

Employee Satisfaction

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Mind Map Employee Satisfaction

Use Case

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Use Case Summary

Objective Statement:

- Get an insight about what is the effect of salary on the employee
- Get an insight into which department has the lowest salary
- Get an insight into what department most leave the company
- Get an insight about how satisfaction employees who left the company

Analytisc Technique:

- Descriptive Analysis
- Graph Analysis

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Expected Outcome:

- Know what is the effect of salary on the employee
- Know the name of a low-paying company department
- Know what department most leave the company
- Know how satisfaction employees who left the company

Business Understanding

- This dataset contains a company that records various employee parameters (example : salary, satisfaction level, etc).
- This case contains some business questions based on the data:
 - What is the effect of salary on the employee?
 - Which department has the lowest salary?
 - What department most leave the company?
 - How satisfaction employees who left the company?

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Data Understanding

- Source data by Kaggle
- Data Dictionary:
 - statisfaction_level: satisfaction level at the job of an employee
 - last_evaluation: rating between 0 to 1 received by an employee at this last evaluation
 - number_project: number of projects an employee involved
 - average_monthly_hours: average number of hours in a month, spent by an employee at the company
 - time_spend_company: number of years spent in the company
 - Work_accident : 0 = no accident during employee stay, 1 = accident during employee stay
 - left : 0 = indicates employee stay in the company, 1 = indicates employee left the company
 - promotion_last_5year: number of promotions in his stay
 - Department: department an employee belongs to
 - salary: salary in USD

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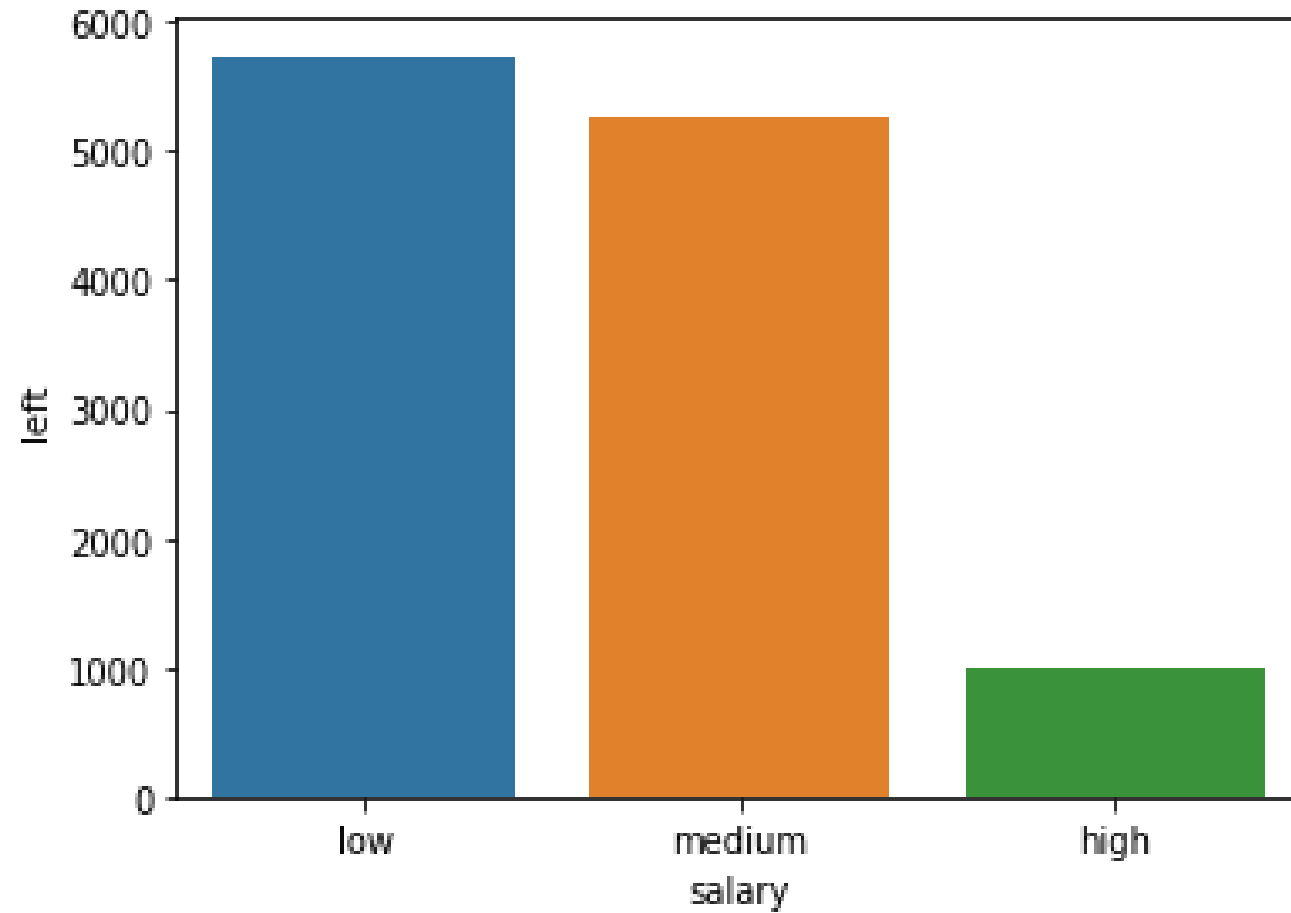
Data Preparation

