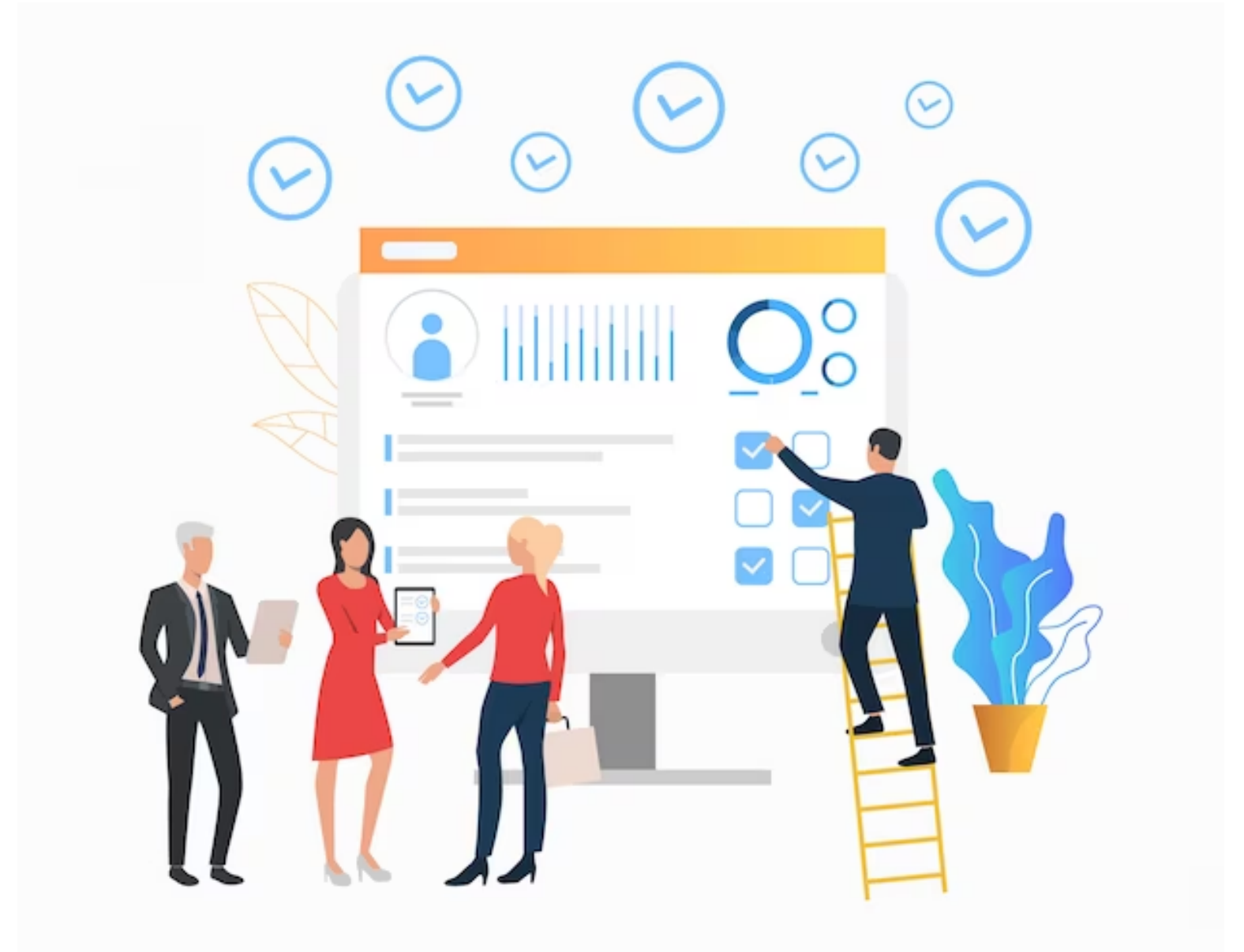# Employee Attrition Analysis

Problem Statement

As a Data Analyst in our HR firm, we aim to analyze and understand the factors influencing employee attrition within our organization. The dataset provided contains various features related to employees, their demographics, job roles, and satisfaction levels.

The objective is to identify patterns and insights that can help us predict and mitigate attrition rates effectively.

Analysis Objective

- Identify key factors contributing to employee attrition within the organization.

- Explore relationships between various features and attrition rates.

- Build predictive models to forecast the likelihood of employee attrition.

