HR Analytics Power BI Project Report

# 1. Attrition Analysis

The Attrition Analysis project aims to identify key drivers of employee attrition and recommend data-driven HR strategies. The dataset consists of 1,470 employee records sourced from the IBM HR dataset, with attributes such as Age, Gender, Department, Job Role, Tenure, Satisfaction, and Attrition.

## Key Insights:

- Highest attrition occurs in the 0–2 year tenure group (34.88%).  
- Sales and Lab Technician roles show higher attrition rates.  
- Younger employees report lower job satisfaction.  
- Income increases with tenure, but early-stage attrition remains high.  
- Technical and HR fields show the highest average attrition rates.

## HR Recommendations:

- Strengthen onboarding and engagement in the first 2 years.  
- Prioritize retention for Sales and Lab roles.  
- Offer career development opportunities to younger employees.  
- Align compensation progression with roles and performance.  
- Regularly monitor satisfaction across tenure and age groups.

# 2. Attrition Analysis (Extended)

This extended version of the Attrition Analysis project includes additional visuals and deeper insights. Visuals include attrition by job role, average monthly income vs attrition, tenure vs satisfaction histograms, and a matrix showing attrition rates by education field and role.

## Summary & Next Steps:

- Focus on reducing early tenure attrition with onboarding and mentorship.  
- Address job dissatisfaction in specific roles and departments.  
- Monitor KPIs such as satisfaction, attrition, and income trends.  
- Implement HR policies guided by Power BI dashboard insights.

# 3. Early Tenure Satisfaction Analysis

The Early Tenure Satisfaction Analysis investigates job satisfaction trends by tenure group to detect early signs of disengagement. This project highlights the importance of monitoring satisfaction during the critical first two years of employment.

## Key Insights:

- Employees in the 0–2 year group report the lowest satisfaction (avg: 2.3/4).  
- Over 60% of early leavers are from this tenure group.  
- Sales, HR, and R&D departments show lower early satisfaction.  
- Roles with minimal training or support have higher attrition.

## HR Recommendations:

- Implement structured 90-day onboarding plans with peer mentoring.  
- Conduct pulse surveys and bi-weekly check-ins for early employees.  
- Launch learning & development programs focused on early career paths.  
- Track satisfaction and attrition KPIs monthly to identify risk zones.