



HR ANALYTICS

This project analyzes employee turnover and retention to understand the key reasons behind why employees leave or stay. The goal is to provide HR with useful data insights to help improve workforce management and reduce attrition..



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DATASET OVERVIEW



it includes approximately **1480 employee records**

Key attributes :

Demographics: Age, Gender, Marital Status, Distance From Home

Job Information: Job Role, Department, Job Level, Business Travel

Compensation & Benefits: Monthly Income, Salary Hike, Stock Option Level

Employee Feedback: Job Satisfaction, Environment Satisfaction, Work-Life Balance

Attrition: Employee attrition status (Yes/No)



DASHBOARDS OVERVIEW

1

Workforce Composition & Diversity Insights

Explores employee demographics, gender and education diversity, leadership roles, and attrition patterns by marital status.

2

Attrition & Retention

Focuses on understanding who leaves and why by examining overtime, job satisfaction, and other attrition factors.

3

Performance & Learning Analytics

Tracks employee training, promotions, and job involvement to understand impacts on performance and retention.

4

Compensation & Work-Life Balance Tracker

Analyzes salary trends, salary hikes, and work-life balance to identify pay equity and employee stress.

Dashboard 1 :



1

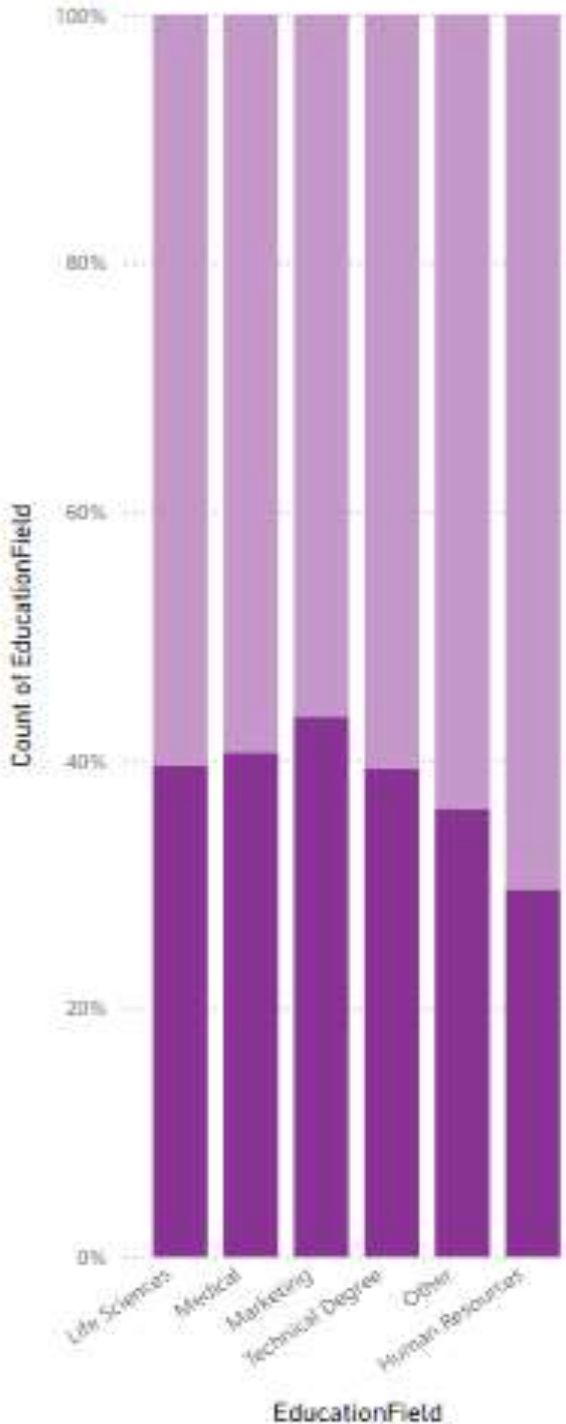
Workforce Composition & Diversity Insights

Explores employee demographics, gender and education diversity, leadership roles, and attrition patterns by marital status.