- Provide actionable insights and recommendations to HR and management to reduce attrition and enhance employee retention strategies.

Attrition Analysis

1473	237	16.09	37	6.50K	7.00
Employees	Attrition Count	Attrition Rate	Average Age of Empl...	Average Salary	Years in the Company

Attrition Count by Education Field

- 89 (37.55%)
- 7
- 32 (2.95%)
- (13.5%)
- 35 (1...)
- 63 (26.58%)

EducationFi...
- Life Scien...
- Medical
- Marketing
- Technical ...
- Other
- Human R...
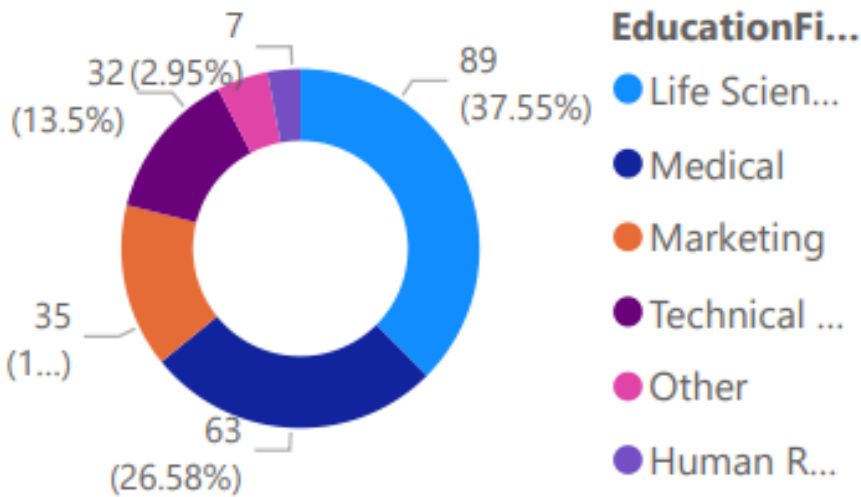
Attrition Count by AgeGroup

AgeGroup	Attrition Count
26-35	116
18-25	44
36-45	43
46-55	26
55+	8
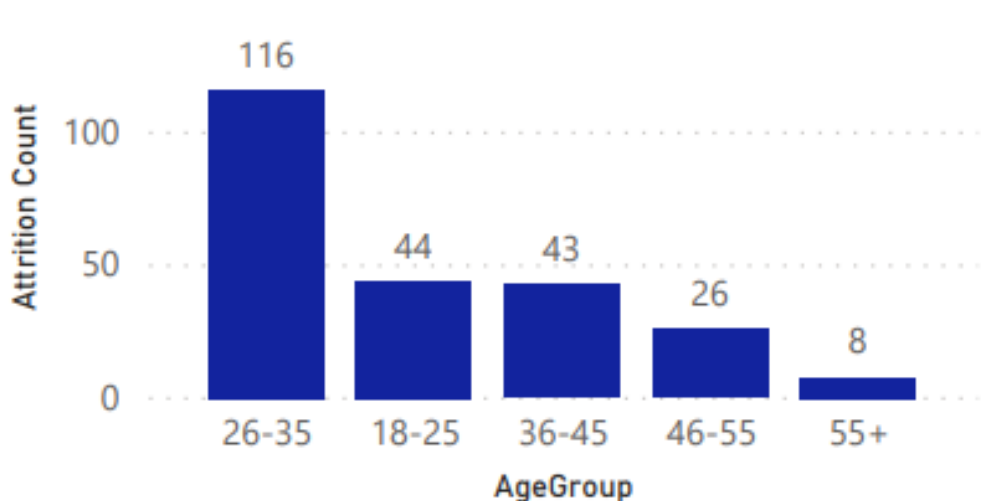
Attrition Count by Job Role

JobRole	Attrition Count
Sales Executive	57
Research Scientist	47
Sales Representative	33
Manufacturing Direct...	10
Research Director	2

