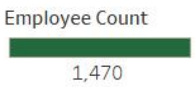
DV&BI [Tableau]-Graded Internal Microproject

Using HR Analytics **Greendestination** dataset create visualizations in tableau for the following:

(1 Mark Each)

- Total number of employees.

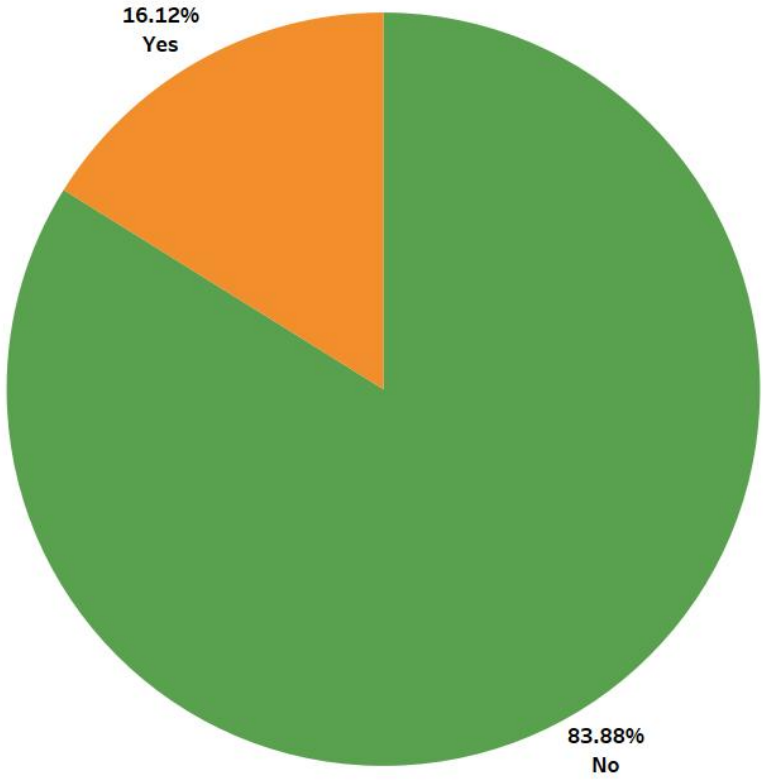
1,470



STEPS

- Connect the data file Greendestination to the tableau
- Create new sheet
- Drag the employee count to the text icon in the marks box
- Drage the employee count to the color icon in the marks box

- Build an attrition Rate Percentage tabular visualization.

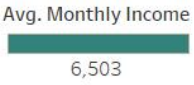


STEPS

- Create New Sheet
- Drag the attrition to the rows
- Drag the employee count to the text icon in Marks BOX below Filter card
- Click on pie chart from “show me”
- Drag the employee count to the label in marks box and , keep the employee count as “SUM”
- Right Click on the sum of employee count then click on “Quick table Calculation” , then click On percent of total

- Average Monthly Income

6,503



STEPS

- Create new sheet
- Drage the monthly income column to the “TEXT” icon in marks Box
- Keep the monthly income as “average” by right click on it
  Then “measure” ⟹ “Average”