HR Dashboard_Workforce Composition & Diversity Insights

Count of EducationField and Count of EmployeeCount by EducationField and Gender

Gender ● Female ● Male



1480

Count of EmployeeCount



Male

889

TotalMale



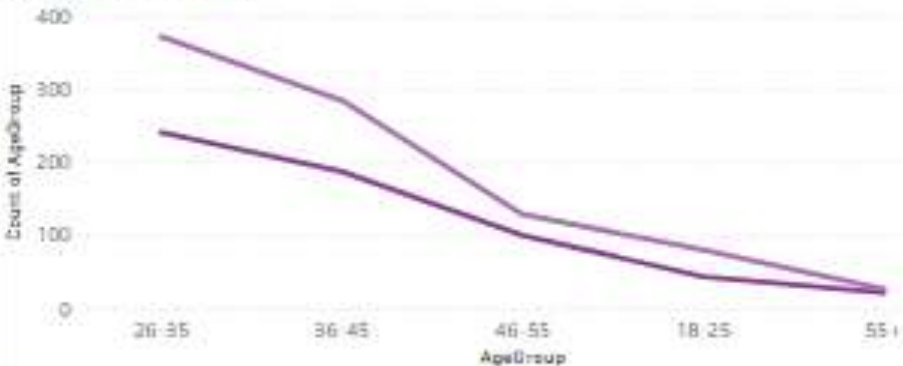
Female

591

Count of TotalFemale

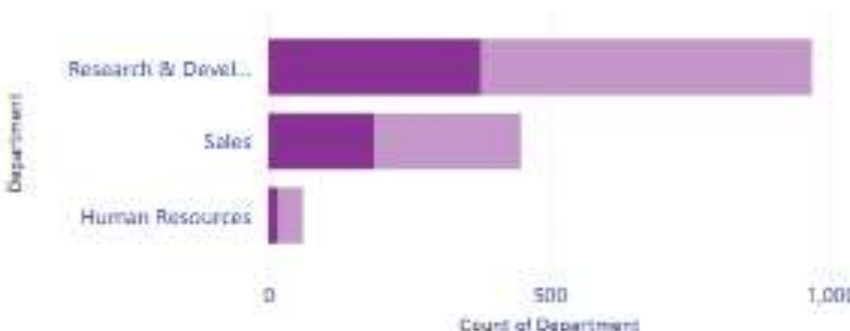
Count of AgeGroup and Count of WorkLifeBalance by AgeGroup and Gender

Gender ● Female ● Male



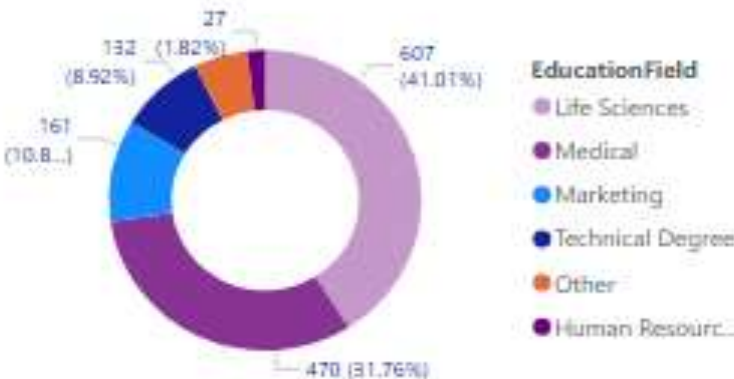
Count of Department and Count of EmployeeCount by Department and Gender

Gender ● Female ● Male

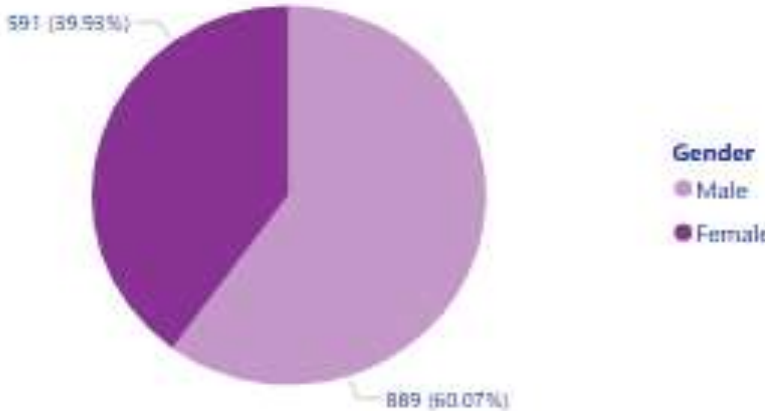


AgeGroup	1	2	3	4	5	Total
18-25	100	23				123
26-35	283	247	76	5		611
36-45	123	301	86	34	27	471
46-55	26	59	48	59	36	228
55+	13	9	10	9	6	47
Total	545	539	220	107	65	1480

Count of Gender by EducationField



Sum of EmployeeCount by Gender



Dashboard 2 :



2

Attrition & Retention

Focuses on understanding who leaves and why by examining overtime, job satisfaction, and other attrition factors.

