# Power BI Project- HR Data Analytics

Concepts covered in the Project:

- Data Cleaning & Processing in Power BI

- Power BI Dashboard Setup

- Import data in Power BI

- Power Query in Power BI

- DAX in Power BI

- Measures and Calculations in Power BI

- Charts in Power BI

- Filters and Slicers in Power BI

- Dashboard in Power BI

- Export Power BI Dashboard

- Insights from Dashboard

About the Project:
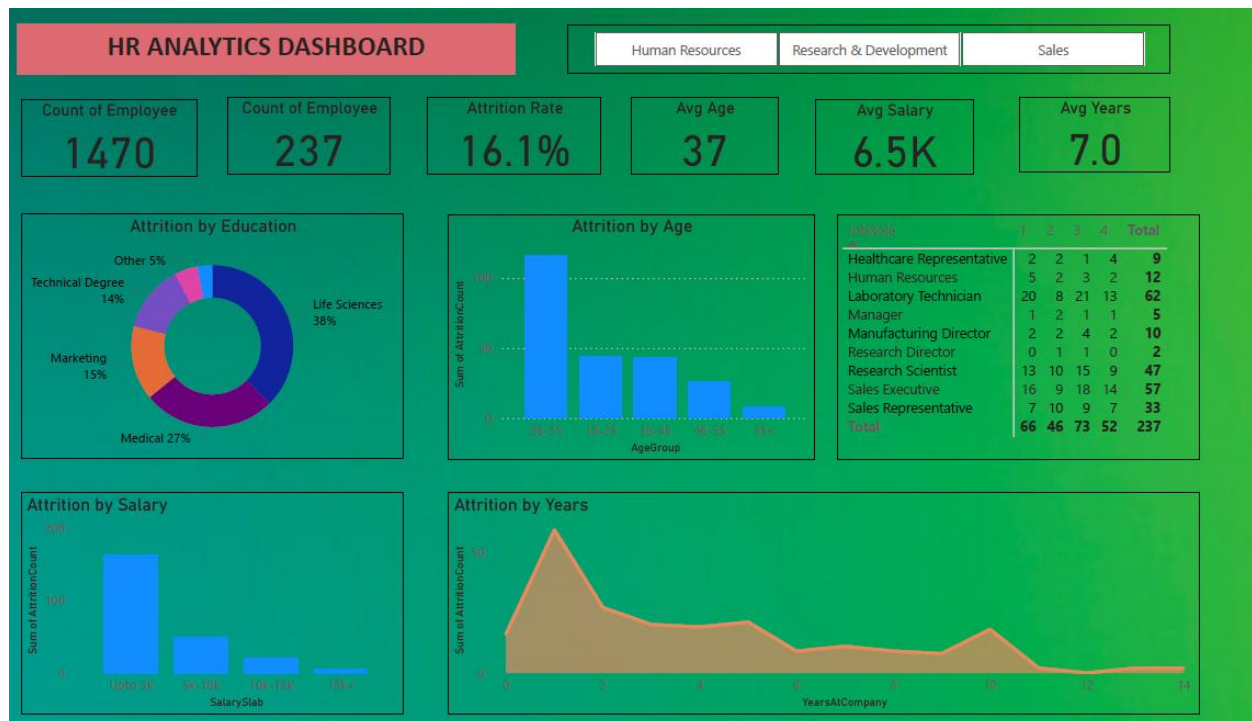
Overall Company details:

- **Employee Count:** The company has a total of 1470 employees.

- **Average Age:** The average age of employees is 37 years.

- **Average Salary:** The average salary is 6.5K (assuming this means $6,500, but the currency is not specified).

- **Average Years at Company:** Employees have been with the company for an average of 7 years.

Attrition Analysis:

- **Attrition Rate:** The attrition rate is 16.1%.

- **Attrition by Education:**

    - Life Sciences: 38%

    - Medical: 27%

    - Technical Degree: 15%

    - Marketing: 14%

    - Other: 5%

- **Attrition by Age:** Attrition count is visualized across age groups (18-25, 26-35, 36-45, 46-55, 55+). The highest attrition count appears to be in the 26-35 and 36-45 age groups.

- **Attrition by Job Role:** Sales Executive, Laboratory Technician, and Sales Representative roles have the highest attrition counts.

- **Attrition by Salary:** Attrition count is visualized across salary slabs (Upto 5k, 5k-10k, 10k-15k, 15k+). The highest attrition count appears to be in the "Upto 5k" and "5k-10k" salary slabs.

- **Attrition by Years at Company:** Attrition count is visualized across different years at the company.

Key Conclusions and Potential Areas for Investigation:

1. **High Attrition Rate:** A 16.1% attrition rate is a significant concern and warrants further investigation.

2. **Education Background Impact:** Employees with a Life Sciences and Medical background seem to have a higher attrition rate.

3. **Age-Related Attrition:** The 26-45 age group is experiencing the highest attrition. This could be due to career growth opportunities, work-life balance issues, or other factors specific to this demographic.

4. **Job Role Impact:** Certain job roles (Sales Executive, Laboratory Technician, and Sales Representative) have notably higher attrition. This suggests potential issues within these specific roles, such as workload, management, or career path limitations.

5. **Salary and Attrition:** Lower salary brackets (Up to 10k) correlate with higher attrition. This strongly suggests that compensation is a significant factor driving employee turnover.

6. **Tenure and Attrition:** The visualization of attrition by years at the company can help identify whether attrition is higher among newer employees or those with longer tenure.

Recommendations

- **Further Analysis:** Conduct deeper analysis to understand the reasons behind attrition in the identified areas (specific age groups, job roles, and education levels). Exit interviews, employee surveys, and focus groups can provide valuable insights.

- **Compensation Review:** Evaluate the compensation structure, particularly for roles with high attrition in lower salary brackets.

- **Employee Engagement Initiatives:** Implement targeted employee engagement programs to address the specific concerns of employees in high-attrition areas. This could include career development opportunities, mentorship programs, and improved work-life balance initiatives.

- **Retention Strategies:** Develop and implement specific retention strategies tailored to address the root causes of attrition identified in the analysis.

By focusing on these areas, the company can take steps to reduce attrition and improve employee retention.