

HIRING PROCESS ANALYTICS

Project Description:

The motto of this project is to obtain meaningful insights to improve the hiring process of a multinational company like google by analysing its data. A company's hiring process data consists of various trends such as the number of rejections, job types, vacancies, salary and interviews. Understanding these trends plays significant role in providing insights for the department.

Approach:

As a data analyst, following a systematic data analysis approach will fetch the required objectives. Primitively, the dataset with the previous hiring records is obtained with all the information about processing the project. In addition, data cleaning is done to handle the missing data and outliers to improve the accuracy of this analysis. Further analysis is carried out in Microsoft Excel 2019 for both evaluation and visualisation of data.

Tech-Stack Used:

Microsoft Excel 2019 was chosen as the software for data analysis due to its availability, data manipulation capabilities, and visualization tools. The use of Excel allows us to perform various statistical calculations, create charts, and generate insights from the hiring process data efficiently. The main purpose of Excel usage is its familiarity.

Insights:

Data Cleaning:

Handling missing Data: Missing data can be found by using filter in data tab. It is observed that there is no missing data in most of the columns except for Event_name, Post Name, offered Salary. Event_Name has 15 rows of missing data, Post Name has One missing data, and Offered Salary has 1 blank data. As the missing data is minute when compared to total data, we can simply opt to use the filter to not include this data during analysis.

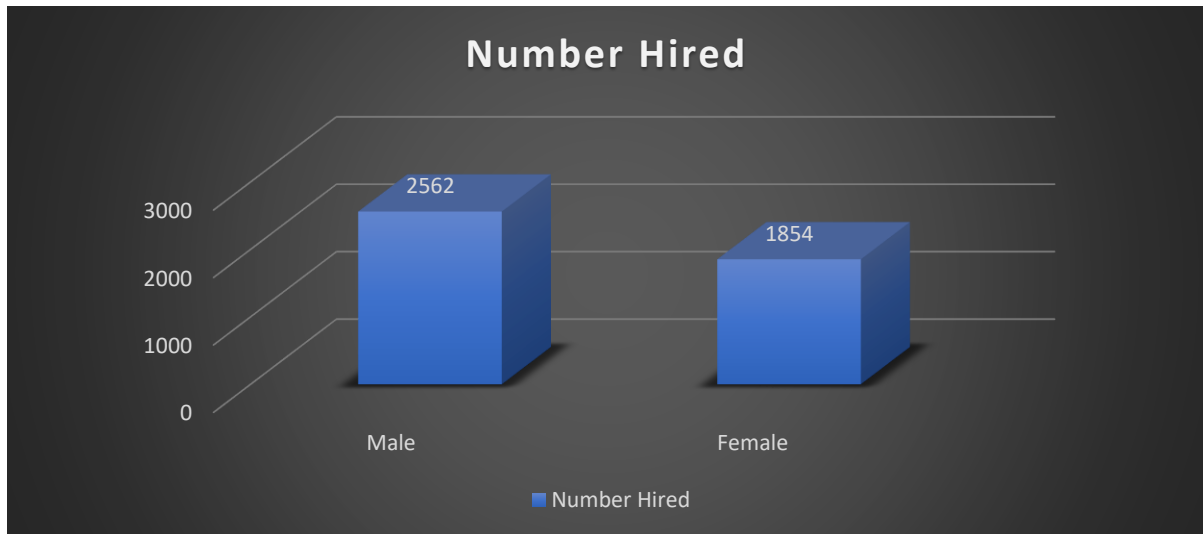
Outliers: Data points that deviate from overall pattern of dataset are termed to be outliers. Detection of outliers can be done using both visualisation and using statistical method, I chose statistical method as the provided dataset is huge. Statistical detection is done by finding out IQR(Interquartile Range), lower boundary and upper boundary.

Outlier calculations	
Q1	25452.75
Q3	74396.75
IQR	48944
Lower bound	-47963.25
Upper bound	147812.75
Median	49614.5

Using the above calculated values, Outliers? Column is created to check if there are any in the Offered Salary using “=OR(G2<\$J\$6, G2>\$J\$8)” and we find out that there are three rows that satisfy this condition. The outliers are handled by deleting them from dataset to carry on with analysis.

