HIRING PROCESS ANALYTICS

EXCEL PROJECT

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- **Description:**

Hiring process is the fundamental and the most important function of a company. Here, the MNCs get to know about the major underlying trends about the hiring process. Trends such as- number of rejections, number of interviews, types of jobs, vacancies etc. are important for a company to analyse before hiring freshers or any other individual. Thus, making an opportunity for a Data Analyst job here too!

Being a Data Analyst, your job is to go through these trends and draw insights out of it for hiring department to work upon.

- **Approach:**
  1) Understand the data: Before beginning the analysis, I took some time to familiarize with the data. Look at the structure of the data and get a sense of the overall content. This help me identify any potential issues or challenges that I may need to address as I proceed with my analysis.
  2) Check for missing or incomplete data: Make sure to check for any blank values or missing data in your dataset
  3) Identify and handle outliers: Outliers are data points that are significantly different from the rest of the data. They can have a significant impact on summary statistics and can distort the results of your analysis. It's important to identify any outliers and decide how to handle them, such as by excluding them from the analysis or by treating them as separate cases.
  4) Communicate your findings: Once completed with analysis, present your findings to your audience in a clear and concise way. Use visualizations, such as charts and graphs, to help communicate your results. Be sure to clearly explain your methodology and the implications of your results.
- **Tech Stack Used:**
  MS-Excel to explore, analyse and visualize my data

- **Question:**

A. Hiring: Process of intaking of people into an organization for different kinds of positions.

   Your task: How many males and females are Hired?

B. Average Salary: Adding all the salaries for a select group of employees and then dividing the sum by the number of employees in the group.

   Your task: What is the average salary offered in this company?

C. Class Intervals: The class interval is the difference between the upper-class limit and the lower-class limit.

   Your task: Draw the class intervals for salary in the company?

D. Charts and Plots: This is one of the most important parts of analysis to visualize the data.

   Your task: Draw Pie Chart / Bar Graph (or any other graph) to show proportion of people working different department?

E. Charts: Use different charts and graphs to perform the task representing the data.

   Your task: Represent different post tiers using chart/graph?

- **Insights:**

A. **Hiring:** Process of intaking of people into an organization for different kinds of positions.

Your task: How many males and females are Hired?

Visualization 1: Male and Female Hired and Rejected

Row Label	Female	Male	Grand Total
Hired	1856	2562	4418
Rejected	819	1521	2340
Grand Total	2675	4083	6758

Table 1

- According to the data, the number of males hired is 2562, while the number of females hired is 1856. This means that there are more males who were hired compared to females. And the number of males rejected is 1521, while the number of females rejected is 819. This means that there is more male who gets rejected as compared to females.

B. **Average Salary:** Adding all the salaries for a select group of employees and then dividing the sum by the number of employees in the group.

Your task: What is the average salary offered in this company?

Visualization 2: Average Salary Offered in company

Departments Name	AVG of offered Salary
Finance Department	49628.00694
General Management	58722.09302
Human Resource Department	49002.27835
Marketing Department	48489.93538
Operations Department	49151.35438
Production Department	49448.48421
Purchase Department	52452.66265
Sales Department	49310.38070
Service Department	50629.88418
Grand Total	456835.0798

Table 2

•The data contains outliers, which are data points that are significantly different from the rest of the data.

