Hiring Process Analytics

Project Description

A company's hiring procedure is its most crucial operation. The employment process's tendencies are disclosed to MNCs. A corporation should analyze trends before employing a fresh graduate or anybody else, including the number of rejections, interviews, sorts of employment, openings, experience, etc.

Approach

- Download all Data provided
- Understanding the data
- Checking for outliers
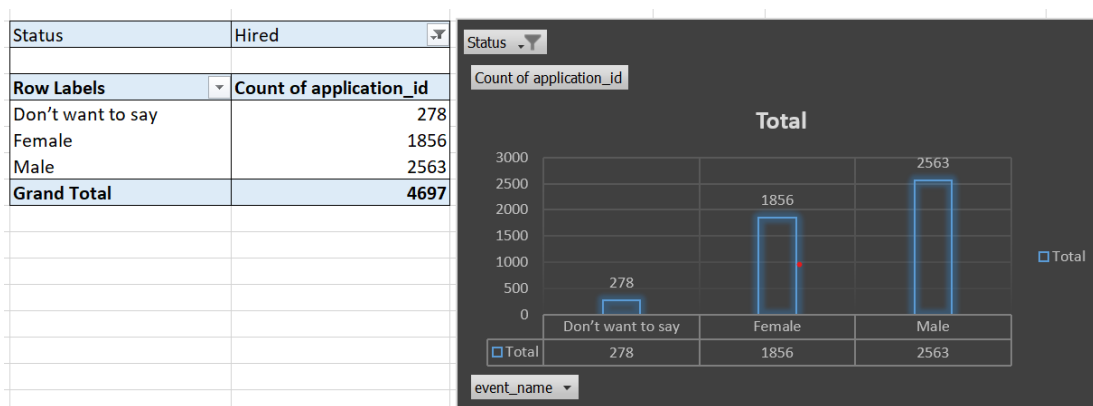- Removing outliers
- Drawing Data Summary

Tech-Stack Used

Microsoft Excel (2021)

Tasks:

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

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

Status	Hired	
Row Labels	**Count of application_id**	
Don't want to say	278	
Female	1856	
Male	2563	
Grand Total	**4697**	

Insights:

- Just 39.51% of the hired applicants are female, with over half being men. The other people have not revealed their gender. An organization's reputation in the public realm may suffer from a high gender ratio (the ratio of male to female). Thus, the organization should concentrate on lowering the gender ratio and getting it as near to one as possible.

- The analysis process may be hampered by missing or irrelevant data, thus the data quality team should make sure the data is comprehensive and relevant.

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.

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

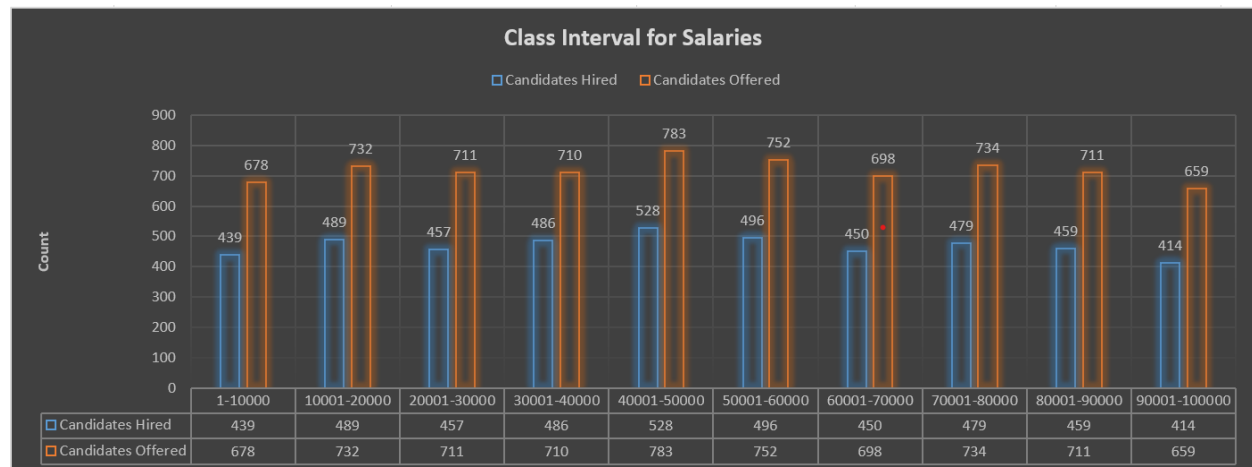|	C28	fx =AVERAGEIF(Sheet1!C2:C7169,"Hired",Sheet1!G2:G7169)					
	A	B	C	D	E	F	G
24		B. Salary Analysis: The average salary is calculated by adding up the salaries of a group of employees and then dividing the total by the number of employees.					
25		Task: What is the average salary offered by this company? Use Excel functions to calculate this.					
26							
27		Average Offered Salary:	49878.86482				
28		Average Salary of Hired Candidates:	49594.90888				
29							

Insights:

- The average salary that was offered was 49878.86 in currency, while the average salary that hired candidates received was 49594.91 in currency. The offered salary and the average salary of hired candidates are nearly equal. This demonstrates that the hiring staff is selecting applicants based on the organization's predetermined wage bands.

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.

