

# Employee Attrition Analysis

By Adithya Prahasith



# Problem Statement

Employee attrition (turnover) is a major challenge for organizations, leading to high costs in recruitment, training, and lost productivity. The objective of this project is to analyze employee data to:

- Identify **who is leaving** (demographics, departments, job roles).
- Understand **why they are leaving** (compensation, travel, satisfaction, work-life balance).
- Provide **data-driven recommendations** to improve retention strategies.

# Executive Summary

The overall attrition rate stands at **16%**, which is above industry benchmarks and signals a need for stronger retention strategies.

Key insights reveal that **Sales (21%) and HR (19%) departments face the highest attrition**, while Research & Development (14%) is relatively stable. Employees who **travel frequently (95% attrition)** are significantly more likely to leave compared to those with no travel (5%). Attrition is also disproportionately higher among **younger employees (18–25, 26–35 age groups)** and those in **lower salary slabs (≤10k)**, suggesting challenges in retaining early-career and lower-compensated staff.

Further, employees who leave exhibit **lower job satisfaction, weaker manager relationships, longer commute distances, and fewer or no stock option levels** compared to those who stay. These patterns highlight the combined effects of **compensation, career development, and work-life balance** on retention.

## Recommended Actions:

Retention programs in Sales & HR Depts.

Reduce travel burden (remote work or incentives).

Compensation review for early-career employees & Strengthen early engagement programs.

Expand stock options and revamp benefits for overtime hours.

# Key Metrics

16%



Current Attrition Rate

1480



HeadCount

238



Employees Left

2.73



Satisfaction Rate

18-25



Most Attrition Age

2



Years

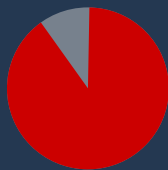
Average Employee Tenure

# Work Conditions & LifeStyle

## Business Travel

Attrition Rate

95%



Frequent travel and long commutes strongly correlate with higher attrition. Overtime benefits is another pressure point.

Attrition Rate

54%

Hourly Rate

\$65

3.16

Performance Rating

15%

Hike

OverTime Statistics

# Demographics

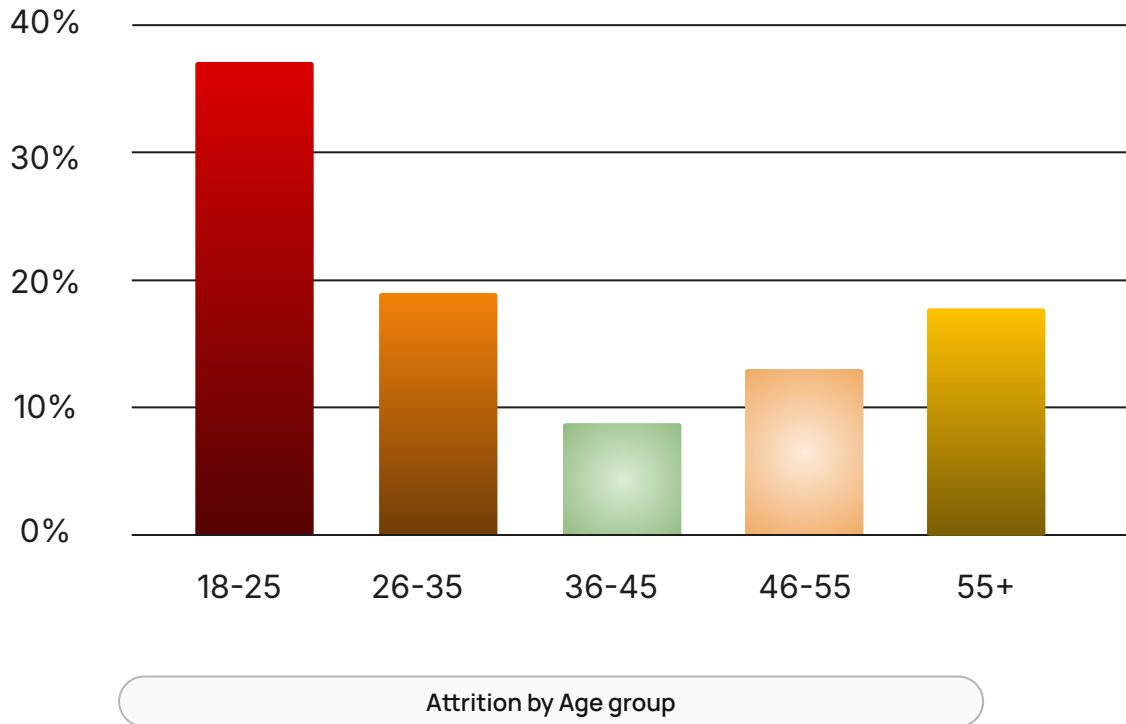
63%

Attrition Rate - Male

60%

Overall Male Headcount

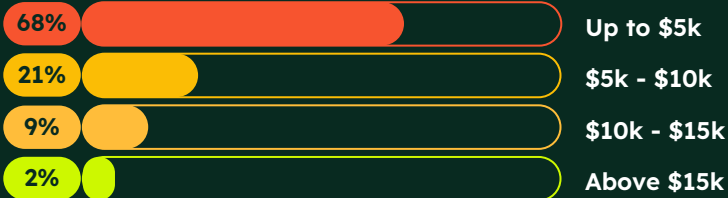
Younger employees (18-25, 26-35) are leaving disproportionately, with shorter tenure. Older employees are more stable.



