

Hiring Process Analytics

Project Description:

To get useful insights to enhance the hiring process, this project analyzes hiring process data from a global corporation comparable to Google. The study aims to address important problems including gender distribution among hires, average income, salary distribution, departmental analysis, and position tier analysis by carefully examining the dataset.

This research aims to thoroughly analyze the hiring process data at a multinational corporation comparable to industry heavyweights such as Google. The principal objective is to get significant insights that may augment the efficacy and efficiency of the organization's recruitment processes.

Unquestionably, the hiring procedure is essential to the expansion and achievement of any business, thus it's necessary to comprehend and maximize its numerous

The dataset provided contains records of previous hires, encompassing a range of information such as gender, salary, job types, departmental affiliations, and position tiers. By delving into this dataset, the project addresses pertinent questions regarding the company's hiring landscape.



Approach:

To accomplish the objectives of the project, the following approach was followed:

1. **Data Cleaning:** The dataset was scrutinized for missing values and outliers. Missing data were handled using appropriate strategies, and outliers were identified and dealt with accordingly.
2. **Data Analysis:** Utilizing Excel, various statistical measures were calculated to derive insights. Gender distribution, average salary, salary distribution, departmental proportions, and position tier distribution were analyzed using relevant Excel functions and tools.
3. **Visualization:** Visual representations such as pie charts, bar graphs, and charts were employed to effectively communicate findings and patterns within the data.

Tech-Stack Used:

Software: Microsoft Excel 2022

Purpose: Excel was chosen for its versatility in handling data analysis tasks, providing robust statistical functions, and offering visualization tools for the effective presentation of insights.



Insights:

Handling Missing Data:

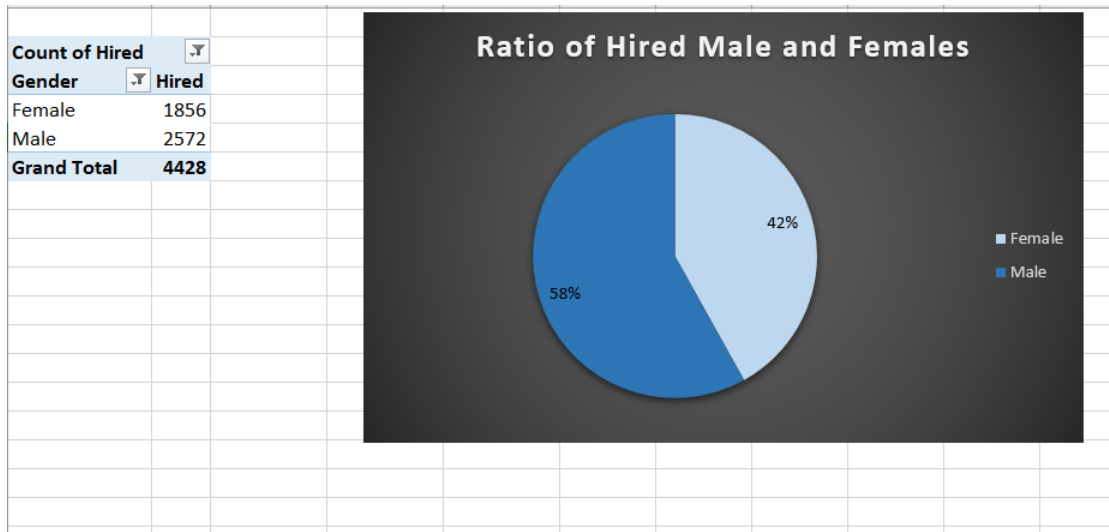
Post Name-new							
c8						event_name	frequency
c5						Male	4085
c5						Female	2675
i4						-	15
i4						Don't want to say	393
c9							
i7							
i7							
i4							
i4					Salary Analysis	Caluculation	
n10					Average of salary	49989.99009	
b9							
b9					SUM	358174068	
b9					COUNT	7165	
i7					AVERAGE	49989.40237	
i7							
i5							
i5							
i1					Post Name	Count	
i1					c8	320	
i1					c5	1747	
i1					i4	88	
i6					-	1	
i7					i7	982	
i1					n10	1	
i1					b9	463	
i6					i5	787	
i6					i1	222	
i1					i6	527	
i4					m6	3	
i4					m7	1	
i7					c10	232	
c5					c9	1792	

Missing values in the Post Name and event_name columns by taking mode or frequency and replacing the null values with the values that have the highest frequency

In the case of the Post Name column, there is only one cell that has "-" as a missing value and it is replaced by c9.

In the case of the event_name column, there are 15 missing columns and those are replaced with the gender that has the most frequency which is male.