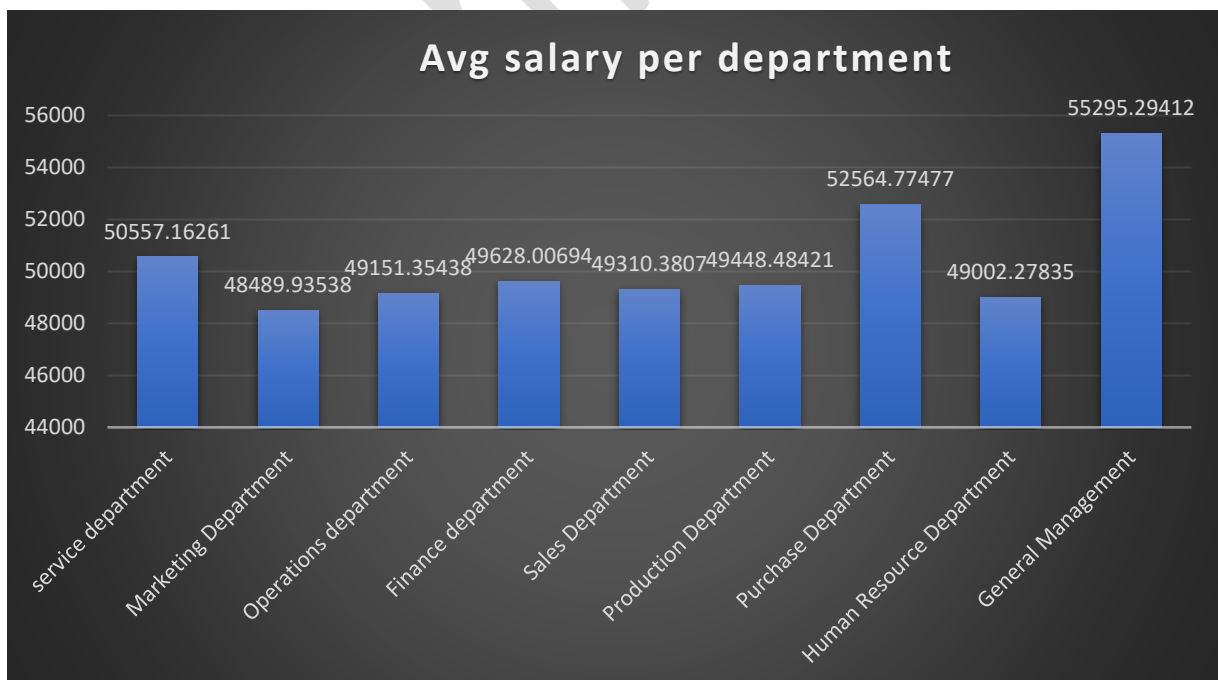
Analysis:

1. Determine the gender distribution of hires: Analysing the gender distribution of hires reveals potential gender imbalances jobs. This information helps the company take steps to promote gender diversity and inclusivity in the workforce.



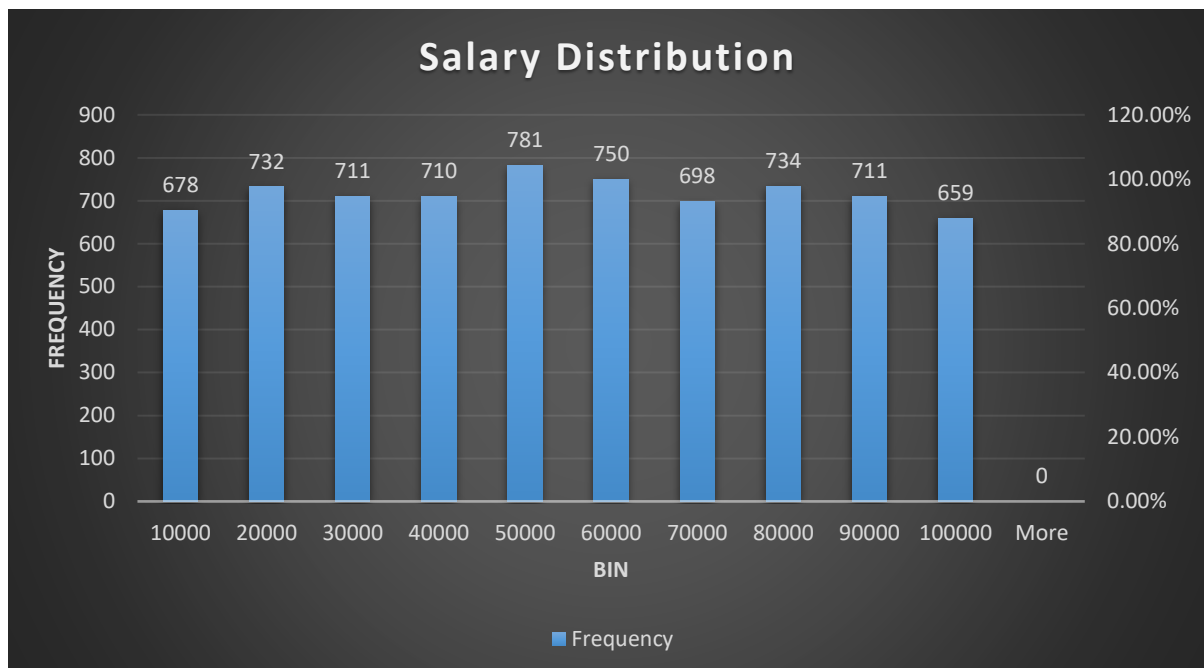
From the provided database it is observed that, a greater number of Male are being hired than Female from the analysis. Company should maintain gender inclusivity in hiring.

