Experiment 11 – Tableau

Dataset – HR

Sheet 1 – KPI – Employee Count

1. Create a new calculated field “Count Employee”, formula: COUNT([Employee Number])

2. The thing is that Employee Count is already there, so, it is your choice whether or not you would like to create another field.

3. Drag “Count Employee” to “text” in the “marks” pane

4. Now select “text” in the “marks” pane and format the text to KPI form

5. Number should be bigger than the text, above the Number, write “Employee Count”, increase the size and keep the size of the number bigger than the text written above.

6. Format the text the way you want, any color, any font

Sheet 2 – KPI – Attrition Count

1. Create a new calculated field, “Attrition Count”, formula: COUNT(IF [Attrition] = 'Yes' THEN [Employee Number] END)

2. Do the same procedure as the first sheet to make the KPI card for Attrition Count

Sheet 3 – KPI – Attrition Rate

1. Create a new calculated field, “Attrition Rate”, formula:

   IF COUNT([Employee Number]) = 0 THEN 0
   ELSE ([Attrition Count]/[Count Employee])*100 END

2. Do the same procedure as the first sheet to make the KPI card for Attrition Rate

Sheet 4 – KPI – Active Employees

1. Create a new calculated field, “Active Employees”, formula:
   [Count Employee] - [Attrition Count]

2. Do the same procedure as the first sheet to make the KPI card for Active Employees

Sheet 5 – KPI – Average age

1. Create a new calculated field, “Average Age”, formula: AVG([Age])

2. Do the same procedure as the first sheet to make the KPI card for Average Age

Dashboard 1 – KPI Cards

1. Now we combine all the cards we made before into one full KPI card dashboard

2. To do this, we create 5 horizontal containers and arrange them accordingly, so, that they fit the cards

3. I hope you know how to make horizontal containers, and move them using the floating option

4. Place each card in one container and adjust the sizes, so, that it shows the values properly

Sheet 6 – Lollipop Chart

1. Create a new calculated field, “Attrition Rate (By Gender)”, formula:
   COUNT(IF [Attrition] = 'Yes' THEN [Employee Number] END) / [Count Employee]

2. Drag “Attrition Rate (By Gender)” to column 2 times and “gender” to rows

3. Also add “gender” to “color”

4. The idea is very is simple, we will be making the 2nd graph as circle and then combining the 2 together

5. Select the 2nd graph in the “marks” pane and set the graph as “circle”, increase the size a bit

6. First, go to the “marks” pane for the 1st graph and select “bar” chart from there

7. Now, merge the two charts by right clicking on the axis of 2nd graph and choosing “dual axis”

8. Change the view from “standard” to “entire view” and decrease the size of bar chart & increase the size of the circle chart, so, that it looks like a lollipop

9. Drag “Attrition Rate (By Gender)” to the “label” of the “marks” pane for the circle chart only. Set the alignment for the text at the center of the circle by clicking on “label” in the “marks” pane and then “alignment” to center.

Sheet 7 – Pie Chart

1. Drag “Attrition” to “filters” pane and select “Yes”, apply

2. Drag “department” to “colors” and “label” & drag “Employee number” to “angle” and “label” in the “marks” pane

3. It will show it is not compatible, bcoz “employee Number” doesn’t give us the count, so, right click on “employee number” in the “marks” pane and select “measure”, in it select “count”

4. Do the same for the 2nd “employee number” in the “marks” pane

5. Now, we would like to see as percent, for that right click on “employee number” in the “marks” pane which is for “label”

6. Now choose “quick table calculations” and then “percent of total”

7. Now, we need to see the total attrition count as well, either you could just drag and drop “attrition count” to “label” of the “marks” pane

8. Or you could create a new calculated field, “total attrition”, formula:
   COUNT(IF [Attrition] = “Yes” THEN [Employee Number] END)

9. Now just drag and drop “total attrition” to “label” in the “marks” pane

10. You can format the text to look more beautiful, it is upto you

Sheet 8 – Bar Chart

1. Create a new calculated field, “Ae group”, formula:
   IF [Age] < 30 THEN 'Under 30'
   ELSEIF [Age] < 40 THEN '30-39'
   ELSEIF [Age] < 50 THEN '40-49'
   ELSE '50+'
   END

2. Drag “Age Group” to the row and “Employee Number” to column, once again right click on “Employee Number” and select “measure” and then “count”

3. Set the view from “standard” to “Entire view”

4. You can name the visualization as “Number of Employees By Age Group”

Sheet 9 – Highlight Table

1. You can name the visualization as “Job Satisfaction Rating By Job Role”

2. Drag and drop “Job Satisfaction” to column and “Job Role” to row

3. Set the type as “square” from the “marks” pane

4. Drag “employee number” to “label” and “color” in the “marks” pane, and once again right click on “Employee Number” and select “measure” and then “count”

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

Sheet 10 – Horizontal Bar Chart

1. Name the visualization as “Attrition count by education field”
2. Drag “Attrition” to “filters” pane and select “Yes”, apply
3. Drag “Employee Count” to column and “Education Field” to row
4. Add “employee count” to “color” in the “marks” pane
5. Set the view from “standard” to “entire view”

Sheet 11 – Multiple Donut Chart

1. Name the visualization as “Attrition Rate by Gender for different Age groups”
2. Drag “Attrition” to “filters” pane and select “Yes”, apply
3. We have to use zero access for the donut chart
4. Create a new calculated field, “zero access”, formula: 0
5. Now drag “Age Group” to column and set the chart type to “pie” in the “marks” pane
6. Fit the view by setting it from “standard” to “entire view”
7. Add “gender” to “color” and “employee count” to “angle” & “label” in the “marks” pane, right click on the “employee count” for “label” and select “quick table calculations” and then “percent of total”
8. Add “access zero” to the row 2 times
9. Increase the size of the first chart from the “marks” pane
10. Now remove everything from the “marks” pane of the 2nd chart and increase its size as well, but keep it smaller than the 1st one.

11. Now right click on the axis of the 2nd chart and choose “dual axis”

12. Change the color of the 2nd chart to “white”

13. And finally the multiple donut is complete, if you get the 11th one somehow, try to negotiate for power BI

Dashboard 2

1. Add all the sheets one by one, except the first five of course, they are KPI cards and for them we have already prepared the dashboard