

# Experiment 11 – Power BI

Dataset – HR

Page 1 – KPI Cards

1. Create a measure, “Employee Count”, formula :  
$$\text{Employee Count} = \text{COUNT}(\text{'HR'}[\text{EmployeeNumber}])$$
2. Now, select “card” from the visuals, it’s the one with 123 written on it
3. Drag and drop “employee count” in it
4. Now we must do some formatting, go to format visuals and in the visuals panel, disable “category label”, you can format the “callout value” to any font or color, your choice
5. Now, go to “general” and enable “title”, inside it, type the title “Count of Employees”
6. Minimize it and look for “divider” and enable it, increase its width
7. Now, go to effects pane and change the background color according to your choice, enable “borders” and make it rounded to 20 px
8. Now, it is better to basically copy this KPI card and use it for the other 4 KPI cards
9. Right click on the card and select copy visual
10. Paste it on the same page and now we just have to use the different value and change the title.
11. Select the pasted card and remove “employee count” from “fields” from the “build visual” pane
12. Create a new measure, “attrition count”, formula :  
$$\text{Attrition Count} = \text{COUNTROWS}(\text{FILTER}(\text{'HR'}, \text{'HR'}[\text{Attrition}] = \text{"Yes"}))$$

13. Drag and drop the “attrition count” field in the card and change the “title” from the format visuals pane “attrition count”.
  14. Once again copy-paste the card in the page, and remove the “field” from the card visual pane
  15. Create a new measure, “Attrition Rate”, formula :
- Attrition Rate = DIVIDE([Attrition Count], [Employee Count], 0) \* 100
16. Now add “attrition rate” to the card and change the “title” to “attrition rate”
  17. Once again copy-paste the card in the page, and remove the “field” from the card visual pane
  18. Create a new measure, “Active Employees”, formula :

Active Employees = [Employee Count] - [Attrition Count]

19. Drag “average age” to the card and update its title to “average age”

## Page 2 – Lollipop Chart (Line and stacked Column Chart)

1. It is not possible to make lollipop chart in power bi, so, we have lollipop chart
  2. Create a new measure, “Attrition Count By Gender”, formula :
- Attrition Count By Gender = CALCULATE([Employee Count], HR[Attrition] = “Yes”)
3. Select “Line and Stacked Column Chart” from the visuals, drag “gender” to x-axis and “attrition count” to “column y-axis” and “attrition count by gender” to “line y-axis”
  4. Now you can format the “line” from the format visual pane the way you like

## Page 3 – Pie Chart

1. Select “pie” chart from the visuals pane
2. Drag “department” to “legend” and “attrition Count” to “values”

## Page 4 – Bar Chart

1. Create “age (bins)” by right clicking on “age” and selecting “new group”, Set the “bin type” to “number of bins” and “bin count” as 10
2. Select “stacked bar chart” from the visuals pane and drag “age (bins)” to y-axis and “employee count” to x-axis

## Page 5 – Highlight Table

1. Select “matrix” from the visuals pane
2. Drag “JobRole” to rows and “JobSatisfaction” to columns and “employee count” to values

## Page 6 – Horizontal Bar Chart

1. Select “stacked bar chart” from the visuals pane and drag “educationalField” to y-axis and “attrition count” to x-axis

## Page 7 – Multiple Donut Chart

1. Select “donut” chart from the visuals pane and drag “gender” to the “legend” and “attrition rate” to the “values”
2. Replicate the same donut chart 3 more times, with the same legend and values
3. Now select the 1<sup>st</sup> donut chart and drag “Age (bins)” to the filters pane
4. Give advanced filtering as “is less than 30”
5. Similarly, do the same for 2<sup>nd</sup> donut chart and give advanced filtering as “is greater than or equal to 30 and is less than 40”

6. For the 3<sup>rd</sup> donut chart, “is greater than or equal to 40 and is less than 50”
7. For the 4<sup>th</sup> donut chart, “is greater than or equal to 50”

#### Page 8 – Dashboard

1. Create an interactive dashboard by copying each visual from the previous pages