1. **Gender Distribution:** The analysis revealed the gender distribution among hires, highlighting the number of males and females recruited by the company.



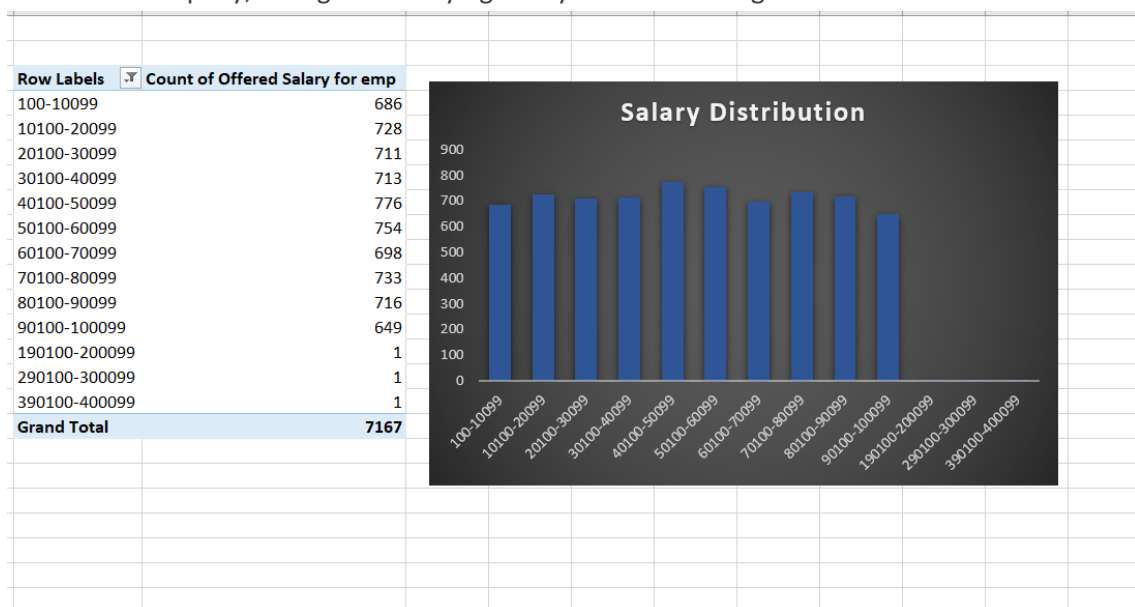
The total number of Females hired by the company is 1846, and the total number of Males hired by the company is 2572, Therefore, the percentage of Females in the company is 42% and the percentage of Males in the company is 58%

2. **Average Salary:** Through Excel functions, the average salary offered by the company was calculated, providing a benchmark for salary analysis.

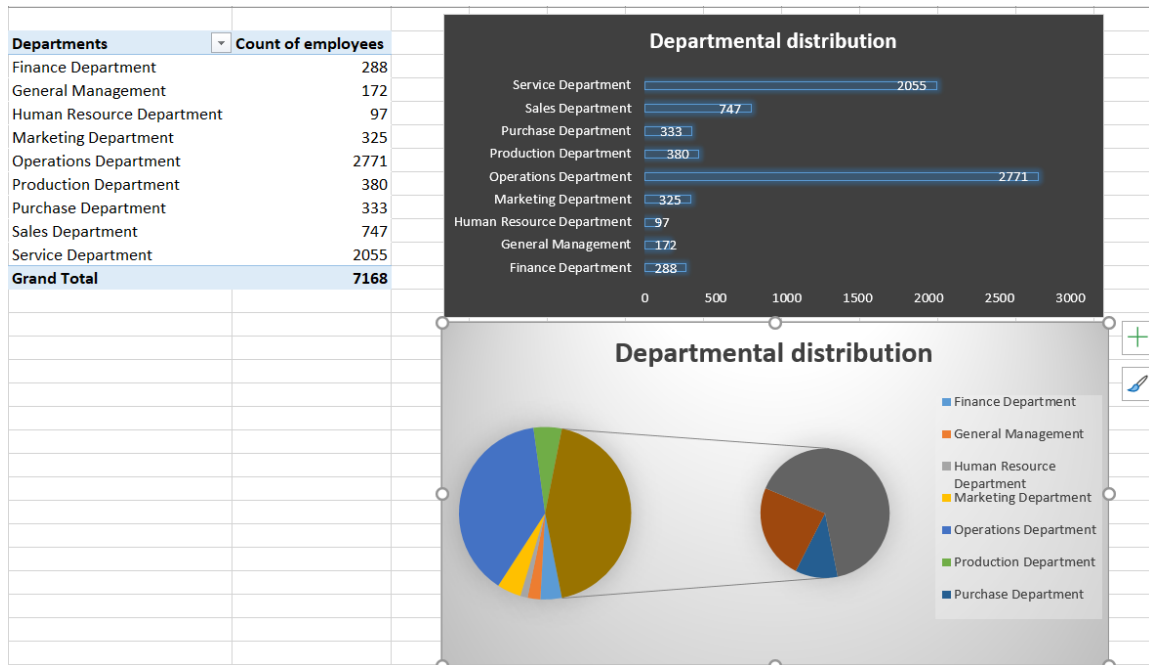
Offered Salary						
56553						
22075						
70069						
3207						
29668						
85914						
69904						
11758						
15156						
49515						
26990						
200000						
86787						
2308						
56688						
81757						
15134						
100						
73579						
50351						
38462						
82510						
52554						
3423						
88744						
70979						
99574						
52176						
Hiring Analysis	Salary Analysis	Salary Distribution	Departmental Analysis	Position Tier Analysis		