- Packages : Pandas, Numpy, Seaborn, Matplotlib
- Use HR comma sep dataset
 - All columns, except sales and salary columns are numeric.
 - Work_accident, left, and promotion_last_5years are binary (0,1).
 - The name of the sales column will be changed to Department.

Data Cleansing

- The dataset has no missing values, and the data type names are all correct.
- The dataset contains 3008 duplicated data points that must be removed.

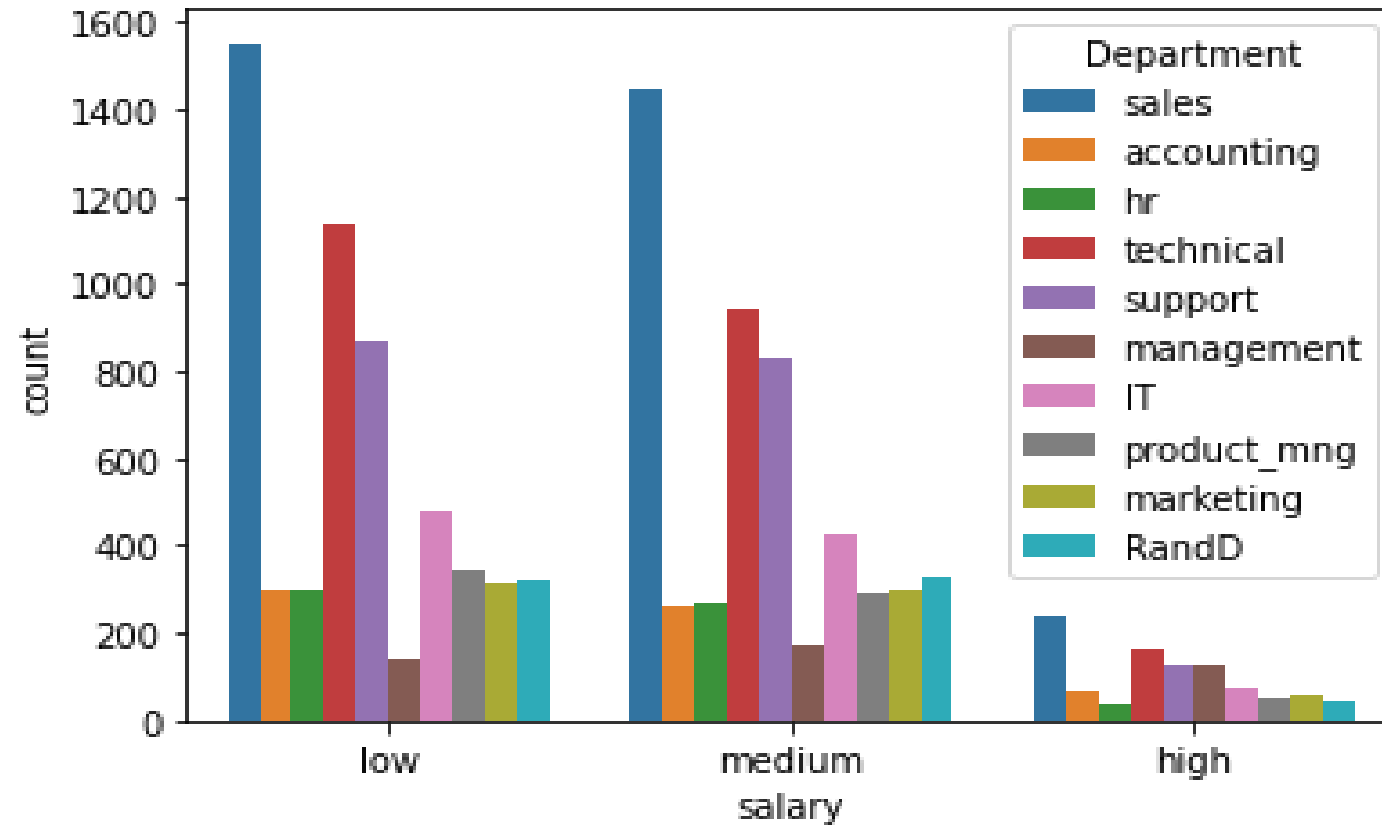
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What is the effect of salary on the employee?