2. Salary Analysis: Calculating the average salary offered by the company provides valuable information for benchmarking salary packages and identifying opportunities for salary adjustments to attract top talent. 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.



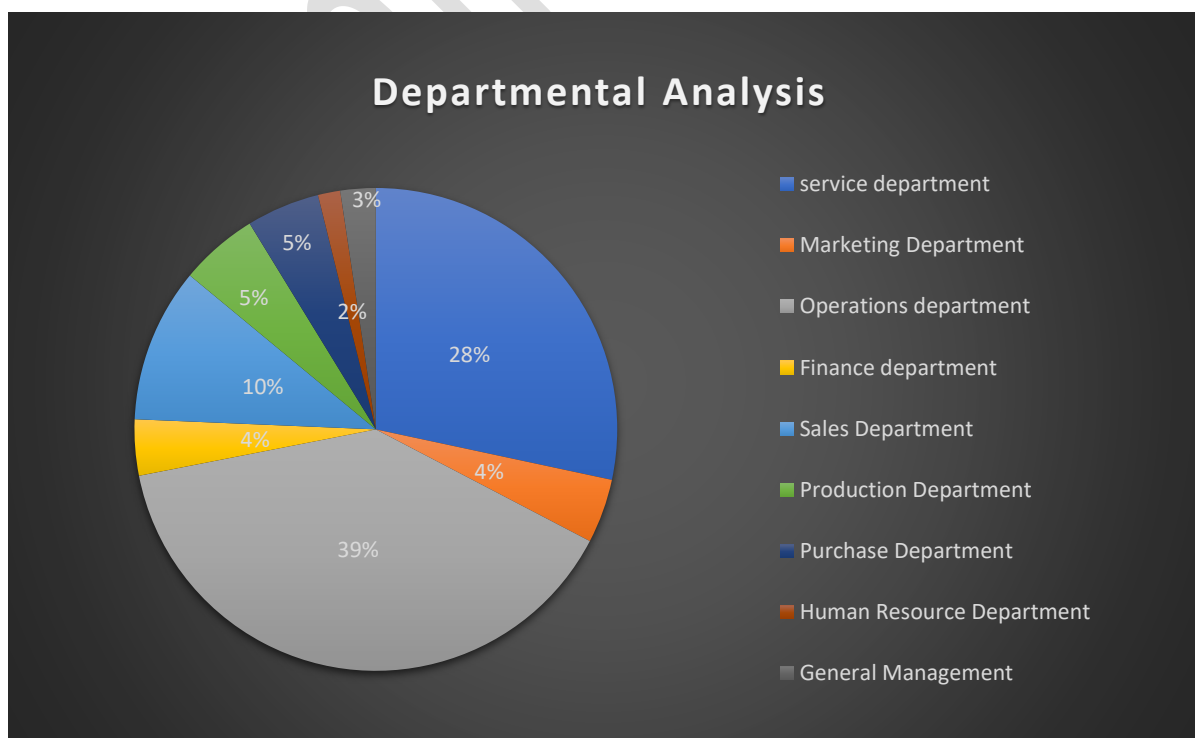
The chart above represents the average salaries in each department and it is observed that General Management department gets the highest average salary around 55,295/-. And the average salary of all the departments combined is obtained as 49,878/-.