(JobRole table)
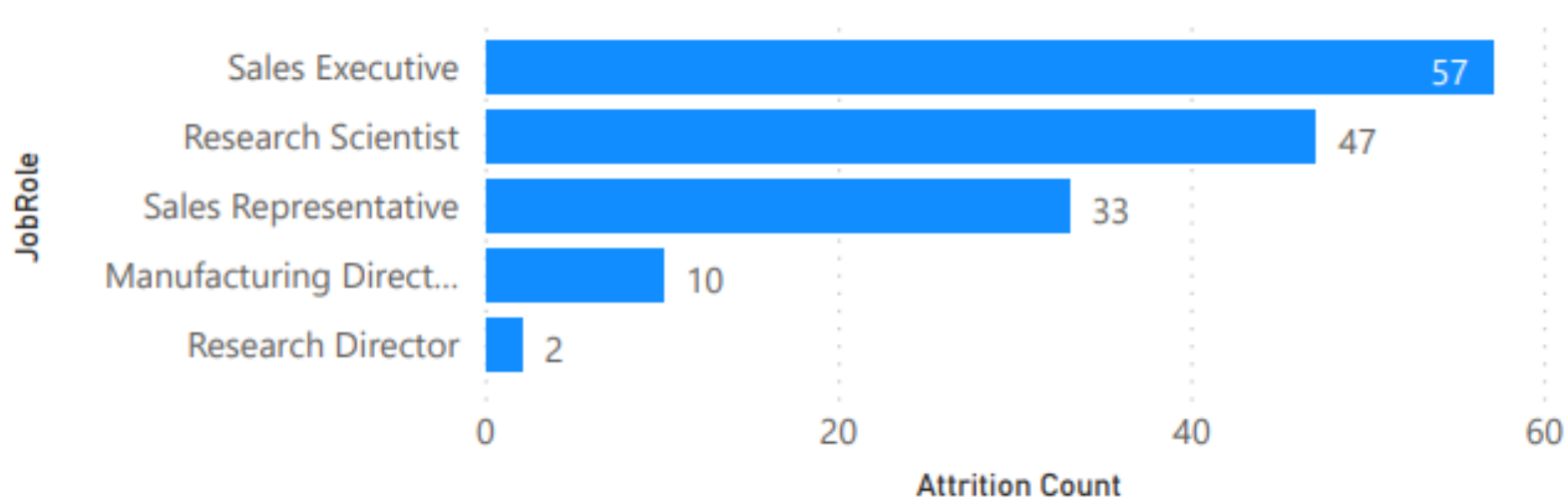
JobRole	1	2	3	4	Total
Sales Representative	7	10	9	7	33
Sales Executive	16	9	18	14	57
Research Scientist	13	10	15	9	47
Research Director		1	1		2
Manufacturing Director	2	2	4	2	10
Manager	1	2	1	1	5
Laboratory Technician	20	8	21	13	62
Human Resources	5	2	3	2	12
Healthcare Representative	2	2	1	4	9
Total	**66**	**46**	**73**	**52**	**237**

Attrition Count by Years at Company
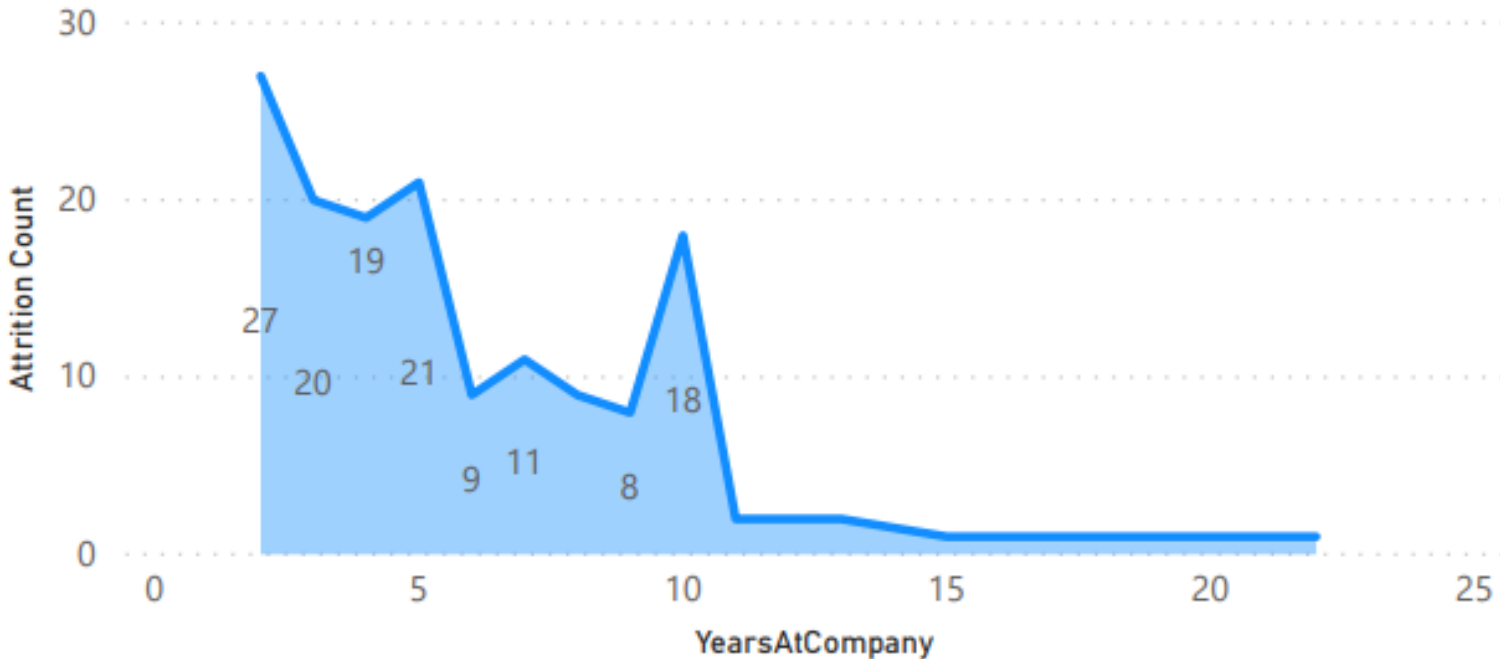
Attrition Count by Salary Slab

