

Project Title:**Employee Attrition Analysis Using Power BI****Objective:**

To analyze employee attrition data to understand which departments and demographics have the highest turnover and identify factors that may contribute to employees leaving the organization.

Dataset Used:

Employee_Attrition_Analysis.xlsx (300 employees)

This dataset contains the following fields:

- Employee ID
- Age
- Gender
- Department
- Job Role
- Performance Rating (1-5)
- Years at Company
- Salary
- Education Level (1-5)
- Attrition (Yes/No)
- Exit Date (if applicable)

Tools Used:

- Microsoft Excel (for dataset generation)
- Microsoft Power BI Desktop (for modeling & dashboard creation)

Dashboard Visuals:

Visual	Description
KPI Cards	Show key metrics: Total Employees (300), Attrition Rate (23%), Average Tenure (9.35 years), and Total Attrition Count (68)
Donut Chart – Attrition Distribution	Visual breakdown of "Yes" vs "No" attrition (22.67% Yes)
Bar Chart – Avg Performance vs Attrition	Shows average performance rating of retained vs exited employees (3.01 vs 2.98)
Attrition by Department	Displays department-wise attrition count (e.g., Sales, IT, Finance)
Line Chart – Attrition Over Time	Tracks attrition trends by month using Exit Date
Stacked Column – Attrition by Gender and Department	Compares male, female, and other attrition per department
Slicer Panel	Enables filtering by department using a vertical filter pane

Key Insights:

- **Attrition Rate** is 23% overall — concerning in departments like IT, Sales, and Operations.
- **Attrition is almost evenly distributed** across departments but slightly higher in Sales and IT.
- **Performance Rating Difference** between those who left (3.01) and stayed (2.98) is minimal — suggesting performance may not strongly influence attrition.
- **Exit Trend** shows a peak in mid-to-late 2023, indicating possible seasonal or policy-based effects.
- **Gender Distribution** is relatively balanced across departments, but some variation exists.

Conclusion:

The dashboard provides HR stakeholders with a detailed, interactive view of employee attrition. It allows filtering by department and time, enabling targeted investigation into retention trends. The minimal performance gap between attrition groups suggests deeper drivers (e.g., satisfaction, culture) may require future data collection and analysis.