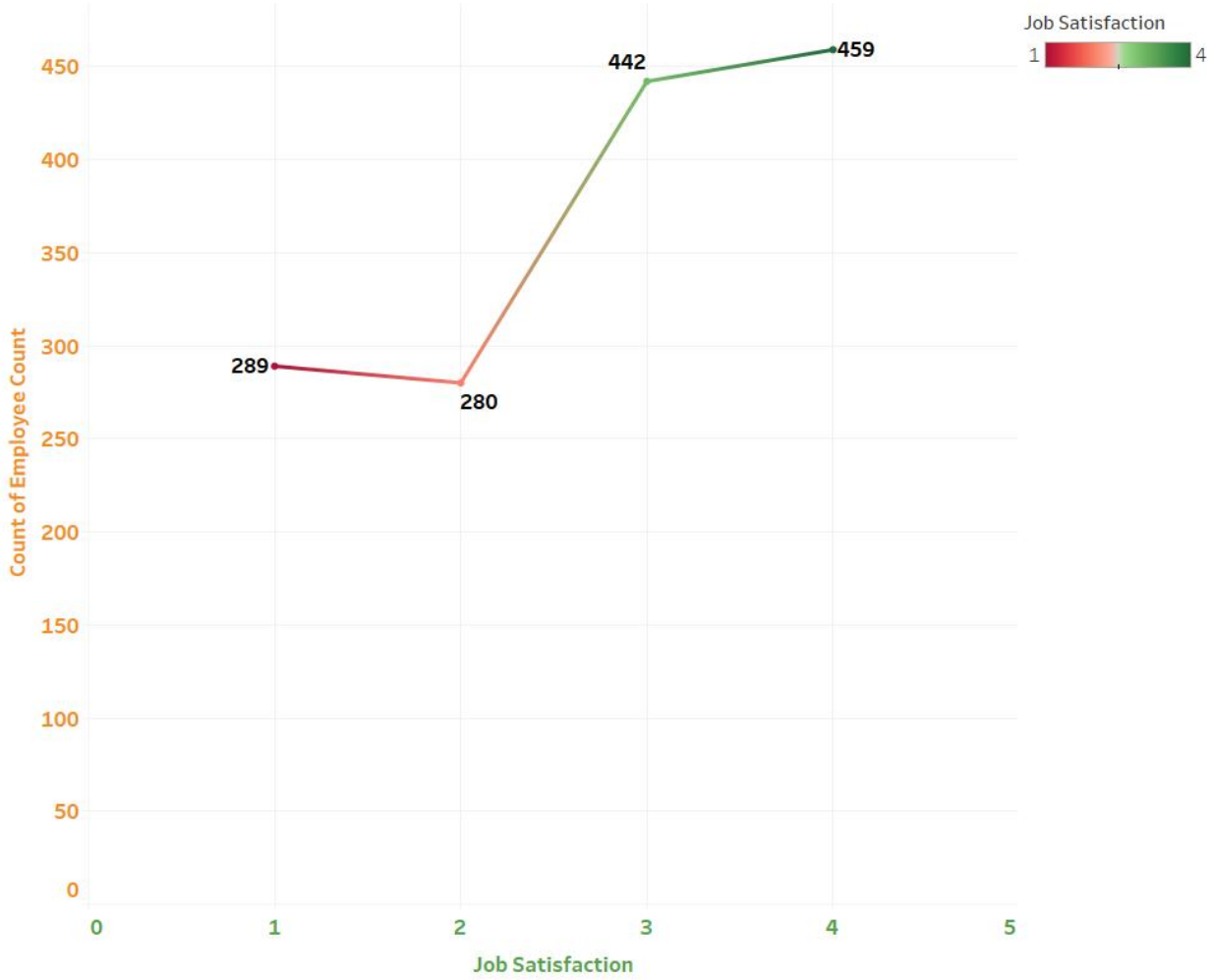
- Average Job Satisfaction

2.729

STEPS

- Create new Sheet
- Drage the job satisfaction column in the “TEXT” Icone of the Marks Box
- Keep the job satisfaction column as “average” by right click on it
  Then “measure” ⟹ “Average”

• Create a visualization for employee count based on Job Satisfaction level.

