# Documentation for the HR Data Project

## Overview:

This HR Data analysis provides comprehensive insights into the human resources data of a company. It visualizes key metrics such as monthly salary, employee satisfaction, job role distribution, department-wise statistics, and gender representation. The dashboard is designed to help HR managers and executives make informed decisions about workforce management, compensation, and employee engagement.

## Pages Breakdown:

1. Summary Page

Key Metrics:

Sum of Monthly Salary: $19.05M

Total Number of Employees: 2.923K

Average Job Satisfaction: 2.73

Insights:

Gender Distribution: 59.94% of employees are male, and 40.06% are female.

Education Levels: The majority of employees hold a Bachelor's Degree (1.139K), followed by those with a Master’s Degree (794).

Department Distribution: Most employees are in the R&D department (1.906K), followed by Sales (891) and HR (126).

Recommendations:

Focus on improving job satisfaction across all departments, particularly HR, which shows lower satisfaction levels.

Consider initiatives to balance gender representation if diversity is a company goal.

Offer more educational opportunities for employees with lower degrees to enhance skill levels and career advancement.

2. Employees Page

Key Metrics:

Gender Distribution: 59.94% Male, 40.06% Female

Count of Employees by Department: Majority in R&D (1.906), followed by Sales (891) and HR (126).

Insights:

Overtime Distribution: R&D has the highest overtime (536 employees), which could indicate high workloads or under-resourcing.

Attrition Rate: Highest in Sales (58%), followed by R&D (38%) and HR (5%).

Recommendations:

Investigate the reasons behind high overtime in R&D and consider strategies to reduce workload or redistribute tasks.

Address the high attrition in the Sales department, possibly through better incentives, work-life balance, or training programs.

HR’s lower attrition rate suggests stability, but it could also indicate a lack of career progression opportunities, which should be evaluated.

3. Departments Page

Key Metrics:

Average Age by Department: HR (37.81), R&D (37.06), Sales (36.54)

Years Since Last Promotion: Sales (2.36 years), R&D (2.14 years), HR (1.78 years)

Insights:

Age Distribution: HR employees are slightly older on average than those in R&D and Sales.

Promotion Frequency: Sales department sees the most frequent promotions, which might correlate with its higher attrition.

Recommendations:

Consider introducing career development plans for older employees, particularly in HR, to maintain engagement and productivity.

Monitor the relationship between promotion frequency and attrition in Sales, ensuring that promotions are based on merit and not just a tool to retain employees.

Balance the age distribution across departments to ensure a mix of experience and fresh perspectives.

4. Salary Analysis Page

Key Metrics:

Sum of Monthly Salary by Job Role:

Highest for Sales Executives ($4.5M) and Managers ($3.5M).

Lowest for Human Resources and Sales Representatives (both $0.4M).

Insights:

Gender Pay Gap: The total monthly salary is higher for males ($25M, 58.94%) compared to females ($17M, 41.06%).

Salary Distribution by Age: Employees aged 35-44 earn the highest total salary ($6.8M), followed by those aged 25-34 ($5.3M).

Recommendations:

Evaluate the gender pay gap to ensure fairness and compliance with equal pay regulations.

Consider aligning salaries with performance and experience, especially for younger employees who may need more incentives.

Conduct a more detailed analysis to understand the reasons behind salary disparities and address any inequities.

5. Job Satisfaction Notes

Key Metrics:

Average Job Satisfaction by Department:

Sales (2.75), R&D (2.73), HR (2.60)

Insights:

Job Satisfaction by Business Travel: Employees who rarely travel are the most satisfied (5.6K).

Work-Life Balance: Best in Human Resources (2.92) and Sales (2.89).

Recommendations:

Implement policies that support work-life balance, especially in departments like R&D, which have lower satisfaction rates.

Explore flexible work arrangements or reduced travel requirements to boost satisfaction among employees who travel frequently.

Regularly monitor job satisfaction and adjust strategies to address areas of concern.