PROJECT-4

Hiring Process Analytics

Project description:

A company hiring procedure is an essential component. It may have an impact on the organization's total productivity. This results in a company's expansion.

Gaining insights into hiring patterns, such as the quality of interviews, job kinds, number of hired/rejections, and openings, can be beneficial for the hiring department.

Approach:

I started by downloading the dataset that the management had provided. Then by eliminating duplicate entries, outliers this way I clean the data.

To do an analysis of data bar graphs, pivot tables, excel formulas, functions, and statistical measurement were all utilized by me in excel. My understanding of insights is made easier by this analysis.

The conclusions drawn from this analysis are documented in Microsoft word and saved as PDF.

Tech-Stack-Used:

Microsoft® Excel® for Microsoft 365 MSO (Version 2311 Build 16.0.17029.20068) 32-bit

With Microsoft excel, I may format, arrange, and compute data on spreadsheet.

Data analyst can make information easier to examine when new or modified data is added by using excel software. Working on spreadsheets in real time with automatic saving and updating is possible when utilizing Excel 365.

Insights:

A. Hiring Analysis:

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

```
=COUNTIFS(D:D,"Male",C:C,"Hired")
```

Number of males hired by company - 2563

```
=COUNTIFS(D:D,"Female",C:C,"Hired")
```

Number of Females hired by company - 1856

The company employed 1856 women and 2563 men out of a total of 7167 applicants.

B. Salary Analysis:

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

```
=AVERAGE(G:G)
```

average salary offered by company - 49983.03/-

Departmental wise average salary:

```
=AVERAGEIF(E:E,"Service Department",G:G)
```
- 50629.88418

```
=AVERAGEIF(E:E,"Operations Department",G:G)
```
- 49151.35438

```
=AVERAGEIF(E:E,"Finance Department",G:G)
```
- 49628.00694

```
=AVERAGEIF(E:E,"Human Resource Department",G:G)
```
- 49002.27835

```
=AVERAGEIF(E:E,"Marketing Department",G:G)
```
- 48489.93538

```
=AVERAGEIF(E:E,"Production Department",G:G)
```
- 49448.48421

```
=AVERAGEIF(E:E,"Purchase Department",G:G)
```
- 52564.77477

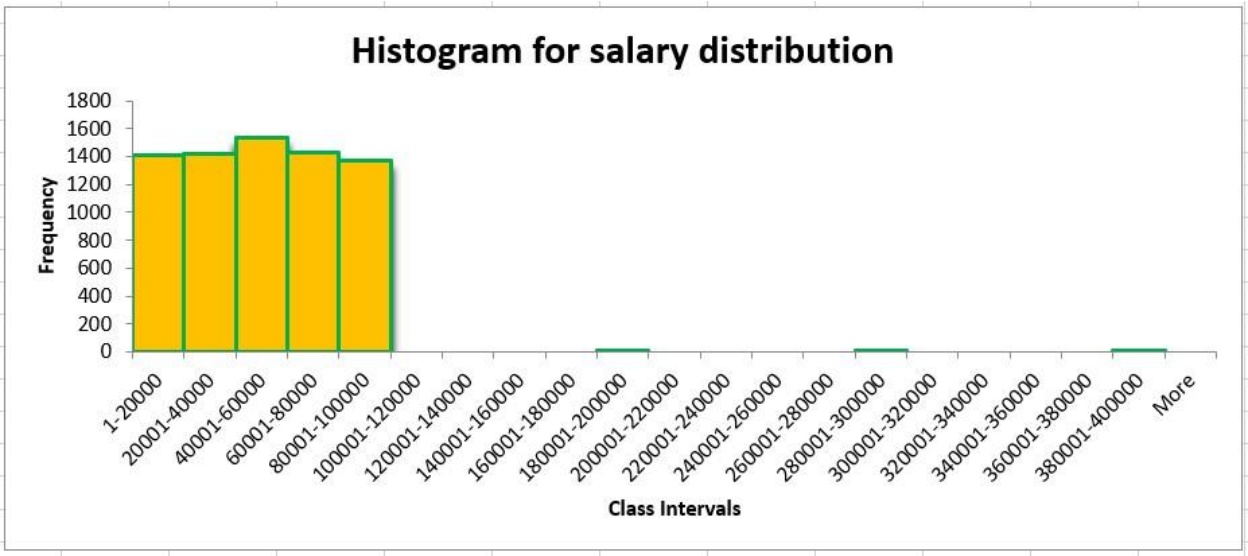
```
=AVERAGEIF(E:E,"Sales Department",G:G)
```
- 49310.3807

```
=AVERAGEIF(E:E,"General Management",G:G)
```
- 58722.09302

C. Salary distribution:

Task- Create class intervals for the salaries in the company. This will help us to understand the salary distribution.