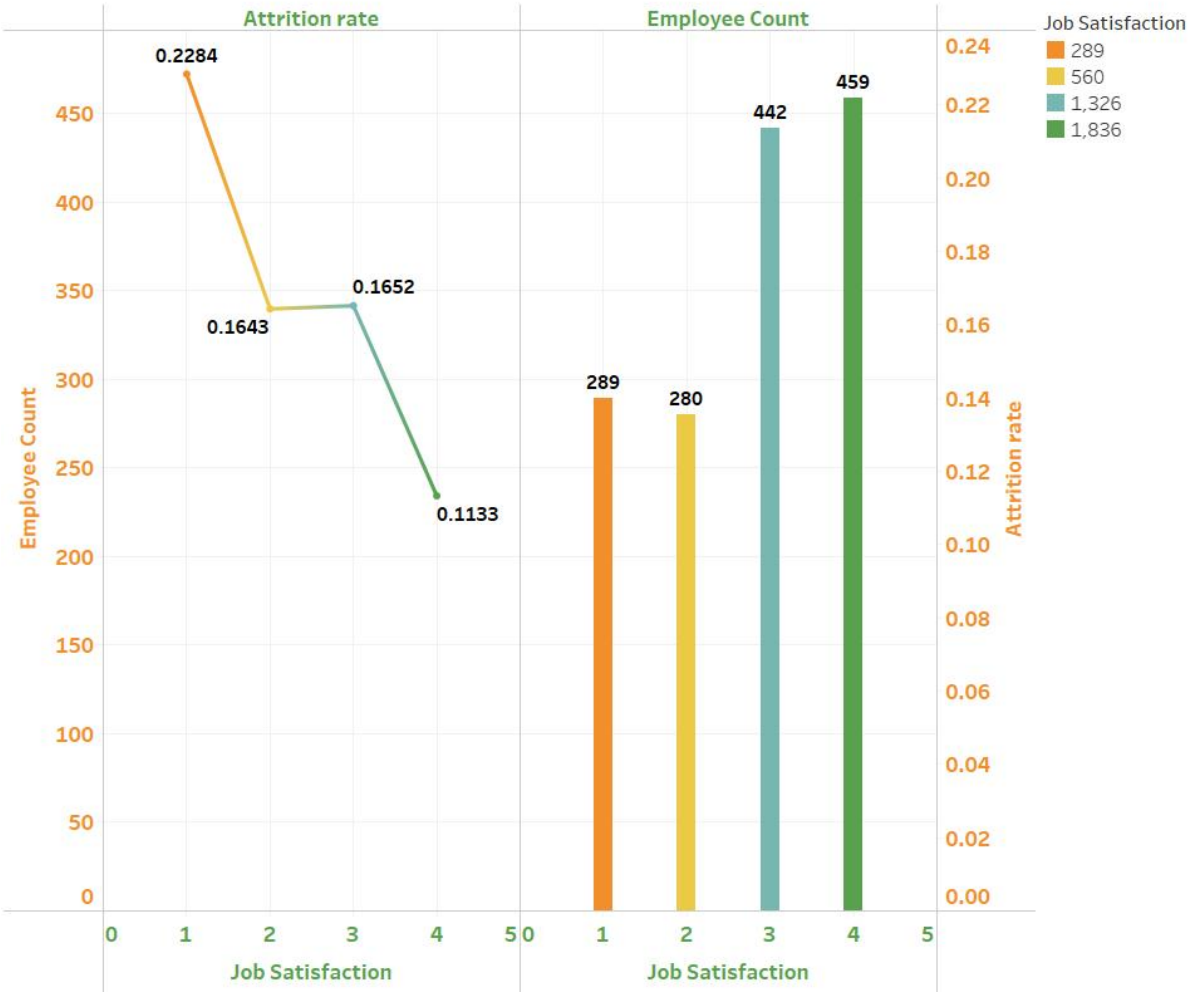


STEPS

- Create New Sheet
- Drag the “Job Satisfaction “ in the Columns and keep it as “Dimension” and “Contineous” by right
  Click on the job satisfaction.
- Drag the “employee count” in the rows and keep it as count
- The Drag the "employee count” on the “Label” icon in “Marks” Box.

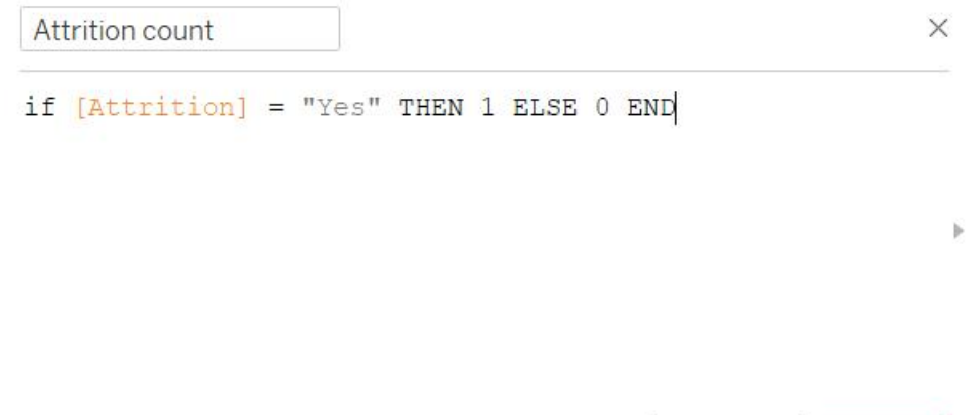
(2 Marks Each)

• Create a visualization for employee count based on Job Satisfaction level depicting/ or with showing Attrition Rates



