Experiment 9 (Tableau)

Dataset – Revenue

Rule – give proper names to every sheet

Sheet 1 – Choropleth Map

1. Drag “country” to “details” in the “marks” pane, and “longitude” to column, “latitude” to row, change type to “filled map” in “show me”

2. Now Drag State to “details” in the “marks” pane

3. Now drag “revenue” to “size” in the “marks” pane, then remove it. (don’t know why this step exists)

4. Drag “revenue” to “color” in the “marks” pane

Sheet 2 – Line Chart

1. Drag “revenue” to row.

2. Drag “year” to column, and then “date” on top of “year” – year(date), remove the individual “year”

3. Look for the + sign on the left of year(date), click on it, now click on the + sign of quarter(date), remove quarter(date)

4. You can name the visualization as “sum of revenue by month”

5. You can apply any filters if you want using “month(date)”, or you can leave it

6. Drag “revenue” to “size” of the “marks” pane

7. Format the axis if you want, change the color of the visualization

Sheet 3 – Bins

1. Right click on “customer age”, select “create”, then “bins”
2. Give the Bins size as 10 and apply
3. Drag “customer age (bin)” to “color” in the “marks” pane and in the column
4. Add “revenue” to the row and change the visualization to “stacked bar”

Sheet 4 – Donut Chart

1. Select “pie chart” in “marks”
2. Drag “country” to “color” & “label” and “revenue” to “angle” & “label” in the “marks” pane
3. Set the view, it’s on the top (middle section), “standard” to “entire view”
4. Create a new calculated field: “zero access”, formula: 0
5. Drag “zero access” twice to the row, you will have two pie charts, the idea is to make the bottom one white and place it on top of the 1st pie chart.
6. Select the 1st “zero access” from the “marks” pane and increase its size
7. In the 2nd pie chart, remove everything from the “marks” pane and add “revenue” to the “label”, increase its size but keep it smaller than the 1st one.
8. Now right click on the bottom axis, and select “dual axis”, it combines both.
9. Set the color of the 2nd pie chart to “white”
10. There you have it, the donut chart, although the same thing in Power BI takes 1 sec, so, that one is better.

Sheet 5 – Butterfly Chart

1. Create two calculated fields – “Female Revenue”, formula: IF [Customer Gender] = 'F' THEN [Revenue] END

   “Male Revenue”, formula: IF [Customer Gender] = 'M' THEN [Revenue] END

2. Drag “product category” to row and “male revenue” & “female revenue” to column

3. Sort both the axes in descending order, it’s present in the top ribbon

4. Right click on the left graph axis and click on “edit axis”. In it, under the “scale” section mark “reversed”.

5. Add “customer gender” to “color” and “revenue” to “label” in the “marks” pane, right click on “revenue” there, select “quick table calculations” and then “percent of total” (can do the same in donut chart as well)

6. Set the view from “standard” to “entire view”

7. You can change title to gender based revenue

8. Drag “zero access” to the column between male and female revenue

Sheet 6 – Profitable States

1. Create a calculated field: “average revenue”, formula: AVG([revenue])

2. Drag “average revenue” to row and “state” to column, sort in descending order

3. Create a new calculated field: “profitable”, formula: IF [average revenue] >= 1000 THEN "Profitable" ELSE "Non-Profitable" END

4. Add “profitable” to row and to “color” in the “marks” pane, use “entire view”

Dashboard 1

1. Drag all the worksheets in, change fixed size to automatic

Dashboard 2

1. Drag all the worksheets properly, now apply filter on the “choropleth map”, i.e. “country”

2. Right click on the filter, and select the worksheet to display upon, select all and apply the filter.