HR Analytics Dashboard - Project Interpretation

# 🎯 Purpose of the Project

The primary purpose of this project is to analyze employee attrition within an organization. By leveraging visual analytics, the dashboard aims to uncover trends, patterns, and key factors contributing to employee turnover. This information can help HR departments and business leaders make informed decisions to improve employee retention, workplace satisfaction, and strategic workforce planning.

# ✅ Objectives

- Identify which groups are most affected by attrition.

- Analyze attrition trends across demographics, education, salary, tenure, and job roles.

- Help HR teams proactively address factors leading to high turnover.

- Provide interactive insights into employee distribution and attrition patterns.

# 🔍 Insights Derived from the Dashboard

## 📌 Overview Metrics

• Total Employees: 1,470

• Total Attrition: 237 employees

• Attrition Rate: 16.1%

• Average Age: 36.9 years

• Average Salary: $6.5K

• Average Tenure (Years at Company): 7.0 years

## 👩‍🎓 Attrition by Education

• Life Sciences: 38% — the highest proportion of attrition.

• Medical: 27%

• Marketing: 15%

• Technical Degree: 14%

• Others (possibly HR, Humanities, etc.): Remaining share.

## 📊 Attrition by Age

• Employees aged 26–35 are most affected by attrition.

• Followed by age groups 18–25 and 36–45.

• Lowest attrition occurs in the 55+ age group.

## 🧑‍🤝‍🧑 Attrition by Gender

• Male Attrition: 140

• Female Attrition: 79

• Indicates that male employees are leaving more than female employees.

## 💰 Attrition by Salary

• Up to $5K: Highest attrition.

• $5K–10K: Moderate attrition.

• $10K–15K and above: Much lower attrition.

• Insight: Lower salary ranges are more vulnerable to attrition.

## 🕒 Attrition by Tenure (Years at Company)

• Peak attrition occurs within the first year (59 employees).

• A significant drop after year 1, with minor spikes at year 5 and year 10.

• Suggests early retention efforts are crucial.

## 🧑‍🔬 Attrition by Job Role

• Sales Executive: Highest attrition.

• Followed by: Research Scientist, Laboratory Technician, Sales Representative.

• Managerial and director roles have very low attrition.

## 📋 Attrition by Job Role and Experience Level (Grid)

• Provides a breakdown of how many employees left across different roles and experience bands.

• Useful for understanding attrition at various experience levels within a job.

# 🧠 Key Takeaways

• Young, early-career employees in sales and research roles are most likely to leave.

• Lower salary bands and short tenures (0–1 years) are highly correlated with high attrition.

• Targeted retention programs should focus on:  
 - Entry-level employees  
 - Employees aged 18–35  
 - Sales and research departments  
 - Low-income brackets

# 🛠️ Tools & Technologies Used

• Excel / Power BI

• Data visualization techniques

• HR analytics best practices