STEPS:-

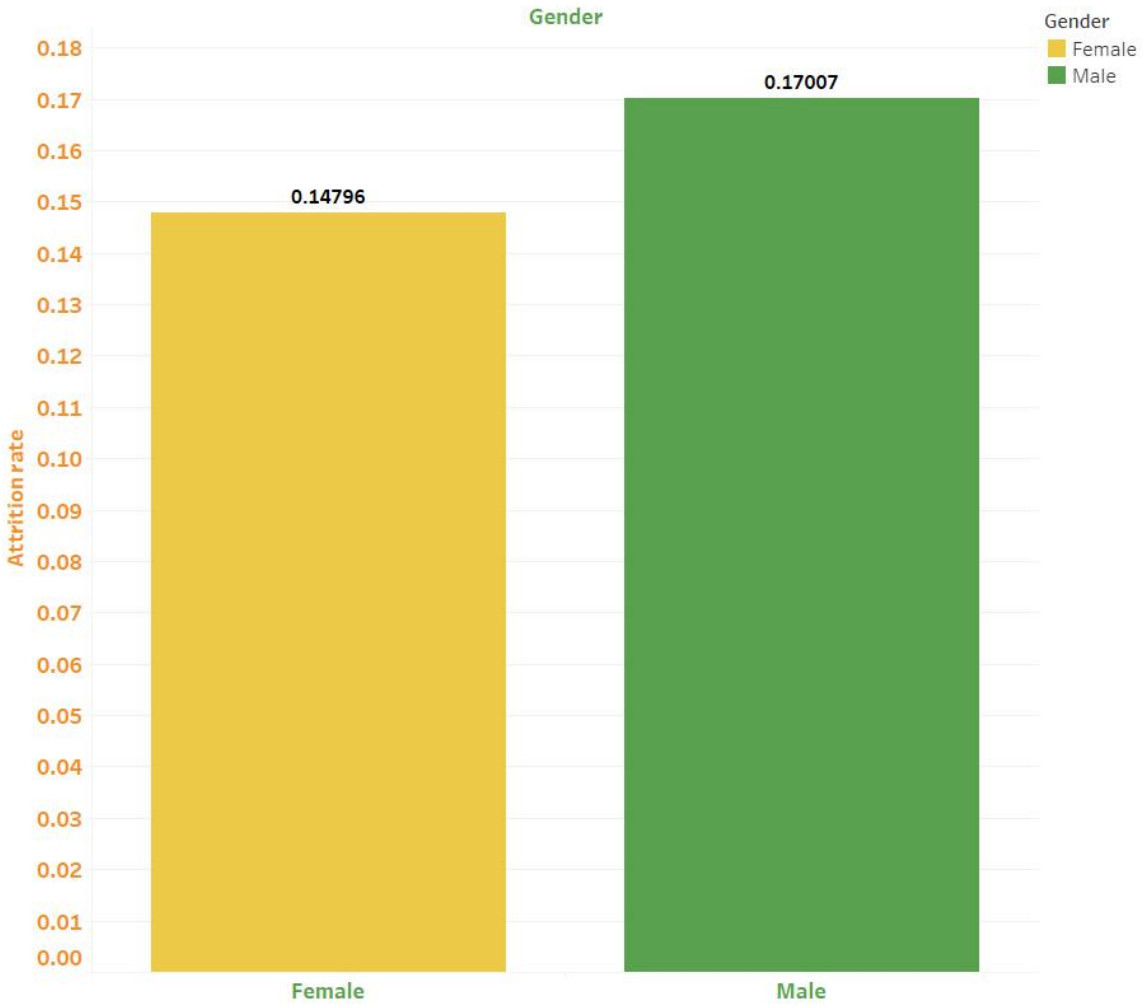
Create below Calculated fields



1. Connect to data source:- connect Tableau to your data source conataing the relevant data, including “Employee Counts, Job Satisfaction, Attrition rates, and Measure names”.
2. Create a new worksheet:- Open a new worksheet in Tableau.
3. Drag and Drop Fields:-
    - Drag the “Measure Name” field to the columns shelf to categorize the measure(e.g., Employee count, Attrition rate).
    - Drag the “Job Satisfaction” field to the Rows shelf to represent Job Satisfaction levels.
    - Drag the “Employee count” field to the Text shelf and change the aggregation to “Sum” to calculate the sum of Employee counts.
    - Drag the “Attrition rate” field to the Text shelf and change the aggregation to “AGG” to aggregate the Attrition rates.

