PROJECT 04

Hiring Process Analytics

Project Description:

As a data analyst for a multinational company my task was to analyze the company's hiring process data and draw insights from it. I am given a dataset of the previous hires of the company and my job is to analyze the data given in order to help the company improve its hiring process. The analysis will require knowledge of Microsoft Excel.

Approach

Firstly, I downloaded the dataset from the given source. Next, I evaluated the dataset and understood the columns and its content. Following this, I identified any missing data and checked for outliers.

To clean the data, I eliminated the rows having empty or blank cells. And upon filtering by column name, I replaced the cells in the column 'event_name' which had '-' instead of any gender with 'Don't want to say' since there was no definite name for those cells.

Next I removed duplicate values by using the 'application_id' column.

I then used Pivot tables to further conduct my analysis.

Tech Stack Used:

- Microsoft Excel 2019

Cleaning the dataset:

- To handle missing data this blank cell found in the "Offered salary" column was deleted along with its row

- These blank cells in the "event_name" column were changed to "Don't want to say" as their gender as I assumed it to be neither male nor female.

- Duplicate values were removed as well. 27 duplicate values were found and removed. This was done by using the "application _id" column.

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?

A. Determining how many males and how many females were hired.

Row Labels	Count of Status
⊞ Don't want to say	408
⊟ Female	2675
Hired	1856
Rejected	819
⊟ Male	4084
Hired	2563
Rejected	1521
Grand Total	**7167**

Insights: The number of **females hired is 1856** and the number of **males hired is 2563.**

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.

B. Analysis of salaries offered

Row Labels	Average of Offered Salary
Finance Department	₹ 49,628.01
General Management	₹ 58,722.09
Human Resource Department	₹ 49,002.28
Marketing Department	₹ 48,489.94
Operations Department	₹ 49,151.35
Production Department	₹ 49,448.48
Purchase Department	₹ 52,564.77
Sales Department	₹ 49,310.38
Service Department	₹ 50,629.88
Grand Total	**₹ 49,983.03**

Using the function 'countif()'.

Department	Average Salary
Finance Department	49628.01
General Management	58722.09
Human Resource Department	49002.28
Marketing Department	48489.94
Operations Department	49151.35
Production Department	49448.48
Purchase Department	52564.77
Sales Department	49310.38
Service Department	50629.88

Insights: The overall average salary offered in this company is **Rs 49,983.03**

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.

D. Class interval of the salaries

Row Labels	Count of application_id
100-10099	686
10100-20099	728
20100-30099	711
30100-40099	713
40100-50099	776
50100-60099	754
60100-70099	698
70100-80099	733
80100-90099	716
90100-100099	649
190100-200099	1
290100-300099	1
390100-400099	1
Grand Total	**7167**
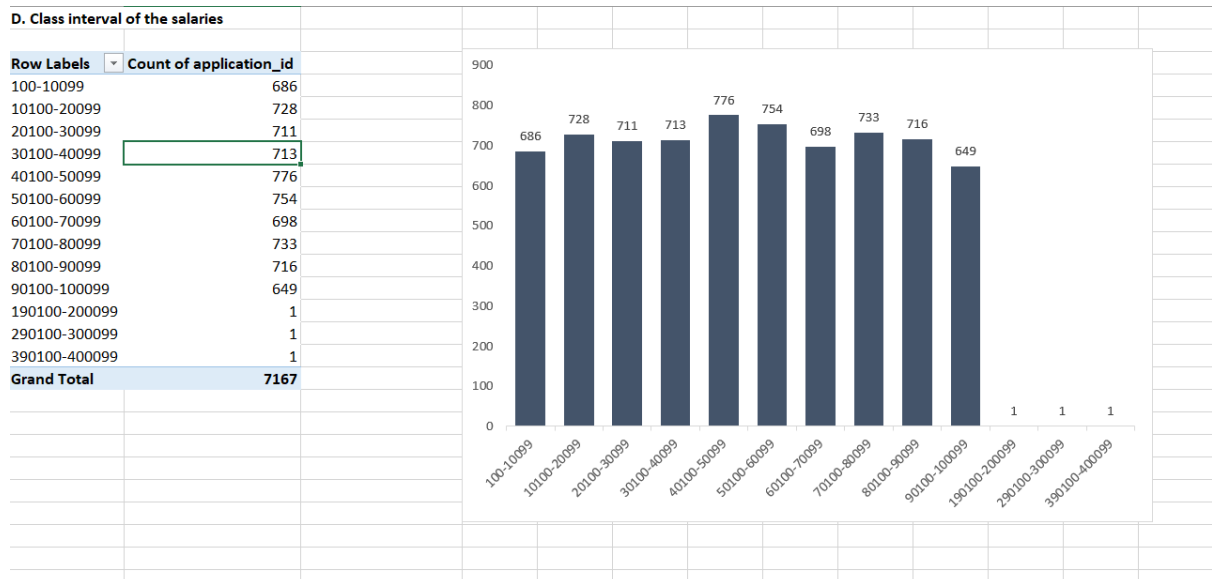
Insights: Created class intervals for salaries in the company to better understand the salary distribution within the company.
Maximum people i.e. 776 belong to the 40100 to 50099 offered salary range.