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

Count of applicatio	Column Labels		
Row Labels	Hired	Rejected	Grand Total
1-10000	439	239	678
10001-20000	489	243	732
20001-30000	457	254	711
30001-40000	486	224	710
40001-50000	528	255	783
50001-60000	496	256	752
60001-70000	450	248	698
70001-80000	479	255	734
80001-90000	459	252	711
90001-100000	414	245	659
Grand Total	4697	2471	7168

Salary Class	Hired	Rejected	Grand Total		Salary Class
1-10000	439	239	678		1-10000
10001-20000	489	243	732		10001-20000
20001-30000	457	254	711		20001-30000
30001-40000	486	224	710		30001-40000
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70001-80000	479	255	734		70001-80000
80001-90000	•	459	252	711	80001-90000
90001-100000	414	245	659		90001-100000

Class Interval for Salaries

☐ Candidates Hired ☐ Candidates Offered

|	1-10000	10001-20000	20001-30000	30001-40000	40001-50000	50001-60000	60001-70000	70001-80000	80001-90000	90001-100000
☐ Candidates Hired	439	489	457	486	528	496	450	479	459	414
☐ Candidates Offered	678	732	711	710	783	752	698	734	711	659

Insights:

- The highest pay provided falls within the range of Currency-Unit 40001–50000, whilst the lowest income offered falls within the range of Currency-Unit 90001–100000 and Currency-Unit 1–10000. This means that assuming that pay is directly correlated with work experience, the majority of the requirements for entry-level positions and senior positions had the least amount of experience.

- We can also see that assuming that pay is directly correlated with work experience, the majority of applicants are hired for positions requiring moderate experience, while the least number of candidates are hired for senior positions and new graduates.

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

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

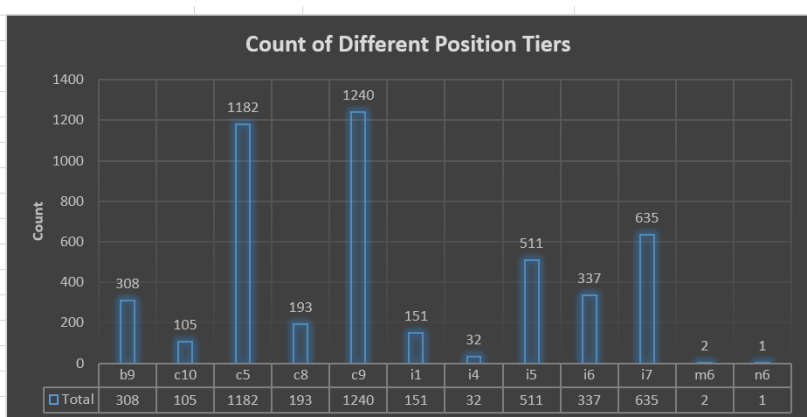| Status	Hired	
Department	**Dept. wise Proportion**	
Finance Department	3.75%	
General Management	2.41%	
Human Resource Departm	1.49%	
Marketing Department	4.30%	
Operations Department	39.24%	
Production Department	5.24%	
Purchase Department	4.90%	
Sales Department	10.33%	
Service Department	28.36%	
Grand Total	**100.00%**	

Proportion of People in Different Departments
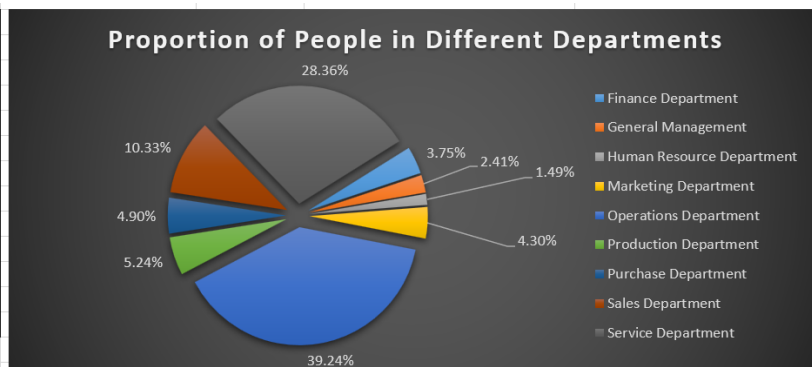
Insights:

- The aforementioned pie chart shows that the operations department hires the most applicants, followed by the sales and services departments, while the human resources department hires the fewest candidates.
- These figures could represent the size of the teams and the significance of the various departments inside the company.

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

Your 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.

Status	Hired	
Post Name	**Count of application_id**	
b9	308	
c10	105	
c5	1182	
c8	193	
c9	1240	
i1	151	
i4	32	
i5	511	
i6	337	
i7	635	
m6	2	
n6	1	
Grand Total	**4697**	

Count of Different Position Tiers

	b9	c10	c5	c8	c9	i1	i4	i5	i6	i7	m6	n6
Total	308	105	1182	193	1240	151	32	511	337	635	2	1

Insights:

- Here, we can see that the company has employed the greatest number of candidates for post-tier C9, with C5 and I7 coming in a distant third.

Result

- This project made it easier for me to see how crucial data analytics is to an organization's recruiting process since it offers useful information like the number of rejections, the reasons behind them, applicant profiles, job openings, and more, all of which assist the hiring department in making data-driven decisions.

Drive Link

X Hiring Process Analytics.xlsx