4. Color Encoding for job Satisfaction:-
    - Drag the “Sum (job Satisfaction)” field to the color shelf to assign colors based on job satisfaction levels for the line chart.
    - Drag the “Sum (job Satisfaction)” field to the color shelf again for the bar chart.
5. Labeling:-
    - Drag the “Measure Name” field to the Label shelf to display the measure names.
    - Drag the “Sum(Employee count)”field to the Label shelf for the line chart.
    - Drag the “Sum(job Satisfaction)”field to the Label shelf for the bar chart.
6. Detail for Tooltip:-
    - Drag the “Measure Name’’ field to the Detail shelf to include it in the tooltip for both charts.
    - Drag the “AGG(Attrition rate)”field to the Detail shelf for the line chart to include Attrition rates in the tooltip.
7. Graph Selection:-
    - Drag the “Sum(Employee count)”field to Rows shelf again and change the chart type to a bar chart.
    - Drag the “AGG(Attrition rate)” field to the Rows shelf and change the chart type to a line chart.
8. Adjust Formatting:-
    - Customize the colors, axes, and other formatting options for both charts to make them clear and visually appealing.
9. Add a Title:-
    - Add a title to your visualization indicating it shows employee count based on job satisfaction level with Attrition Rates.

- Create visualization showing attrition rate based on Gender.



