



Context

XYZ maintains a workforce of approximately 4,000 employees. However, around 15% of employees leave the organization every year, either voluntarily or involuntarily.

This level of attrition presents several challenges, including:

- Delays in project delivery, affecting timelines and client/partner trust
- Increased recruitment efforts and associated costs
- Productivity gaps, as new hires require onboarding and adjustment time

This analysis aims to identify key workforce characteristics and workplace factors that are strongly associated with employee attrition. The goal is to provide data-driven insights to support strategic HR decisions, reduce turnover-related risks, and improve overall workforce stability.

Context

Overview


Attrition

More insights

Attrition Risk


Total employees

4410

Active


3699

84%

Terminated


711

16%

Female


1764

40%

Male

2646

60%

AVG Tenure

11.3

Overview

Department

All

JobRole

All

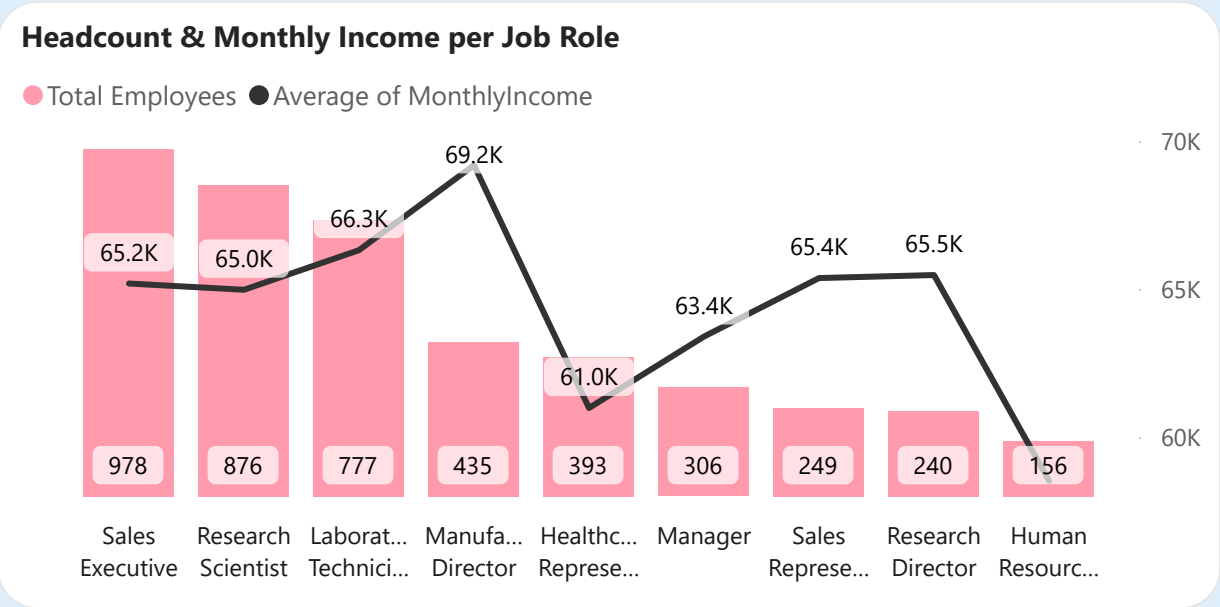
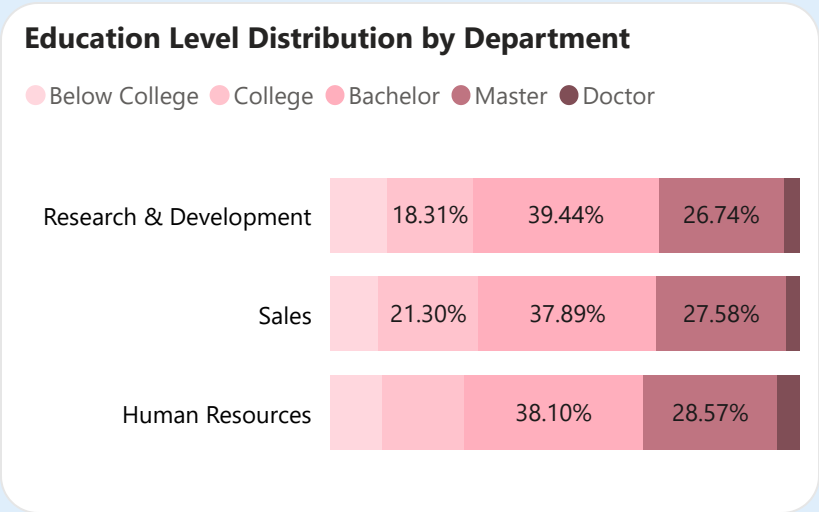
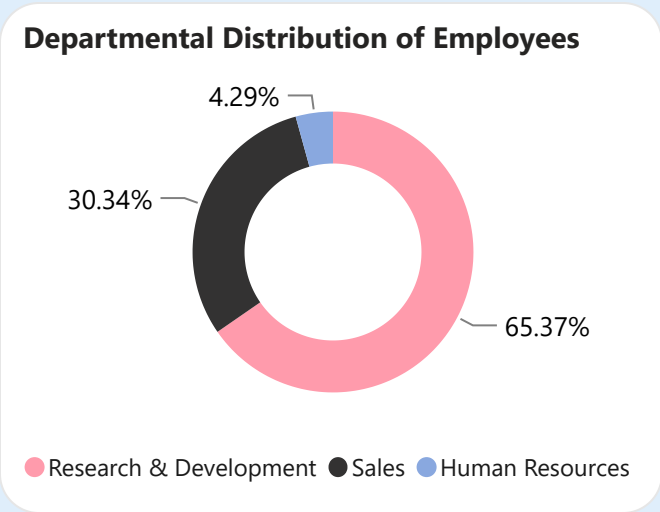
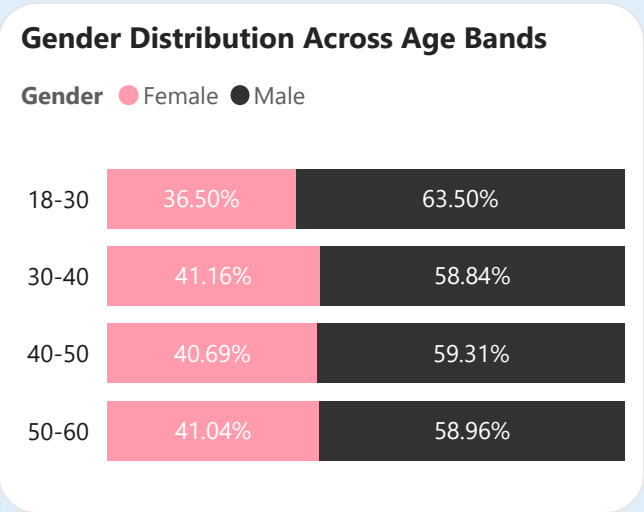
JobLevel