Class Intervals	Salary Distribution
1-20000	1410
20001-40000	1421
40001-60000	1531
60001-80000	1432
80001-100000	1370
100001-120000	0
120001-140000	0
140001-160000	0
160001-180000	0
180001-200000	1
200001-220000	0
220001-240000	0
240001-260000	0
260001-280000	0
280001-300000	1
300001-320000	0
320001-340000	0
340001-360000	0
360001-380000	0
380001-400000	1
More	0



The salary distribution among employees in the organization is highly correlated with the class interval range between 40001 – 60000, as

indicated by the above histogram. It is quite evident that there is a very less salary distribution range above 100000/-.

D. Departmental analysis:

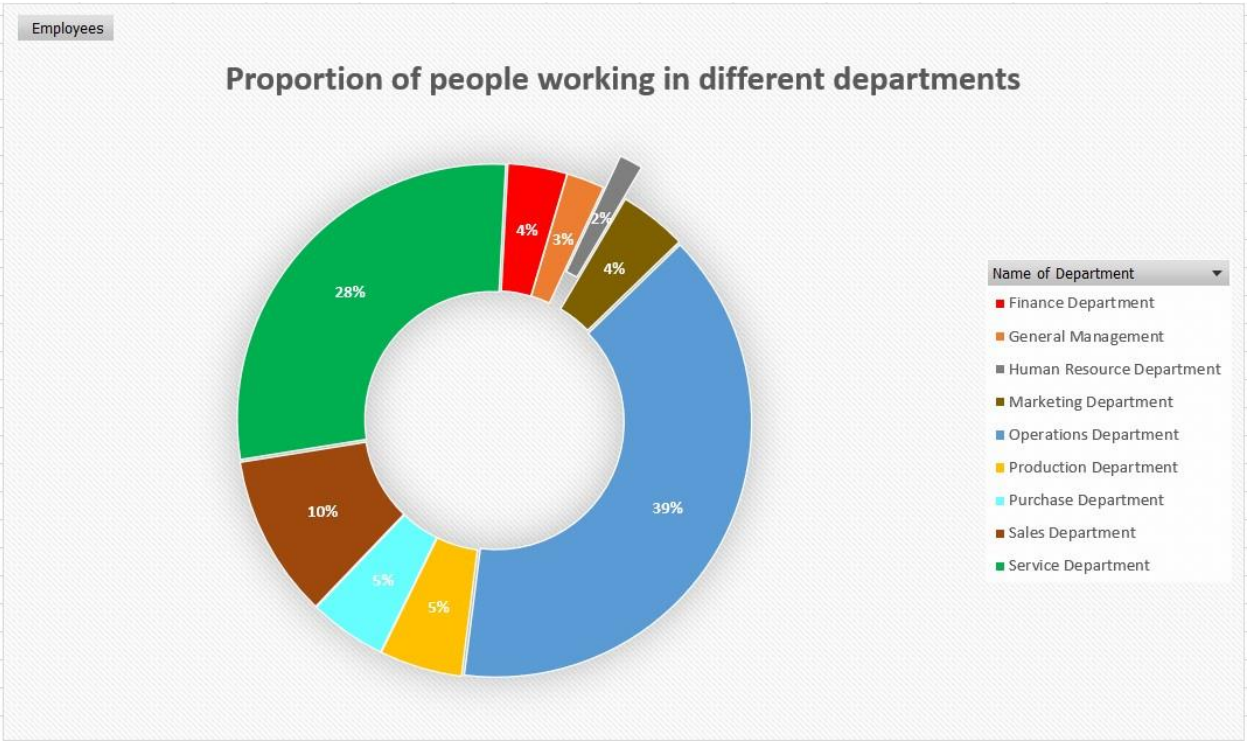
Task- Use pie chart, bar graph, or any other suitable visualization to show the proportion of people working in different departments.

For finding no. of employees working in each department I used below formula for different department names.

```
=COUNTIFS(E:E,"Service Department",C:C,"Hired")
=COUNTIFS(E:E,"Operations Department",C:C,"Hired")
=COUNTIFS(E:E,"Purchase Department",C:C,"Hired")
=COUNTIFS(E:E,"Finance Department",C:C,"Hired")
=COUNTIFS(E:E,"Marketing Department",C:C,"Hired")
=COUNTIFS(E:E,"Human Resource Department",C:C,"Hired")
=COUNTIFS(E:E,"Production Department",C:C,"Hired")
=COUNTIFS(E:E,"Sales Department",C:C,"Hired")
=COUNTIFS(E:E,"General Management",C:C,"Hired")
```

No.of Employees	Name of Department
1332	Service Department
1843	Operations Department
230	Purchase Department
176	Finance Department
202	Marketing Department
70	Human Resource Department
246	Production Department
485	Sales Department
113	General Management

Row Labels	No.of Employees	
Finance Department	176	4%
General Management	113	3%
Human Resource Department	70	2%
Marketing Department	202	4%
Operations Department	1843	39%
Production Department	246	5%
Purchase Department	230	5%
Sales Department	485	10%
Service Department	1332	28%
Grand Total	**4697**	



The pie chart depicts the proportion of individuals employed in various departments.