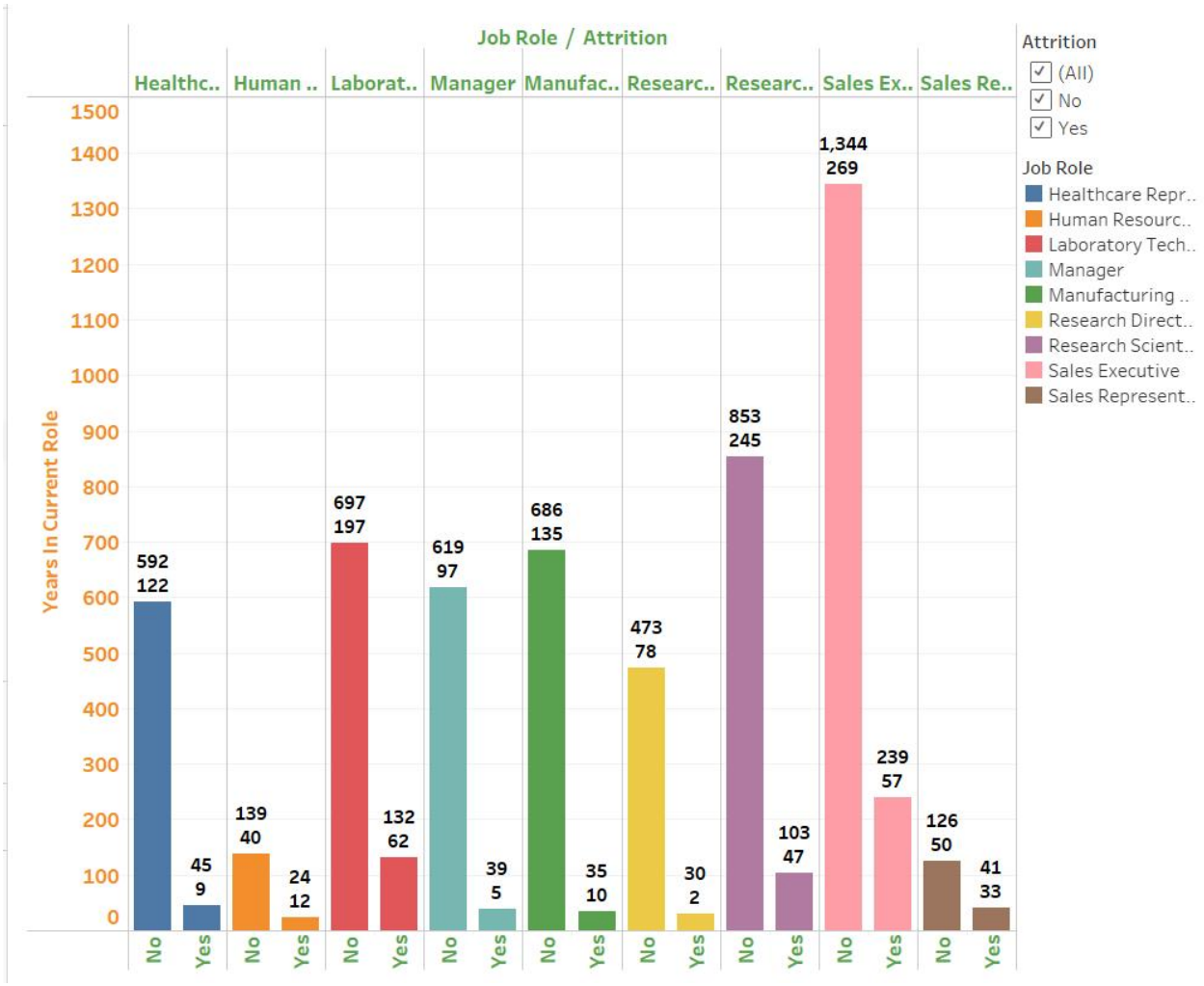
STEPS:-

1. Create a new worksheet:- Open a new worksheet in Tableau.
2. Drag and Drop Fields:-
    - Drag the “Gender” field to the columns shelf to categorize the data by Gender.
    - Drag the “Attrition rate” field to the rows shelf and change the aggregation to “AGG” to aggregate the Attrition rates.
3. Color Encoding for Gender:-
    - Drag the “Gender” field to the color shelf to assign colors based on Gender.
4. Labeling:-

- Drag the “AGG(Attrition rate)”field to the label shelf to display the aggregated Attrtion rates as labels.

5. Adjust Formatting:-
    - Customize the color palette for Gender to make the visualization clear and informative.
    - Format the labels for readability, adjusting font size, color, and alignment as needed.
6. Add a Title:- Add a title to your visualization indicating it shows Attrition Rate based on Gender.

• Find out count of employees and their experience in years at current role, apply attrition filter for the same.