HR DASHBOARD- Attrition & Retention Analysis

Department

Human Resources

Research &
Development

Sales

overall
employees

1480

Attrition

238

Attrition Rate

16.08%

Job satisfaction

2.73

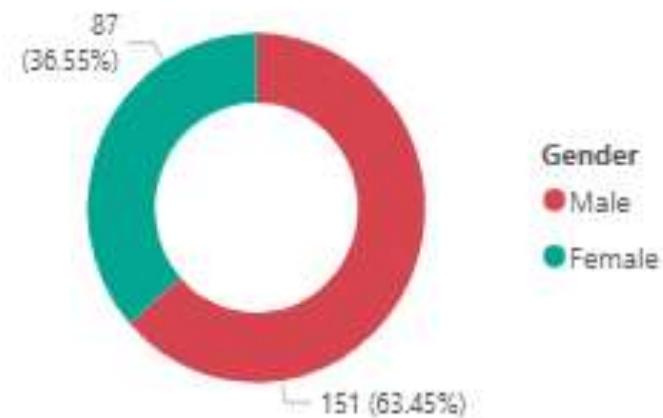
Gender Ratio

66.67%

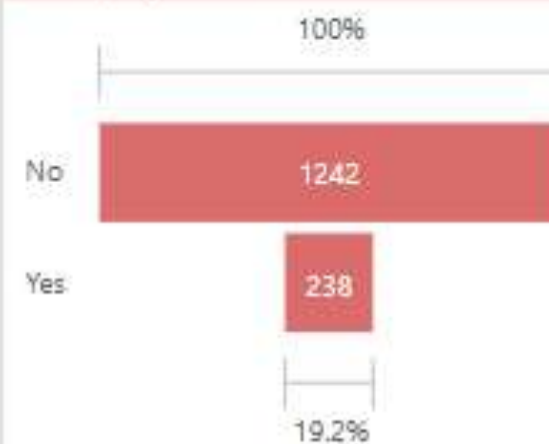
years left

7.01

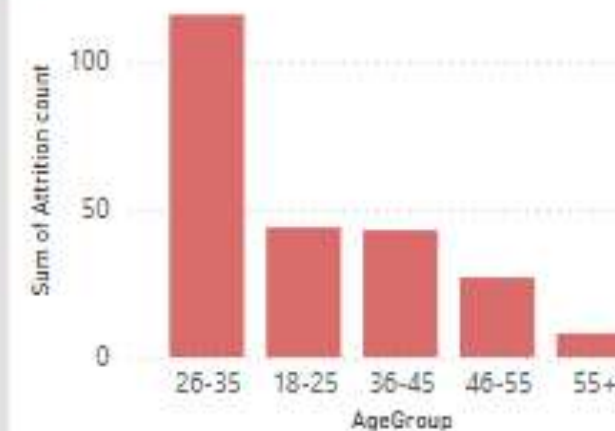
Attrition by Gender



Employee Retention vs Attrition



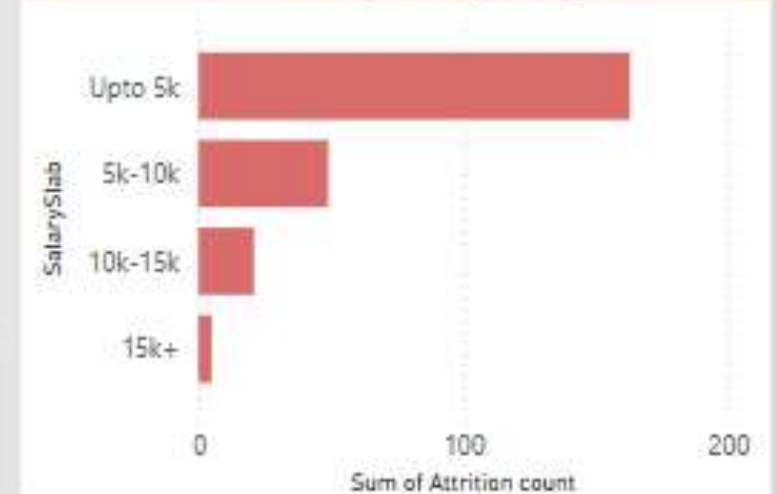
Attrition by Age Group



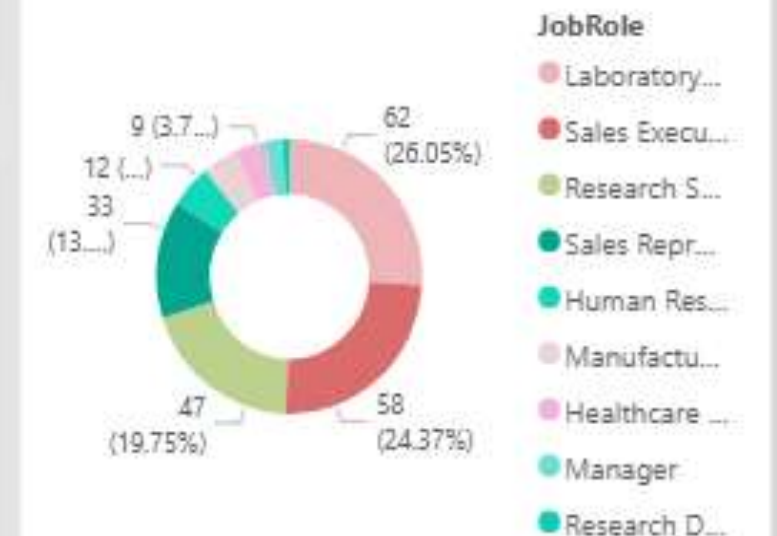
Attrition by Years at Company

YearsAtCompany	No	Yes	Total
0	28	16	44
1	112	59	171
2	100	27	127
3	108	21	129
4	93	19	112
5	177	21	198
6	68	9	77
7	80	11	91
Total	1242	238	1480