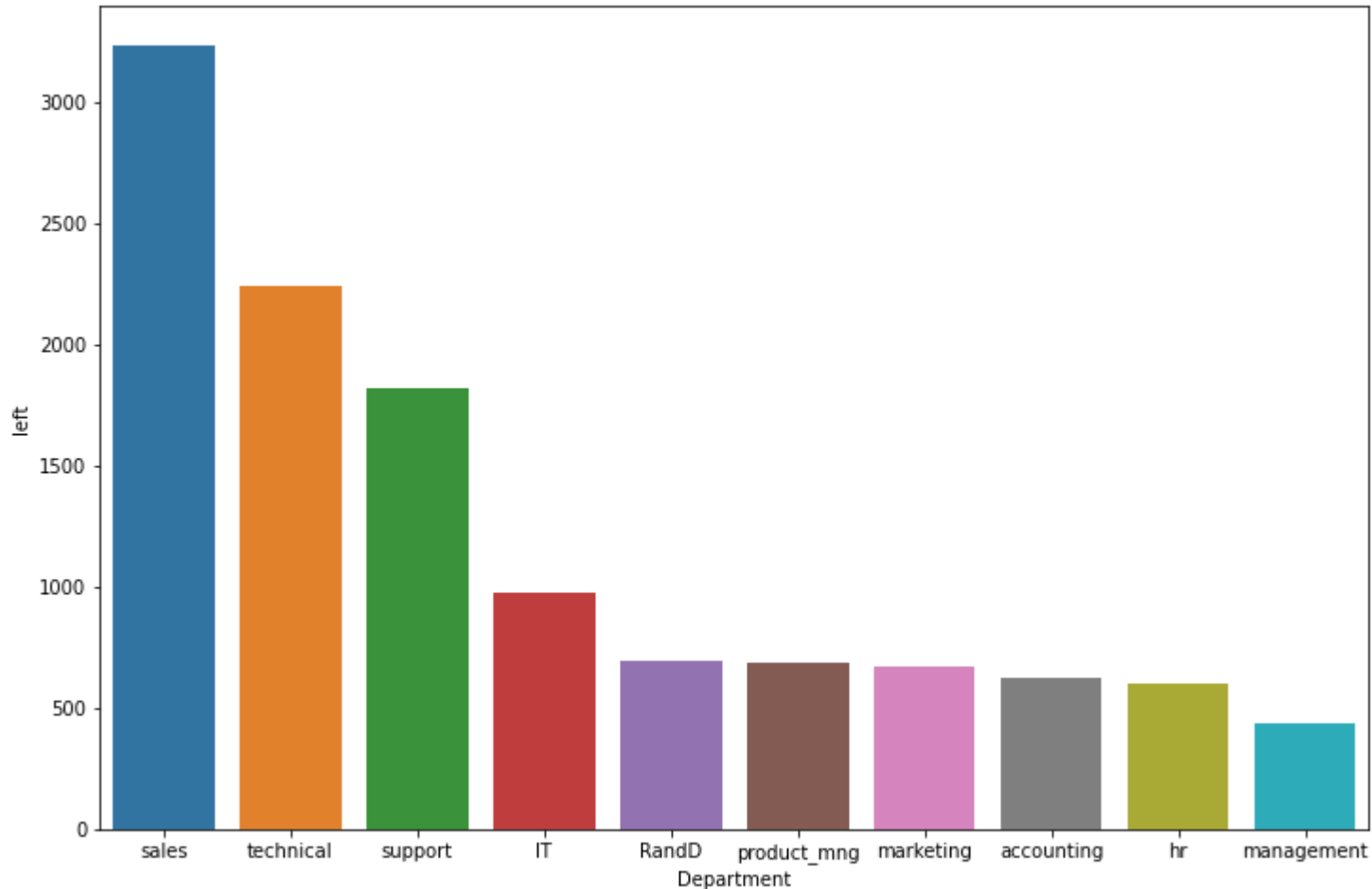
Many employees leave the company because their salary is low and medium