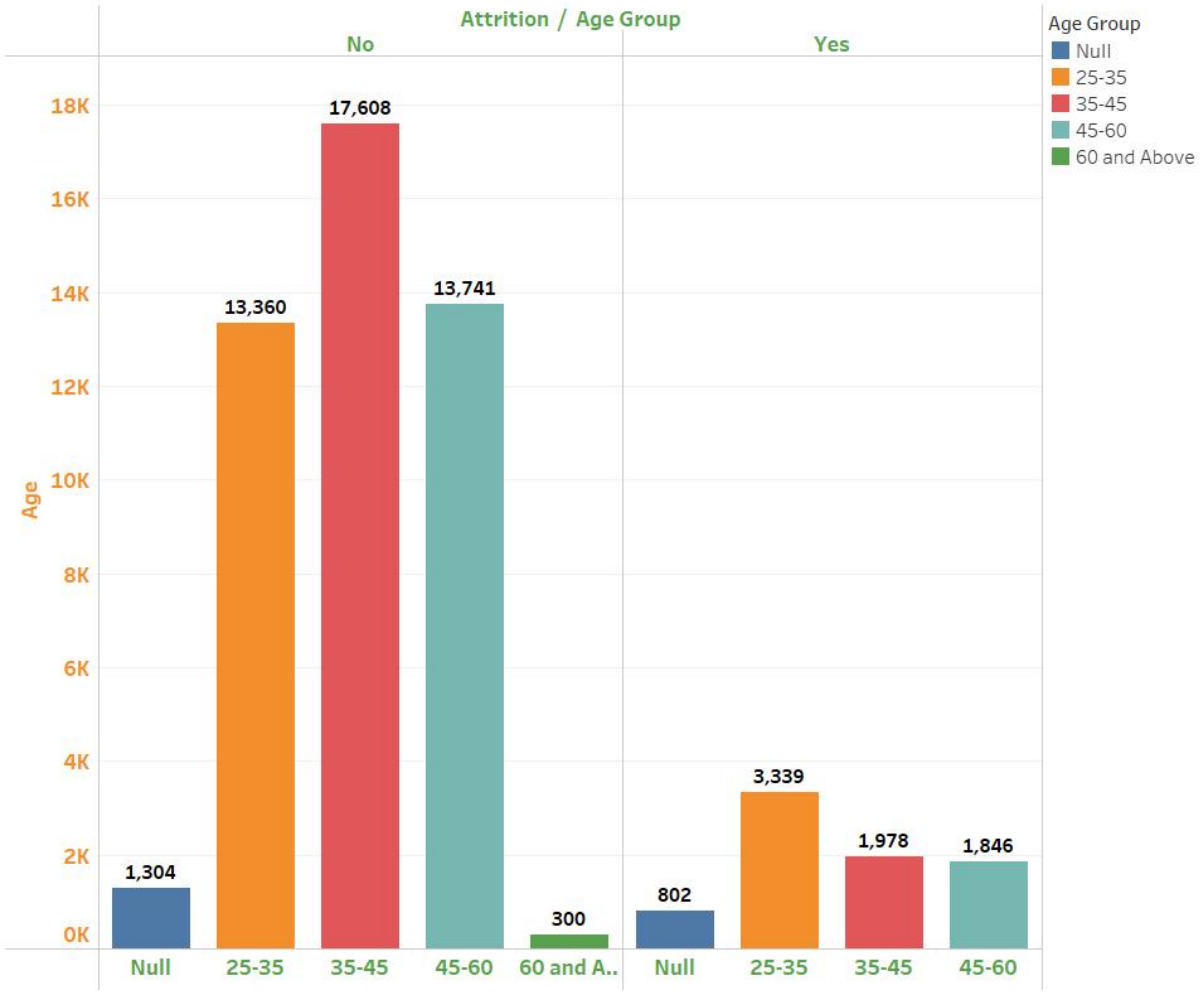


STEPS

1. Connect to data source:- Connect tableau to your data source containing the relevant data, including Employee information, Job Role, Years in Current Role, Attrition Stauts.
2. Create a New Worksheet:- Open a new worksheet in Tableau.
3. Drag and Drop Fields:-
    - Drag the “Job Role” field to the columns shelf to categorize the data by Job Role.
    - Drag the “Sum (Year in Current Role)”field to the Rows shelf to represent the sum of years in current Role for each Job Role.
    - Drag the “Attrition” field to the Filters shelf and select the desired attrition status.

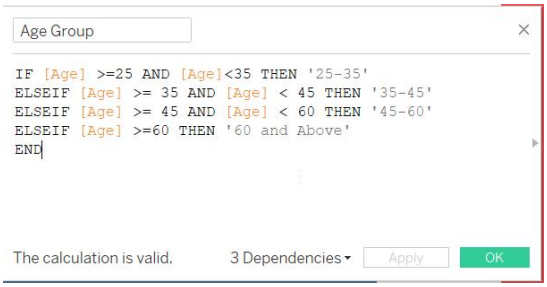
4. Color Encoding for Job Role:-
    - Drag the “Job Role” field to the color shelf to assign colors based on Job Role.
5. Labeling :-
    - Drag the “Sum(year in current role)” field to the label shelf to display the sum of years in current role as labels for each job role.
    - Drag the “Number of Records” field to the label shelf and change the aggregation to “Sum” to display the count of employees as lables.
6. Adjust Formatting:-
    - Customize the color palette for job role to make the visualization clear and informative.
    - Format the labels for readability, adjusting font size, color, and alignment as needed.
7. Add a Title:-
    - Add a title to your visualization indicating it shows the count of employees and their experience in years at the current role, filtered by Attrition status.

- Create a visual categorizing the attrition based on age and create groups for the age brackets of (25-35,35-45,45-60,60 and above).



