HR Analytics Dashboard: Attrition Insights

1. Project Overview

This HR analytics dashboard provides a detailed analysis of employee attrition, helping organizations understand trends and factors contributing to employee turnover. By visualizing attrition data using multiple charts, this project enables HR teams to make data-driven decisions to improve employee retention.

2. Objectives

- Identify overall attrition trends.
- Analyze attrition based on education, age, salary, job roles, gender, and yearly patterns.
- Provide actionable insights to HR teams for reducing employee turnover.

3. Data Used

- 1) **Employee Dataset** (containing attributes like Employee ID, Age, Salary, Education Level, Job Role, Gender, and Attrition Status)
- 2) **Time Frame**: Includes multiple years of data to analyze long-term trends.

4. Dashboard Components & Insights

- Overall Attrition Rate: Displays the total percentage of employees who left the company.
- 2. Attrition by Education (Donut Chart): Shows how attrition varies across different education levels, highlighting which educational groups have the highest turnover.
- 3. Attrition by Age (Column Bar Graph): Identifies which age groups are most likely to leave, helping HR design age-specific retention strategies.
- 4. **Attrition by Salary (Bar Graph)**: Highlights the salary ranges where attrition is highest, allowing HR to assess salary competitiveness.
- 5. Attrition by Year (Area Chart): Analyzes attrition trends over the years to identify patterns and major shifts in employee turnover.
- Attrition by Job Role (Bar Graph): Shows which job roles have the highest attrition, indicating positions that may require better work conditions or career growth opportunities.
- 7. **Attrition by Gender (Tree Chart)**: Helps analyze gender-based attrition trends, allowing HR to address any gender-specific workplace challenges.

5. Key Findings

Here are the **Key Findings** from your HR Analytics Dashboard based on the insights it provides:

1. Education vs. Attrition

- Employees with life sciences have the highest attrition rate 41%.
- Other Education background levels show a relatively lower attrition rate.

2.Age-wise Attrition

- The highest attrition is observed in the 26-30 age group.
- Senior employees (50+ years) have a significantly lower attrition rate.

3. Salary-wise Attrition

- Employees in the lower salary range (Upto 5K) have a higher attrition rate.
- Higher salary employees tend to stay longer in the company.

4. Attrition Trend Over Years

- The highest attrition was recorded in first 5 years.
- The attrition rate has shown an overall decrease over the past few years.

5. Job Role-wise Attrition

• The highest attrition is observed in laboratory technician & sales executive.

6. Gender-wise Attrition

- There is a significant difference in attrition rates between male and female employees.
- Male category has a higher attrition rate, which may impact workforce balance.

6. Tools Used

- Data Cleaning & Processing: Excel / SQL
- Visualization: Power BI / Excel Dashboard

7. Business Impact

- Helps HR managers focus on high-risk employee groups.
- Provides data-driven strategies for employee engagement and retention.
- Supports salary benchmarking and policy improvements.

8. Conclusion

This HR analytics dashboard provides a comprehensive understanding of attrition patterns. By leveraging data-driven insights, organizations can improve retention strategies and create a better workplace environment.