3. **Salary Distribution:** Creating class intervals for salaries allowed us to understand the salary distribution across different pay ranges. This insight can aid in designing competitive compensation packages and employee retention strategies.

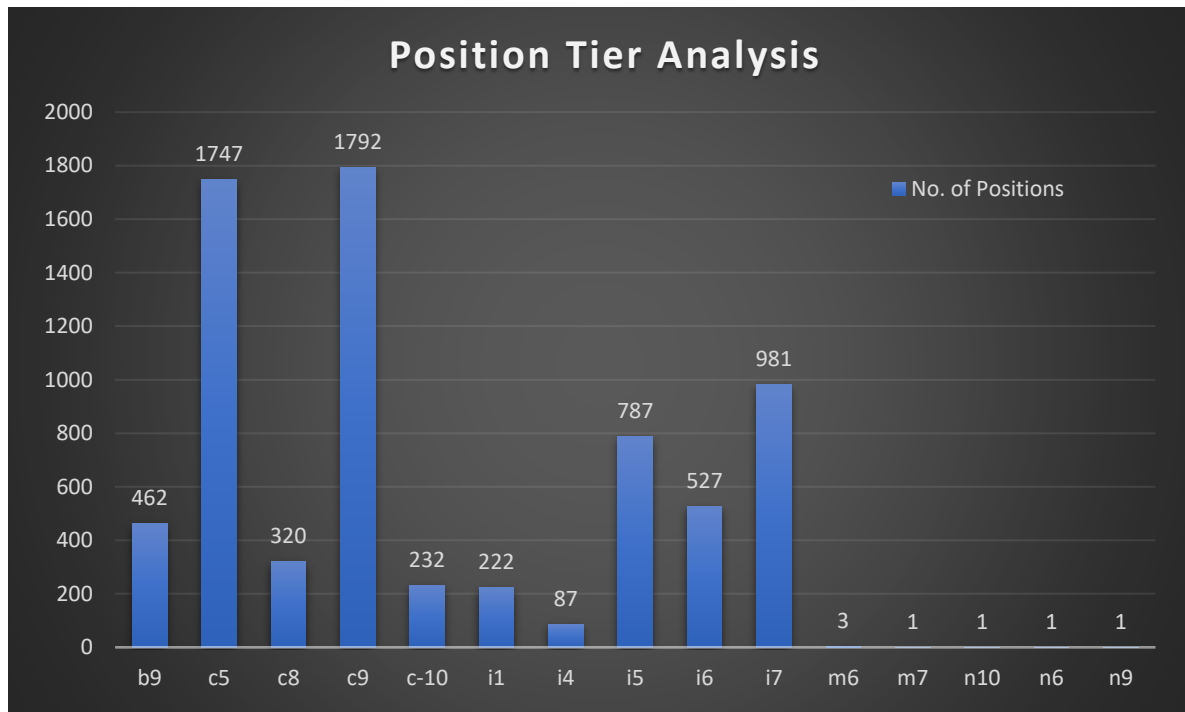


From the visualised data using data analytics in Data tab, it is observed that employs receiving salaries between 40,001- 50,000 are high in number with 781.

4. **Departmental Analysis:** Visualization of the proportion of people working in different departments is done using a pie chart provided a clear understanding that the Operations Department has the highest workforce distribution with 39%, while the Human Resources Department has least workforce. The company should work on allocating the resources effectively.



5. **Position Tier Analysis:** Representing the distribution of positions across different tiers from b9 to n9 respectively, using charts shed light on the organization's hierarchical structure and career growth opportunities. From the analysis it is observed that c5, c9 tiers are leading with humungous positions. Analysis suggests that the organisation should maintain the hierarchy among the positions for all the tiers to build healthy competition for company's development.



Result:

Through this project, we achieved a comprehensive understanding of the hiring process analytics at the company. The report and visualizations generated from the data analysis serve as valuable resources for the hiring to make data-driven decisions in improving the hiring process and overall organizational performance. Through the medium of this project, I successfully learnt to perform data cleaning and perform missing value treatment.

Drive link:

Find the Excel Worksheet that I performed analysis, [here](#).