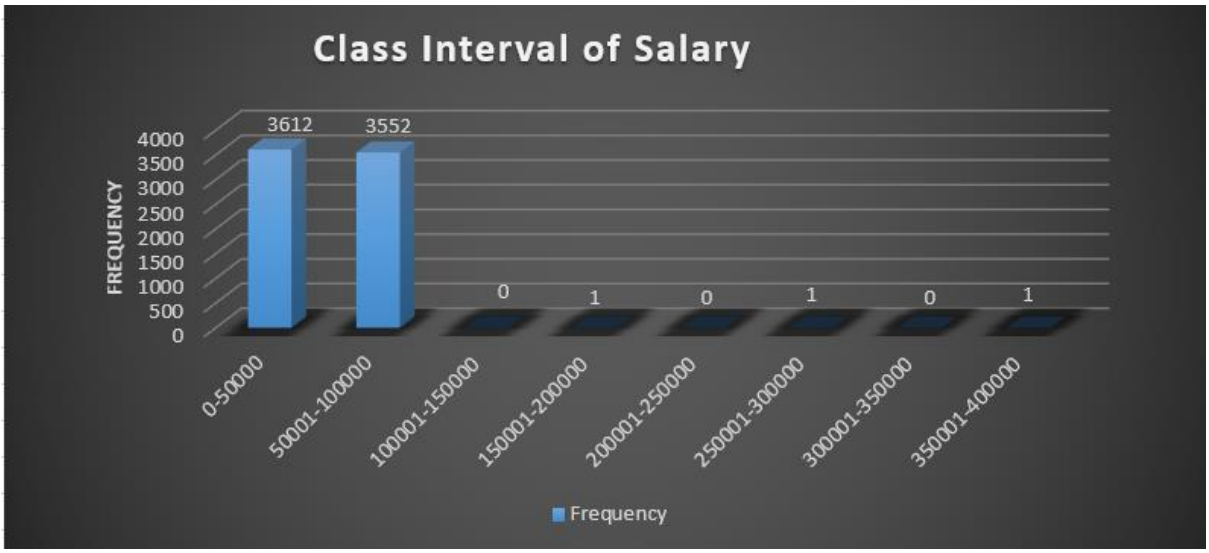
•Despite the presence of these outliers, they do not affect the average salary.

•If the outliers are included in the calculation, the average salary is 456835.

•If the outliers are excluded from the calculation, the average salary is 456835.080.

C. **Class Intervals:** The class interval is the difference between the upper-class limit and the lower-class limit.

Your task: Draw the class intervals for salary in the company?



Visualization 3: Class Interval for salary in company

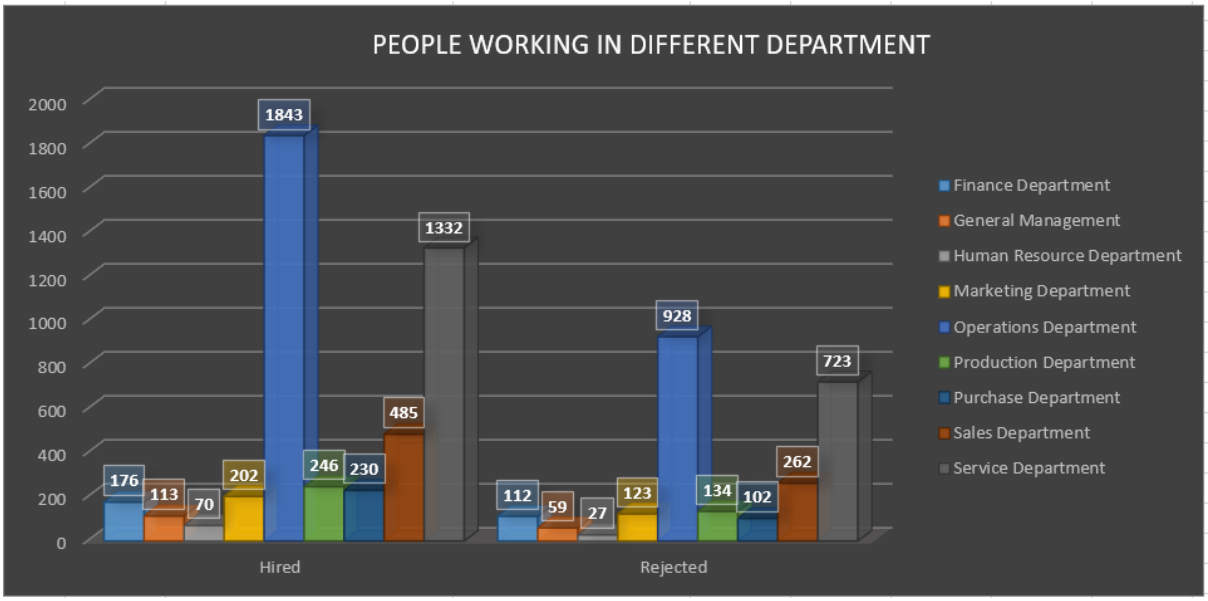
Salary Bin	Frequency
0-50000	3612
50001-100000	3552
100001-150000	0
150001-200000	1
200001-250000	0
250001-300000	1
300001-350000	0
350001-400000	1
Grand Total	7167

Table 3

- The majority of people in the dataset have salaries within the range of 100,000.
- The 3612 number of people have a salary of less than 50000.
- Here is the only one person has salary is greater than 350000.