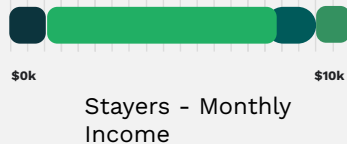
# Compensation & Growth

## Salary Slab

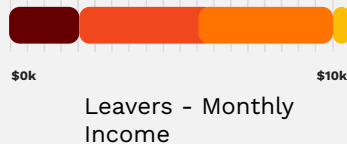
Attrition Rate



6.8k



4.8k



34%

Employees who don't get promoted less than 2 years are high riskers.

65%

65% of the Attrition Employees didn't received any stock options.

Employees in lower salary slabs and those with fewer promotions are at higher risk of leaving. Compensation and career progression are key drivers.

# Departments & Roles

1

Attrition is not equal across departments. Sales and HR are bleeding talent at 21% and 19% respectively, compared to 14% in R&D.

21%



Sales

19%



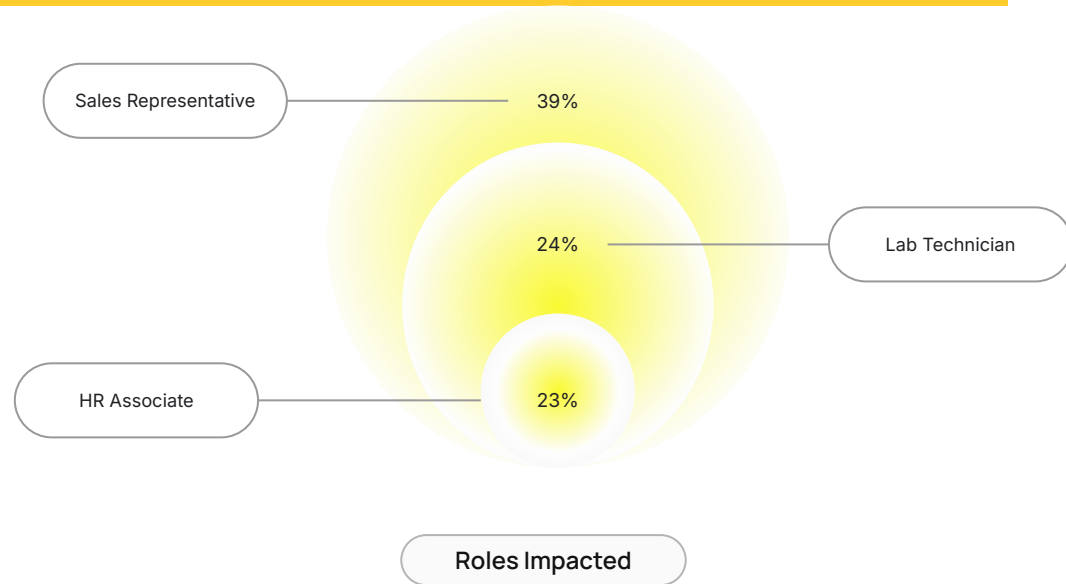
HR

14%



R&D

Departments





# Recommendations - Next Steps

## 1. Target High-Attrition Departments (Sales & HR)

- Launch **focused retention initiatives** in Sales & HR.
- Introduce **performance-linked incentives** tailored for high-pressure roles.

## 2. Improve Early-Career Retention (18–35 Age Group)

- Strengthen **onboarding, mentorship, and career development programs**.
- Offer **clear promotion pathways** within the first 2–3 years.
- Address **low job satisfaction** through employee feedback loops & manager coaching.

## 3. Review Compensation & Rewards

- Adjust pay for employees in **low salary slabs (≤10k)** where attrition is highest.
- Expand **stock option/bonus programs** to more employees including overtime hours benefits.

## 4. Reduce Travel-Related Burnout

- For frequent travelers, Provide **travel allowances, flexible schedules, or hybrid/remote options**.  
And rotate travel responsibilities to prevent overload.

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# DataSet Overview

- **Demographics:** Age, Gender, Marital Status, Education, Education Field
- **Job & Work Factors:** Department, JobRole, BusinessTravel, DistanceFromHome, Overtime
- **Compensation:** MonthlyIncome, SalarySlab, StockOptionLevel, PercentSalaryHike
- **Engagement & Satisfaction:** Job Satisfaction, Environment Satisfaction, Relationship Satisfaction, WorkLifeBalance
- **Career Growth:** YearsAtCompany, YearsInCurrentRole, YearsSinceLastPromotion, TrainingTimesLastYear
- **Attrition:** Target variable (Yes/No)

Source: IBM HR Data Analytics Employee Attrition Dataset Kaggle [Link](#)