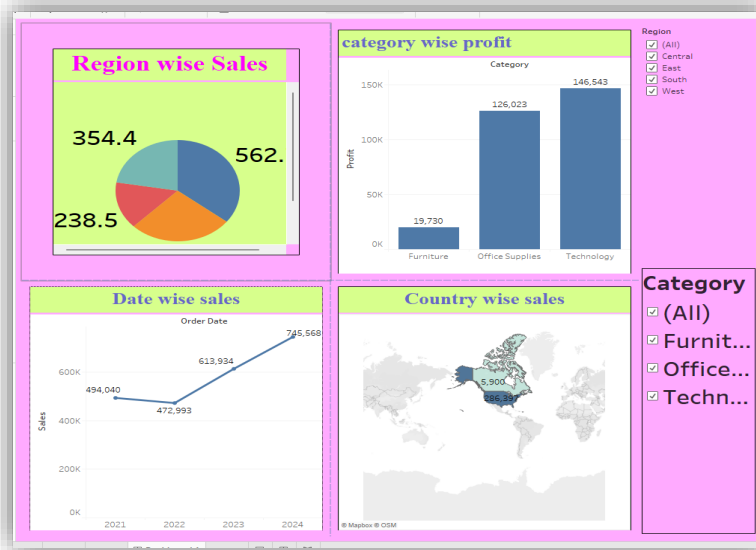
step --> goto format menu select dashboard

then it display the format dashboard

change the dashboard title font size and color alignment, shading border

step --> change worksheet title font-size,color shading

step --> for changing the layout click on layout menu from right side of your dashboard change the dashboard size and apply the border for each report and apply the outer padding and inner padding
output:



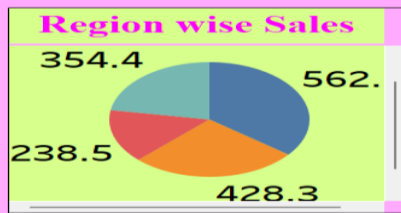
31) Add a title and caption to your dashboard. What information should the caption include to provide context for the viewers?

Step1: select any one of the previously created dashboard

Step2: Adding title and caption to the dashboard

Goto dashboard menu and select show title option now you can edit the title as you required and also add the meaning full caption to the dashboard

Financial reports of MNR & co (sales over 2019)



- Region
- ☒ (All)
 - ☒ Central
 - ☒ East
 - ☒ South
 - ☒ West



- Category
- ☒ (All)
 - ☒ Furnit...
 - ☒ Office...
 - ☒ Techn...