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.

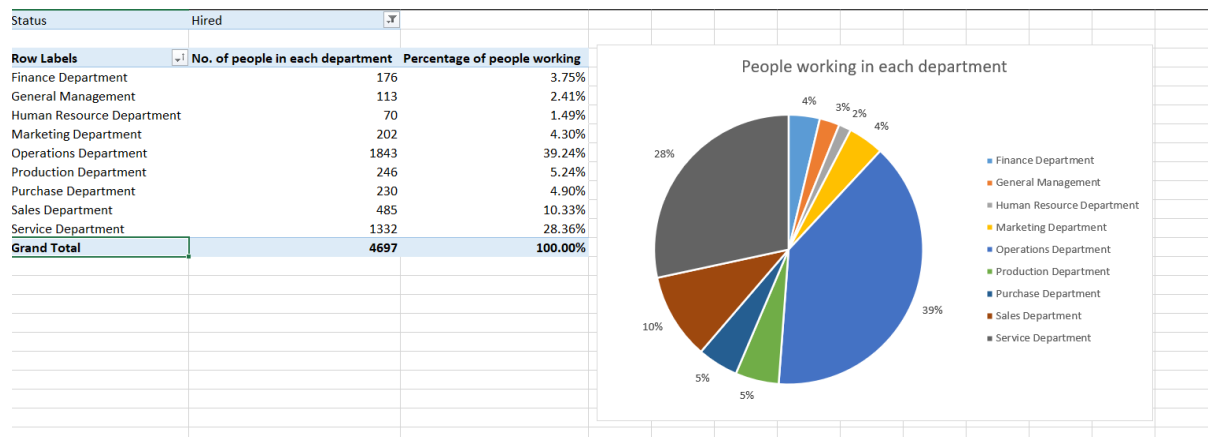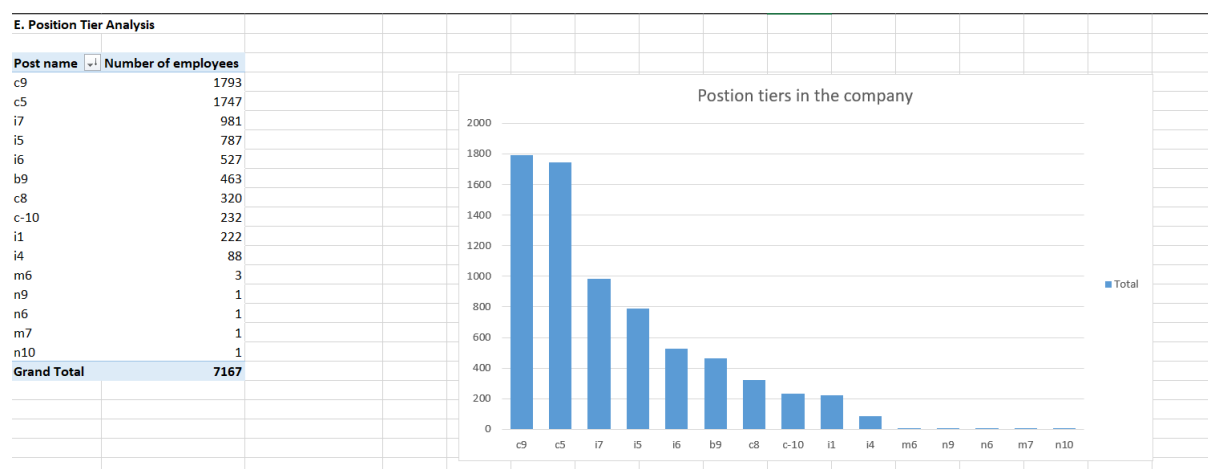| Status	Hired	
Row Labels	**No. of people in each department**	**Percentage of people working**
Finance Department	176	3.75%
General Management	113	2.41%
Human Resource Department	70	1.49%
Marketing Department	202	4.30%
Operations Department	1843	39.24%
Production Department	246	5.24%
Purchase Department	230	4.90%
Sales Department	485	10.33%
Service Department	1332	28.36%
Grand Total	**4697**	**100.00%**

People working in each department

Insights: Used a pie chart to visualize the proportion of people working in different departments. Here, only hired people are considered.
Most of the employees work in the Operation Department and the least number of employees work in the Human Resource Department.

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.

E. Position Tier Analysis

Post name	Number of employees
c9	1793
c5	1747
i7	981
i5	787
i6	527
b9	463
c8	320
c-10	232
i1	222
i4	88
m6	3
n9	1
n6	1
m7	1
n10	1
Grand Total	**7167**

Postion tiers in the company

Insights: The post name c9 has the greatest number of employees.

Conclusion:

With this project I was able to test my excel skills and derive insights as a data analyst for a multinational company. I was able to answer various questions and I could analyse the dataset and provide insights that could potentially help the company improve its hiring process and make better hiring decisions in the future.

Link:

https://docs.google.com/spreadsheets/d/1qt-DIME-DuVUjaP10yVxERTlXE-V1tHZ/edit?usp=drive_link&ouid=109524556463170667809&rtpof=true&sd=true