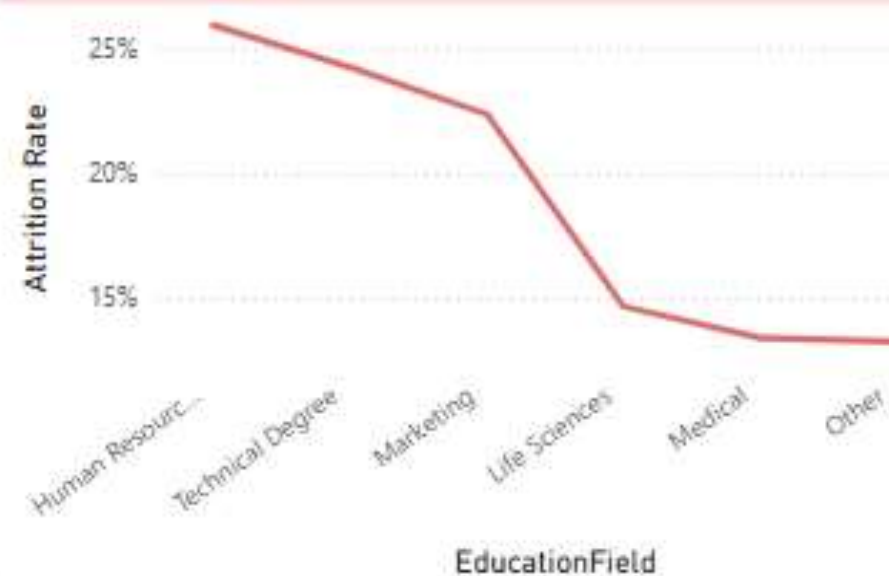
Attrition by Salary Range



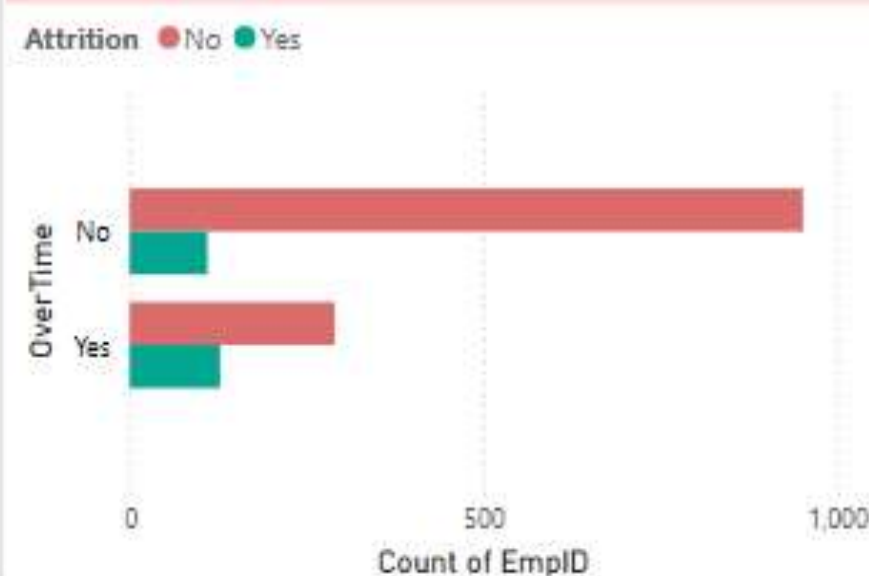
Attrition by Job Role



Attrition Rate by EducationField



Overtime Impact on Attrition



Attrition by Job Role and Level

JobRole	1	2	3	4	Total
Healthcare Representative	2	2	1	4	9
Human Resources	5	2	3	2	12
Laboratory Technician	20	8	21	13	62
Manager	1	2	1	1	5
Manufacturing Director	2	2	4	2	10
Research Director	0	1	1	0	2
Research Scientist	13	10	15	9	47
Sales Executive	17	9	18	14	58
Sales Representative	7	10	9	7	33