STEPS

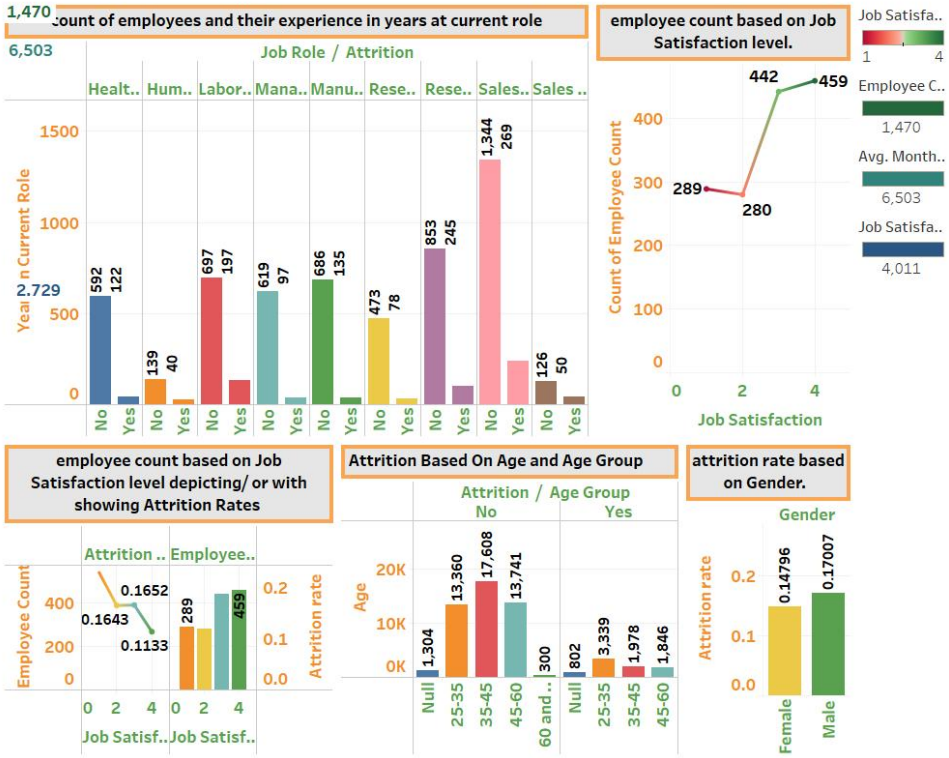
Create Age Group Calculated Field



1. Connect to data source:- Connect Tableau to your data source containing the relevant data, including Attrition status and Age information.
2. Create a New worksheet:- Open a new worksheet in Tableau.
3. Create Age Groups:-
    - Create a calculated field to categorize ages into groups.
    - Right-click on the “Age” field in the Data pane and select “Create”>”Bins.”
    - Configure the bins to create groups for the age brackets you mentioned:25-35,35-45,45-60,and 60 and above.
4. Drag and Drop Fields:
    - Drag the “Attrition” field to the columns shelf to categorize the data by Attrition status.
    - Drag the newly created “Age Group”(bins) field to the Rows shelf to represent the age groups.
    - Drag the “Sum (Age)” field to the Text shelf to display the sum of ages for each age group.
5. Color Encoding for Age Group:
    - Drag the “Age Group” (bins) field to the color shelf to assign colors based on Age Group.
6. Labeling:-
    - Drag the “Sum(Age)”field to the Label shelf to display the sum of ages as labels for each age group.
7. Adjust Formatting:-
    - Customize the color palette for Age Group to make the visualization clear and informative.
    - Format the labels for readability, adjusting font size, color, and alignment as needed.
8. Add a Title:-
    - Add a title to your visualization indicating it shows Attrition categorized by age groups.

(3 Marks)

- Create a Dashboard using above visualizations. (Use slicers for attrition)



STEPS:-

1. Create Individual Visualizations:-
   Follow the steps mentioned earlier to create the visualizations for:-
   - Employee count based on job satisfaction level depicting Attrition Rates.
   - Attrition rate based on Gener.
   - Count of employees and their experience in years at the current role with an Attrition filter.
   - Attrition categorized by age group.
2. Add Slicers for Attrition:-
   - Drag the “Attrition” field to the Filters shelf of each visualization.
   - Customize the filter to show as a slicer by right-clicking on the filter, selecting “Show Filter,” and choosing the “Single Value(Dropdown)” or “Multiple Values(Checkbox)” option depending on your preference.
3. Create the Dashboard:-

- Click on the “New Dashboard” button in Tableau to create a new dashboard.
- Drag each visualization from the sheets onto the dashboard canvas.

4. Arrange and Format the Dashboard:-
    - Arrange the visualizations on the dashboard canvas as desired by dragging and resizing them.
    - Add text boxes, titles, and other annotations as needed to provide context and information on the dashboard.
    - Format the dashboard layout, background color, and borders to make it visually appealing and easy to understand.
5. Add Interactivity:-
    - Test the slicers for Attrition on the dashboard to ensure they filter the visualizations accordingly when selecting different Attrition statuses.
    - Add actions if needed to allow for cross-filtering between different visualizations based on user interactions.
6. Finalize and Save

• Finally conclude with insights in Tableau Story telling presentation.

STEPS:-

1. Prepare Insights:-
    - Review the visualizations and data to identify key insights and trends related to Attrition, Job Satisfaction, Gender, Age and other relevant factors.
2. Create a Tableau Story:-
    - In Tableau Desktop, click on the “New Story” button to create a new story.
    - Add relevant sheets or dashboards to the story by dragging them onto the story canvas.
3. Arrange the Story:-
    - Arrange the sheets or dashboards in a logical order that tells a compelling narrative.
    - Use text boxes, annotations, and titles to provide contect and guide the viewer through the story.
4. Add Insights and Annotations:-
    - Use captions and annotations on specific data points or visualizations to highlight insights and key findings.

- Include explanatory text to provide background information, analysis, and interpretation of the data.

5. Include Interactive Elements:-
    - Utilize interactive elements such as filters, howere actions, and tooltips to engage the audience and allow for explanatory of the data.
6. Format and Design:-
    - Format the story for consistency in font size, style, colors and overall design.
    - Choose an appropriate theme of color scheme that aligns with the the storytelling narrative.