All

Attrition

All

Attrition



AVG Monthly Income and Performance Rating by Department, Job Role and Job Level

Department	Avg of Monthly Income	Avg of Performance Rating
Research & Development	67188.0	3.2
Sales	61384.5	3.1
Human Resources	57904.4	3.1
Total	65029.3	3.2



UNDERSTANDING ATTRITION: EXPLORATORY ANALYSIS



Attrition Rate



16.1%

Average Tenure



11.28

MED Monthly Income



₹ 49.2K

Bachelor Degree or Higher Rate



88.4%

2.73

Avg Job Involvement

3.15

Avg Performance Rate

2.72

Avg Job Satisfaction

2.72

Avg Environment Satisfaction

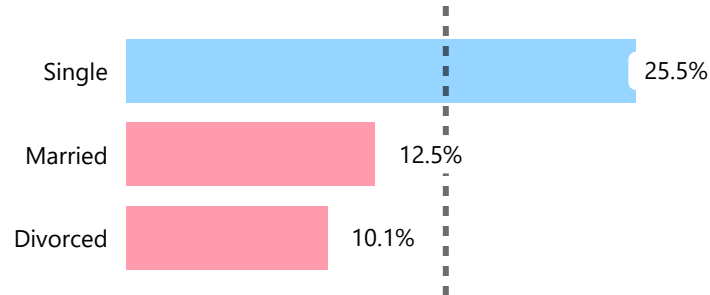
Demographics

Job and Career

Work Experience

Compensation & Benefit

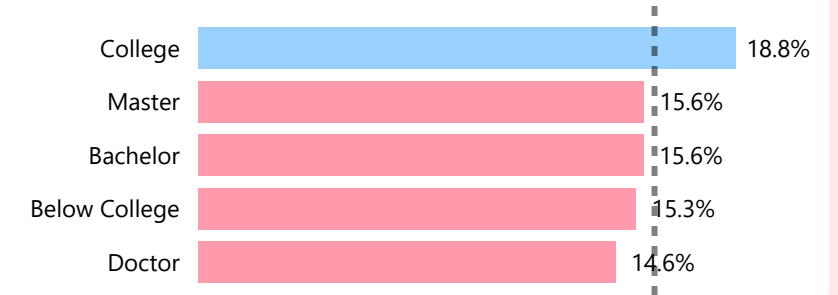
Marital status



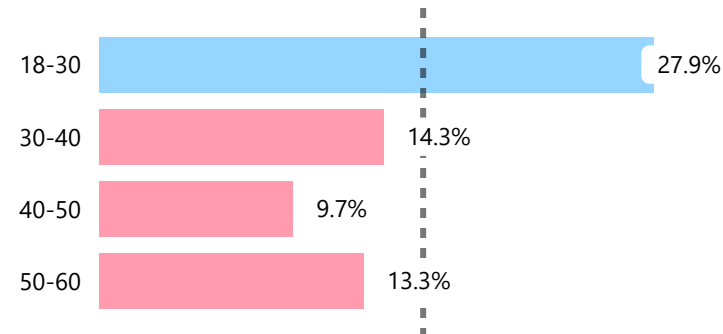
Gender



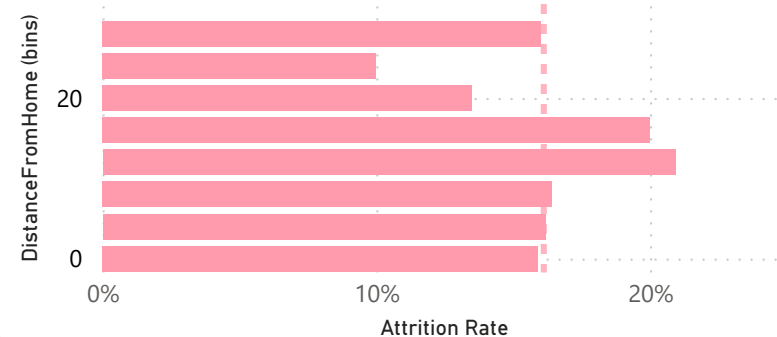
Education level



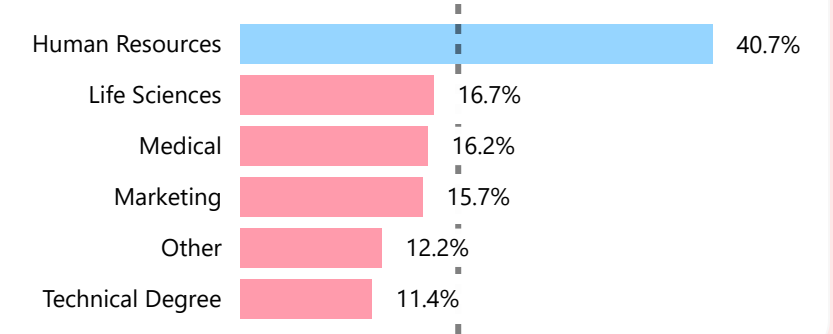
Age



Distance From Home



Education Field



LOW JOB SATISFACTION INSIGHT

Among those who left,
how many had low job
satisfaction?

28%

$P(Fx \mid \text{Attrition})$

In the whole company,
how many employees
have low job satisfaction?