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Which department has the lowest salary?
sales, technical and support departments
have low and medium salary

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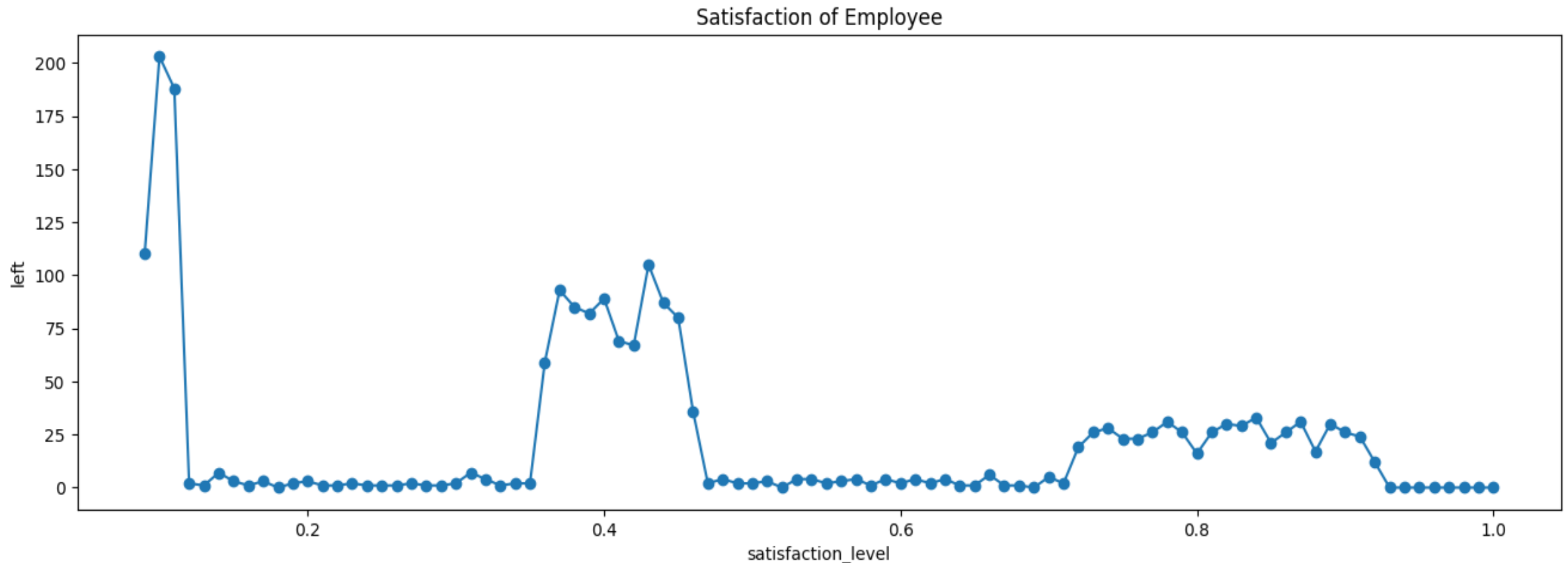
What department most leave the company?

The sales department has the most employees who leave the company, followed by the technical and support departments

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How satisfaction employees who left the company?

The highest number of employees leaving a company with a low satisfaction rate is below 20%



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Conclusion

- In the dataset, fewer employees are leaving the company, which is 1991 employees and 10000 employees remain in the company.
- The analysis focuses on employees leaving the company, with salaries having a significant impact on the number of employees leaving the company. Employees who are paid more in the low and medium ranges are more likely to leave the company.
- The lowest and medium salaries were found in the sales, technical, and support departments.
- The highest number of employees who left the company came from sales departments of 3239 employees, technical departments of 2244 employees, and support departments of 1821 employees.
- Employees who leave the company have an average satisfaction rate of less than 50% and the highest number with the lowest satisfaction level is less than 20%.