

Project Objective

The goal of this HR Analytics Dashboard is to analyze and understand the factors influencing **employee attrition** (resignations or turnover) in an organization. The dashboard helps HR professionals make data-driven decisions to improve **employee retention, satisfaction, and productivity**.

Key Insights from the Dashboard

1. Overall Workforce Overview

- **Total Employees:** 1,470
- **Attrition Count:** 237
- **Attrition Rate:** 16.12%
- **Active Employees:** 1,233
- **Average Age:** 37 years

These metrics give a quick summary of the organization's workforce health and turnover.

2. Department-wise Attrition

- The **HR department** has the highest attrition rate (56.12%), followed by **R&D (38.82%)** and **Sales (5.06%)**.
- This indicates potential engagement or workload issues within HR.

3. Education Field-wise Attrition

- Employees from **Life Sciences** and **Medical** fields show higher attrition.
- It may suggest a mismatch between job roles and educational background or industry opportunities.

4. Employee Age Distribution

- Majority of employees fall between **27–35 years**.
- Attrition is more common in younger age groups, which could indicate early-career mobility.

5. Attrition by Gender

- **Male attrition:** 150 employees
- **Female attrition:** 87 employees
- Male employees are leaving at a higher rate, possibly due to job role expectations or opportunities elsewhere.

6. Job Satisfaction Rating

- Satisfaction levels are rated on a 1–4 scale across various job roles like Healthcare, Research, Sales, etc.
- Roles like **Research Scientist** and **Sales Executive** show more mixed satisfaction ratings, which could be areas for improvement.

7. Attrition by Gender & Age Group

- Younger employees (under 35) have the **highest attrition rate**.
- Older employees (45+) show more stability in their jobs.

Tools & Techniques Used

Category	Details
Tool	Tableau Desktop
Data Source	CSV/Excel dataset containing employee information
Data Fields Used	Employee ID, Department, Gender, Education, Age, Job Role, Job Satisfaction, Attrition Status
Visualizations	Pie Chart, Bar Chart, Donut Chart, Histogram, Matrix Table
Dashboard Features	Interactive filters, dynamic KPIs, consistent color themes, calculated measures
Calculated Fields	- Attrition Rate = (Attrition Count / Total Employees) * 100 - Age Bins (Grouping) - Gender Ratio Analysis
Filters Used	Education Field, Department, Age Group

How the Dashboard Was Built

1. Data Cleaning & Preparation

- The dataset was imported into Tableau after basic preprocessing in Excel (removing duplicates, formatting columns).

2. Calculated Fields Creation

- Created measures for Attrition Count, Attrition Rate, and Age Group classification.

3. Visualization Design

- Multiple charts (pie, bar, donut) created as individual Tableau worksheets.

4. Dashboard Assembly

- Combined the worksheets into a single interactive dashboard layout.
- Added filters (like Education) and visual legends (Gender colors).

5. Styling

- Used a dark blue theme for a professional look.
- Added headers, background images, and highlight indicators.