20%

$P(Fx = \text{Low Job Satis})$

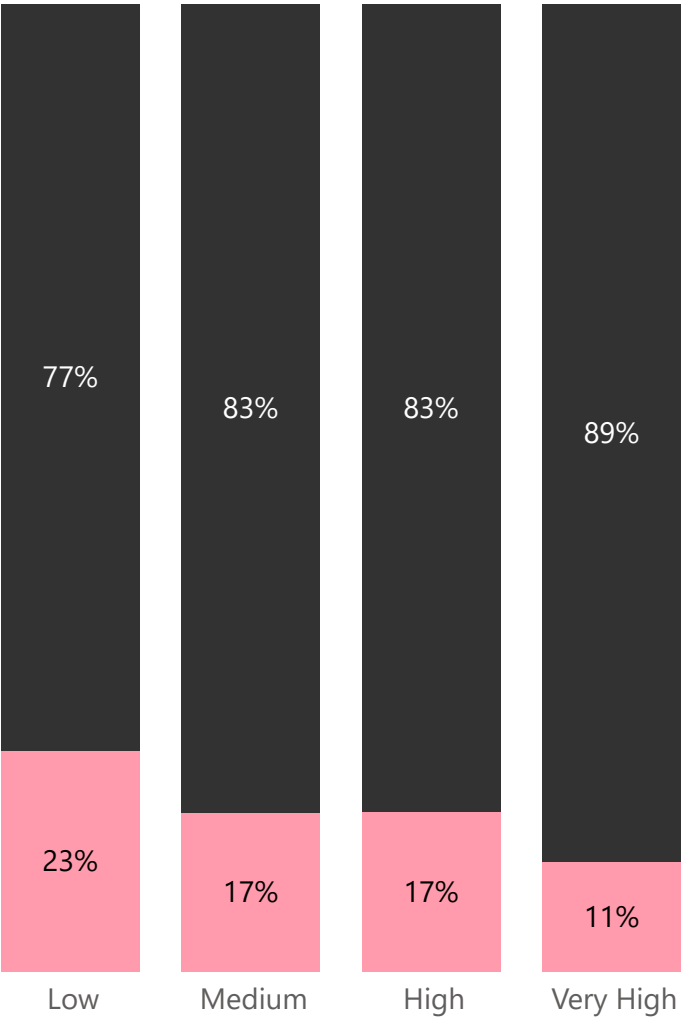
What is the overall
attrition rate?

16.2%

$P(A)$

Total Employees by JobSatisfaction Level and Attrition

Attrition ● Yes ● No



Non-Related Education Field

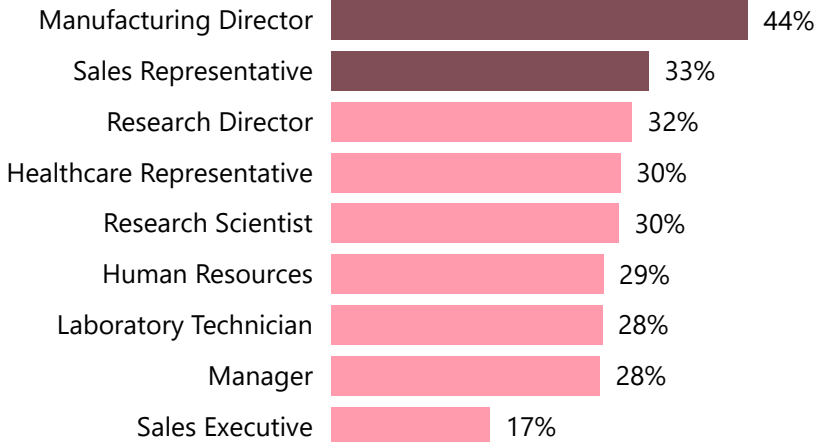
Related Education Field

Proportion of Low Job Satisfaction Among Resigned Employees by Expertise and Field Match

● Non-Related Education Field ● Related Education Field



Proportion of Low Job Satisfaction Among Resigned Employees by Job Role



Relevant
Education Field

% Low Job
Satisfaction by
Job Role

ATTRITION RISK OF ACTIVE EMPLOYEES

Risk level

Medium Risk

Department

All

JobRole

All

EmployeeID	Probability	Age	Gender	MaritalStatus	Department	EducationField	EducationFieldMatch	JobRole	JobLevel	Mon
416	35%	33	Female	Single	Sales	Marketing	Marketing	Sales Executive	1	
1886	35%	33	Female	Single	Sales	Marketing	Marketing	Sales Executive	1	
3356	35%	33	Female	Single	Sales	Marketing	Marketing	Sales Executive	1	
427	34%	40	Male	Divorced	Research & Development	Medical	Life Sciences, Medical	Research Scientist	2	
878	33%	46	Male	Single	Research & Development	Technical Degree	Life Sciences, Medical, Technical Degree	Laboratory Technician	1	
2348	33%	46	Male	Single	Research & Development	Technical Degree	Life Sciences, Medical, Technical Degree	Laboratory Technician	1	
3818	33%	46	Male	Single	Research & Development	Technical Degree	Life Sciences, Medical, Technical Degree	Laboratory Technician	1	
53	31%	31	Male	Married	Sales	Marketing	Marketing	Sales Executive	2	
2993	31%	31	Male	Married	Sales	Marketing	Marketing	Sales Executive	2	
3367	30%	40	Male	Divorced	Research & Development	Medical	Life Sciences, Medical	Research Scientist	2	