Total	67	46	73	52	238

Dashboard 3 :



3

Performance & Learning Analytics

Tracks employee training, promotions, and job involvement to understand impacts on performance and retention.

HR Dashboard- Performance & Learning Analytics

Average Performance Rating

Average of PerformanceRating

3.15

Performance Rating Count (Yes / No)

No
Count of PerformanceRating

1.062K

Yes
Count of PerformanceRating

418

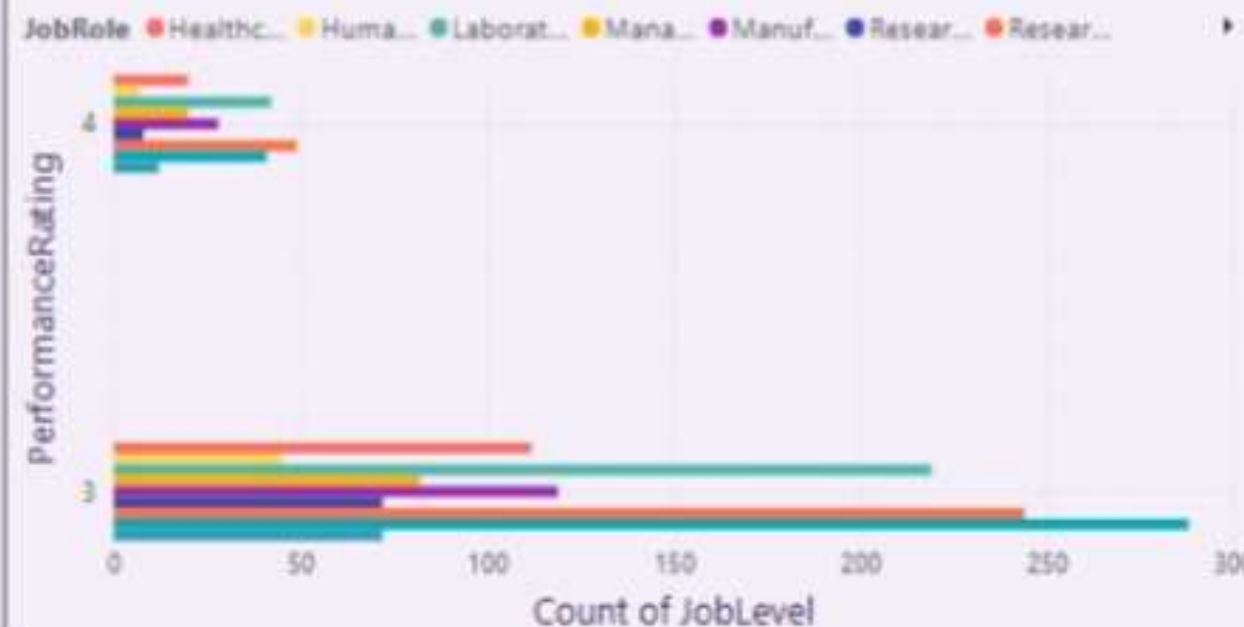
Promotion, Performance & Training Times by Job Level