The largest proportion of employees working in the operation department was 39% out of 100%. In terms of numbers, there are 1843 employees working out of 4697.

Out of nine departments, the human resource department had the fewest employees (2%), with 70 people.

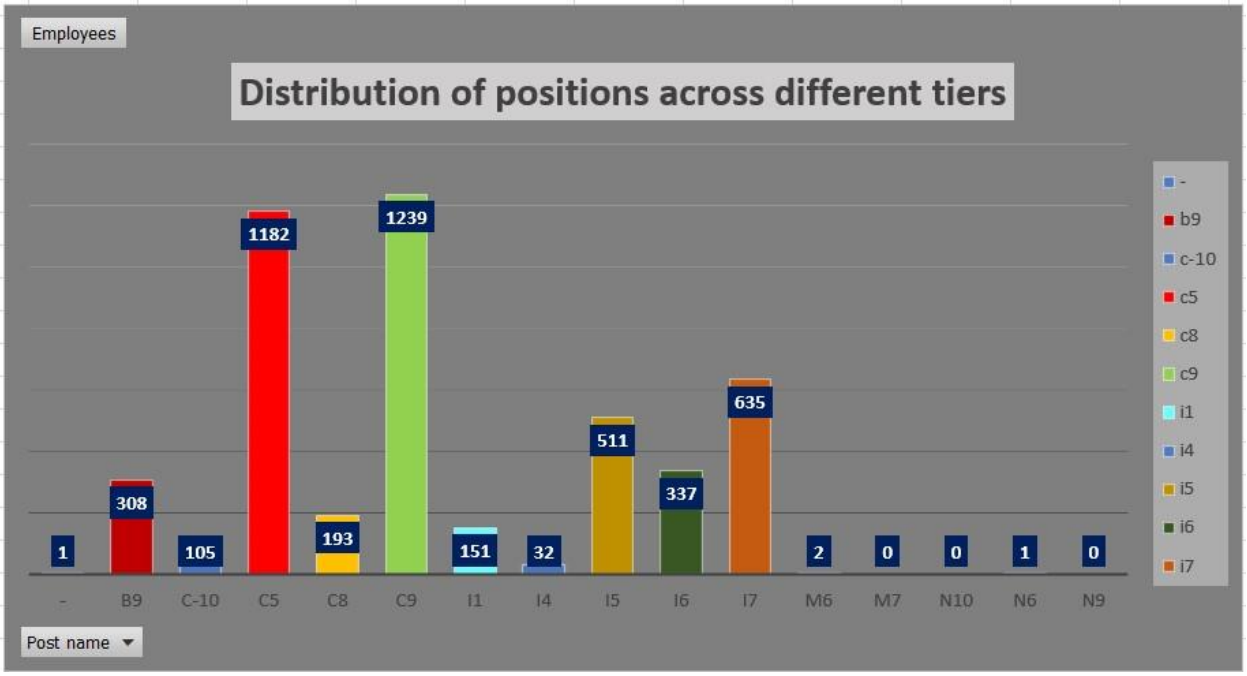
E. Position Tier Analysis:

Task- use a chart or graph to represent different position tiers within the company. This will help us to understand the distribution of positions across the tiers.

For finding different position tiers I used the formula below for different tier names.

```
=COUNTIFS(F:F,"b9",C:C,"Hired")
```

Post Name	Employees
-	1
b9	308
c-10	105
c5	1182
c8	193
c9	1239
i1	151
i4	32
i5	511
i6	337
i7	635
m6	2
m7	0
n10	0
n6	1
n9	0
Grand Total	**4697**



The distribution of position across different tiers was shown using a bar graph. It clearly states that there were 1239 individuals working under post designation ‘c9’. And it goes as follows in descending order c5, i7, i5, i6, b9, c8, i1, c-10, i4, m6, n6, -.

Result:

I was able to extract significant information from the given dataset hiring process by utilizing my extensive excel abilities. And I gain valuable insights from it. This project taught me how to deal with the missing data, outliers, and detect outliers from a given dataset. With the use of excel functions, pivot tables, charts, bar graphs, and pie charts, I gained valuable insights from this project. I also learnt how a data analyst may assist a company in analyzing data from the hiring process and understanding trends such as the number of rejections, hires, interviews, and job kinds for the hiring department. Using this analysis, the hiring department may make important decisions for the company’s growth.

EXCEL SHEET-LINK: workbook

https://docs.google.com/spreadsheets/d/1VJdMrvxtUkt_q20-Io24B9mgMYjv6ftu/edit?usp=sharing&ouid=100964008805735709631&rtpof=true&sd=true