The average salary offered by the company to an individual is ₹49986.00712

3. **Salary Distribution:** Class intervals were created to understand the distribution of salaries within the company, aiding in identifying salary trends and ranges.

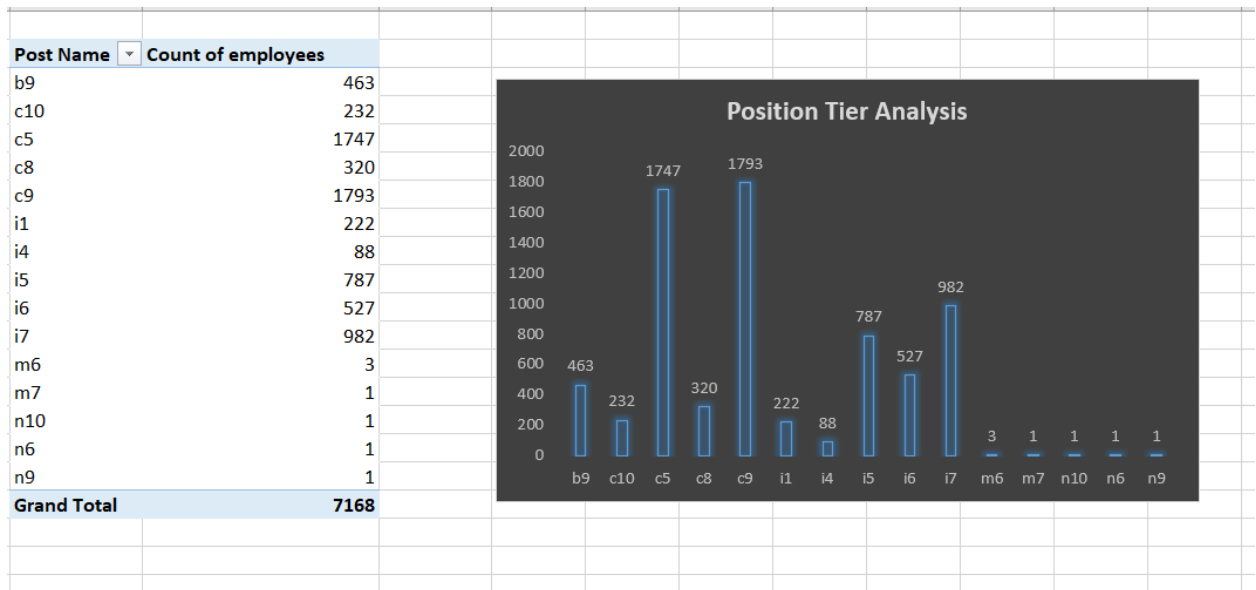


4. **Departmental Analysis:** Visualizations such as pie charts depict the proportion of employees working in different departments, facilitating a better understanding of departmental compositions.



Here, both the pie chart and bar chart tell the same story of the distribution of employees by each department.

5. **Position Tier Analysis:** Charts or graphs illustrate the distribution of positions across different tiers within the company, shedding light on the hierarchy and structure of roles.



This bar chart helps us to understand the distribution of employees across different positions and tiers within the company. The highest number of employees in the company belongs to position c9 and the lowest number of employees in the company belongs to m7,m10,n6, and n9.

Result:

Overall, this project has equipped me with practical experience in handling missing data, detecting and handling outliers, and summarizing data effectively. It has also improved my skills in using Excel functions for statistical analysis and creating visualizations to communicate findings effectively. By drawing meaningful insights from the data, I've not only contributed to improving the hiring process but also gained valuable experience in data analytics that can be applied across various industries and contexts.