Training Times by Total Working Years



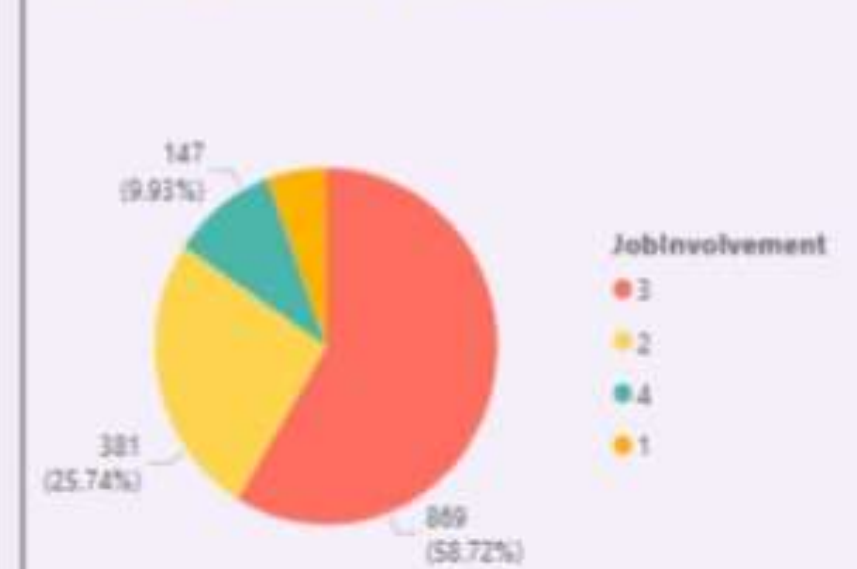
Job Level Count by Performance Rating & Job Role



Training Times by Department



Job Involvement Distribution



Dashboard 4 :



4

Compensation & Work-Life Balance Tracker

Analyzes salary trends, salary hikes, and work-life balance to identify pay equity and employee stress.

Compensation and Work-Life Dashboard:

Average of MonthlyIncome

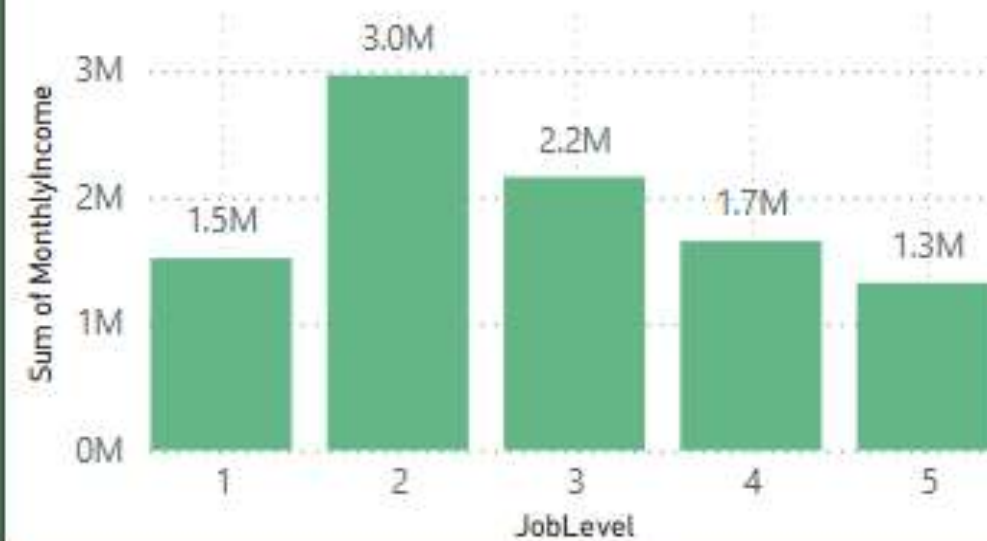
6.50K

Sum of EmployeeCount

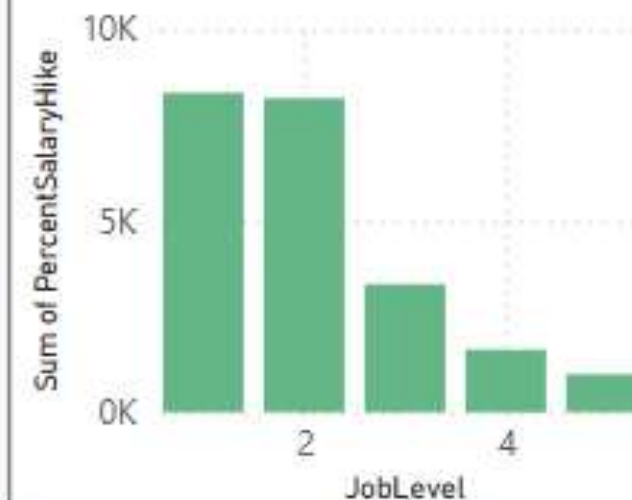
1K

Income trends by Job Level:

Sum of MonthlyIncome by JobLevel



Sum of PercentSalaryHike by JobLevel



Count of EmpID by Department and SalarySlab

SalarySlab ● 10k-15k ● 15k+ ● 5k-10k ● Upto 5k



Sum of PercentSalaryHike



Count of EmpID



JobRole

Healthcare...	Human Re...	Laboratory...
Manager	Manufactu...	Research ...
Research ...	Sales Exec...	Sales Repr...

Department

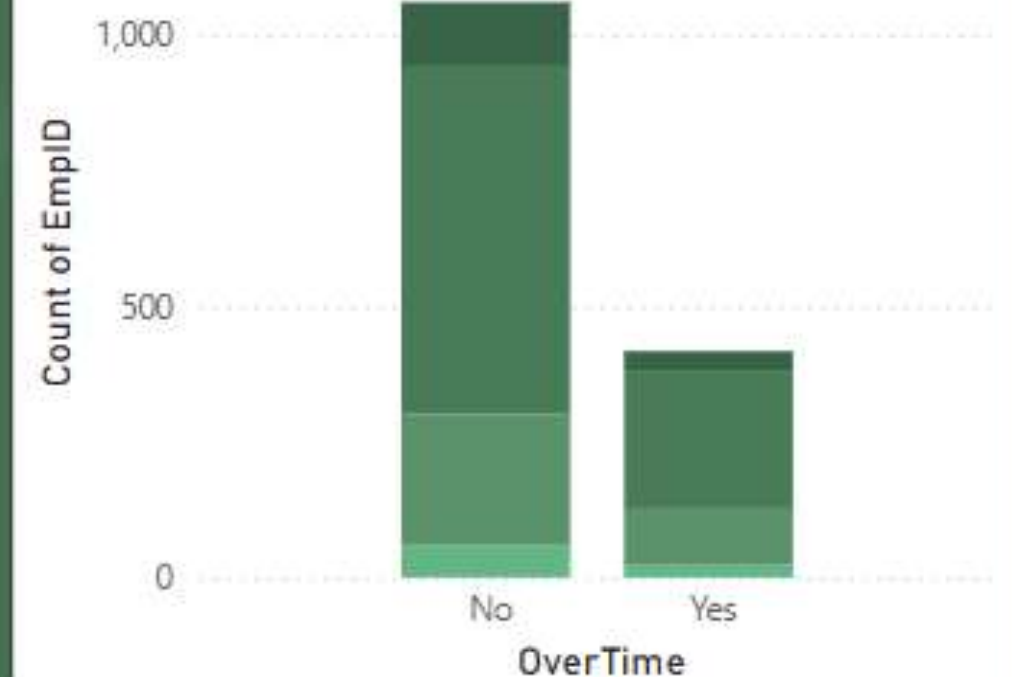
Human Re...	Research ...	Sales
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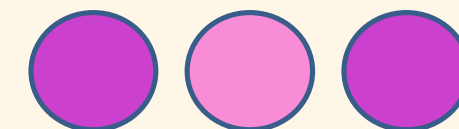
Gender

Female	Male
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Work-Life Balance:

WorkLifeBa... ● 1 ● 2 ● 3 ● 4





References:

Dataset : youtube

Tutorials: youtube, chatgpt