D. **Charts and Plots:** This is one of the most important parts of analysis to visualize the data.

Your task: Draw Pie Chart / Bar Graph (or any other graph) to show proportion of people working different department?



Visualization 4: proportion of people working in different departments

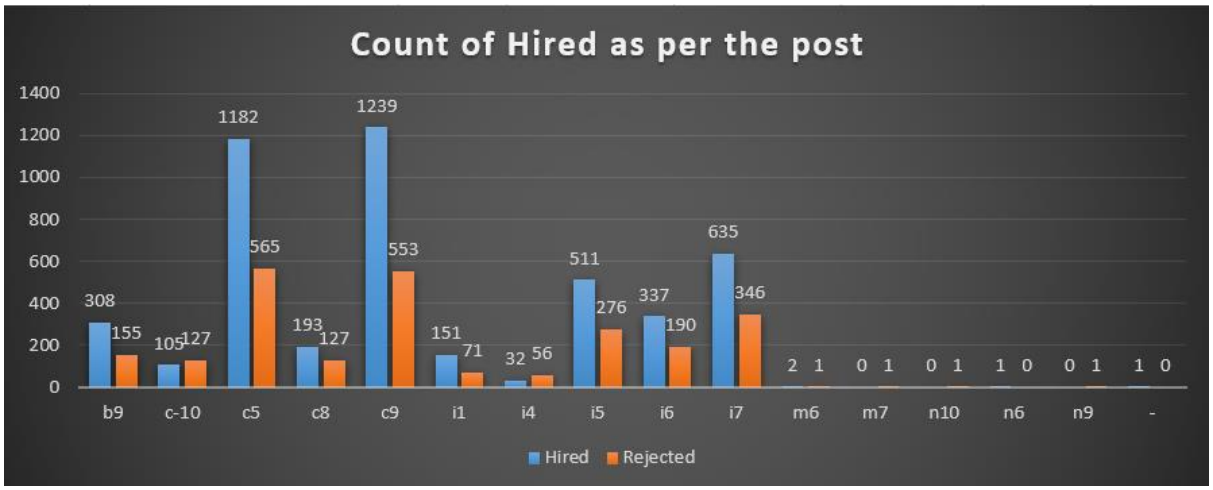
Department	Hired	Rejected	Grand Total
Finance Department	176	112	288
General Management	113	59	172
Human Resource Department	70	27	97
Marketing Department	202	123	325
Operations Department	1843	928	2771
Production Department	246	134	380
Purchase Department	230	102	332
Sales Department	485	262	747
Service Department	1332	723	2055
Grand Total	4697	2470	7167

Table 4

- The highest number of employees were hired to work in the Operations department (1843).
- The lowest number of employees were hired to work in the HR department (70).
- A significant portion of the workforce is concentrated in the operations and service departments.
- The highest number of employees were rejected in the operations department (928).

E. Charts: Use different charts and graphs to perform the task representing the data.

Your task: Represent different post tiers using chart/graph?



Visualization 5: Count of hired as per the post

Post Name	Hired	Rejected	Grand Total
b9	308	155	463
c-10	105	127	232
c5	1182	565	1747
c8	193	127	320
c9	1239	553	1792
i1	151	71	222
i4	32	56	88
i5	511	276	787
i6	337	190	527
i7	635	346	981
m6	2	1	3
m7	0	1	1
n10	0	1	1
n6	1	0	1
n9	0	1	1
-	1	0	1
Grand Total	4697	2470	7167

Table 5

- The most common job titles among the people in the dataset are C5 and C9.
- **Key Insights:**

- The number of males hired is 2562, while the number of females hired is 1856. This means that there are more males who were hired compared to females.
- If the outliers are included in the calculation, the average salary is 456835.
- If the outliers are excluded from the calculation, the average salary is 456835.08.
- The majority of people in the dataset have salaries within the range of 100,000.
- A significant portion of the workforce is concentrated in the operations and service departments.
- The most common job titles among the people in the dataset are C5 and C9

- **Result:**

- Most importantly, department and gender analysis were drawn which could help the hiring team take decisions based on the findings.
- The highest application approval rate was in the operation Department and lowest was in Service Department.
- I found some very crucial insights about the hiring process function of the company.
- Towards the end of the case study, I learned how a data analyst can add value to such a manual task as hiring employees.