Project 04

Hiring Process Analytics

Project Description:

The hiring process is a crucial function of any company, and understanding trends such as the number of rejections, interviews, job types, and vacancies can provide valuable insights for the hiring department.

Analyse the company's hiring process data and draw meaningful insights from it.

Data Analytics Tasks:

A. Hiring Analysis: The hiring process involves bringing new individuals into the organization for various roles.

Task: Determine the gender distribution of hires. How many males and females have been hired by the company?

B. Salary Analysis: The average salary is calculated by adding up the salaries of a group of employees and then dividing the total by the number of employees.

Task: What is the average salary offered by this company? Use Excel functions to calculate this.

C. Salary Distribution: Class intervals represent ranges of values, in this case, salary ranges. The class interval is the difference between the upper and lower limits of a class.

Task: Create class intervals for the salaries in the company. This will help you understand the salary distribution.

D. Departmental Analysis: Visualizing data through charts and plots is a crucial part of data analysis.

Task: Use a pie chart, bar graph, or any other suitable visualization to show the proportion of people working in different departments.

E. Position Tier Analysis: Different positions within a company often have different tiers or levels.

Task: Use a chart or graph to represent the different position tiers within the company. This will help you understand the distribution of positions across different tiers.

Approach:

The project follows a systematic approach to Exploratory Data Analysis (EDA), including understanding the data columns and their content, checking for missing data, clubbing columns with multiple categories for comprehensive analysis, identifying and handling outliers, and creating a data summary. Using statistical knowledge and Excel formulas, the project aims to draw meaningful conclusions about the company's hiring trends. The detailed report will provide actionable insights to the hiring department, aiding in decision making and improving the overall hiring process.

Tech Stack Used:

The primary tech stack for this project would involve using Excel. Excel offers a wide range of functions and tools for data analysis and manipulation, making it ideal for tasks like exploratory data analysis and drawing insights from the dataset. Excel's features, such as formulas, functions, pivot tables, and charts, will be utilized for data cleaning, calculating statistics, identifying trends, and creating visual representations of the hiring data, providing a user-friendly interface for analysis.

A. Hiring Analysis

Task: Determine the gender distribution of hires. How many males and females have been hired by the company?

Total no. of males hired	Total no. of females hired
2563	1856

The company hired more males (2563) compared to females (1856). Company may conduct a gender diversity review to ensure equitable hiring practices.

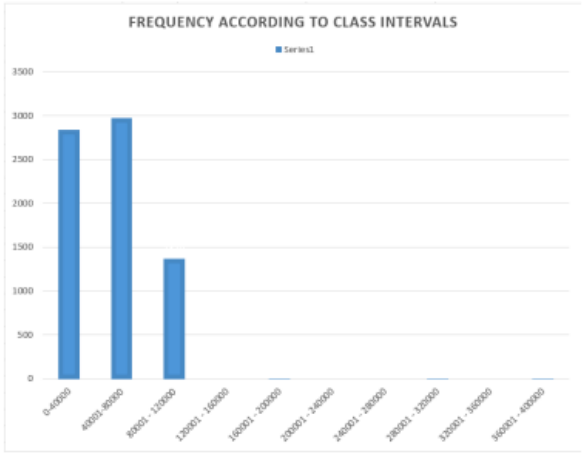
B. Salary Analysis

Avg salary of employees
49752.90

The average salary offered in the company is $49,752.90. The company can assess whether this average salary aligns with industry standards and competitors. If the average is significantly lower, they may need to re-evaluate their compensation packages to attract and retain top talent.

C . Salary Distribution:

Class Intervals	Frequency
0-40000	2831
40001-80000	2963
80001 - 120000	1370
120001 - 160000	0
160001 - 200000	1
200001 - 240000	0
240001 - 280000	0
280001 - 320000	1
320001 - 360000	0
360001 - 400000	1

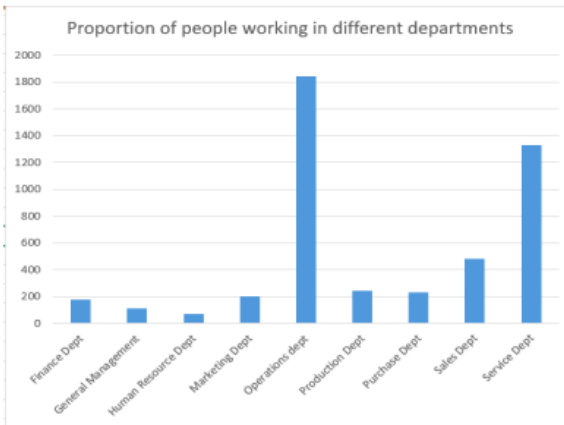


The majority of employees fall within the salary range of $0-$80,000.

The company can use this data to analyse the distribution of salaries and consider whether adjustments are needed to ensure fair and competitive compensation, especially for roles with no representation in certain salary ranges.

D. Departmental Analysis:

Proportion of people working in different deptartments	
Finance Dept	176
General Management	113
Human Resource Dept	70
Marketing Dept	202
Operations dept	1843
Production Dept	246
Purchase Dept	230
Sales Dept	485
Service Dept	1332

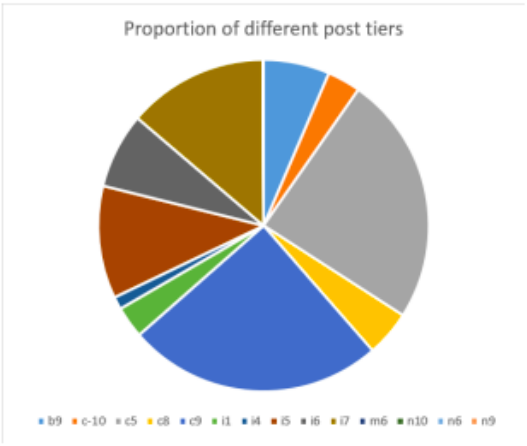


The majority of employees work in the "Operations" and "Service" departments.

The company can evaluate departmental distribution and consider to strengthen other departments by adjusting their recruitment efforts or offer incentives to attract more talent in those areas.

E. Position Tier Analysis:

Proportion of different post tiers	
b9	463
c-10	233
c5	1747
c8	320
c9	1792
i1	222
i4	88
i5	787
i6	527
i7	982
m6	3
n10	1
n6	1
n9	1



The highest proportion of employees are in the "c9" post tier, followed by "i7" and "c5."

The company can use this data to evaluate the structure of their workforce and ensure proper career progression and growth opportunities. They could also analyse whether the distribution of post tiers aligns with the company's growth plans.

Insights

- The company hired more males (2563) compared to females (1856). Company may conduct a gender diversity review to ensure equitable hiring practices.

- The average salary offered in the company is $49,752.90. The company can assess whether this average salary aligns with industry standards and competitors. If the average is significantly lower, they may need to re-evaluate their compensation packages to attract and retain top talent.

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Results

While working on this project, I have achieved several accomplishments. I successfully analysed the hiring data, identified the number of males and females hired, as well as calculated the average salary offered.

Additionally, I created class intervals for salary ranges and visualized the data through charts and graphs to showcase departmental proportions and post tiers. This project has enhanced my skills in data analysis, statistical calculations, and data visualization techniques. It has also provided me with valuable experience in deriving insights from real-world datasets, which will further strengthen my capabilities as a data analyst.