SalarySlab	Attrition Count
Upto 5k	163
5k-10k	49
10k-15k	20
15k+	5
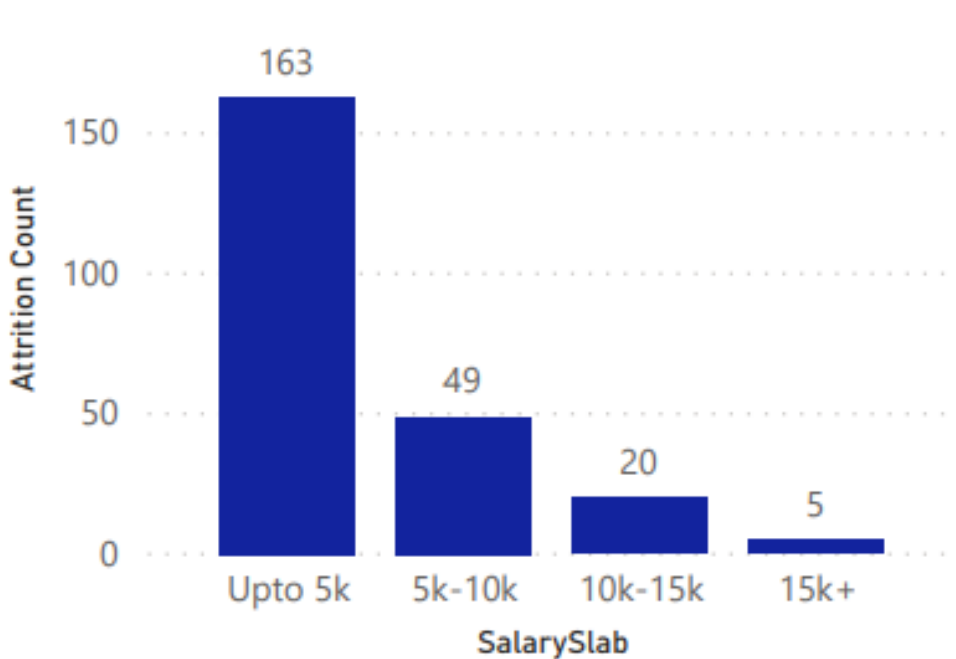
Complete Insights

- Start by presenting the overall attrition rate for the organization is 16.09%.

- The attrition rate by age group. the highest attrition rate is among the 26-35 age group (26.58%).

- Show the attrition rate for different job roles. Sales Representatives and Research Scientists have the highest attrition rates (33 and 47 respectively).

  - **For example,** for Sales Representatives, it could be high pressure, challenging targets, or lack of commission structure.

- The attrition rate seems to be increasing with salary, with the highest rate in the 15k+ salary bracket.

Note: It is important to remember that correlation does not imply causation. There could be other factors influencing attrition in higher salary brackets, such as more opportunities available to these employees.

Need to Include some more Insights

Thank you!