TRAINITY DATA ANALYTICS PROJECT-4

HIRING PROCESS ANALYTICS

PROJECT DESCRIPTION:

This project aims to analyze a multinational company's dataset containing information about individuals who registered for a specific position within a department. The analysis will require the application of statistical knowledge and Excel formulas to draw relevant conclusions about the company. The analysis will involve data sorting and filtering, calculating descriptive statistics, and creating graphs to visualize the data. Through this analysis, the project aims to provide insights to the company for better recruitment and hiring decisions.

APPROACH:

To commence a hiring process analytics project, the first step is to obtain the dataset and carry out a comprehensive evaluation of the data columns and content. Following this, any missing data is identified and removed while outliers are examined to guarantee the precision of the analysis and reduce any potential bias. Once the data is cleaned, a detailed summary is prepared to highlight significant findings and insights, enabling more informed decision-making. Employing this rigorous approach ensures that the project is conducted with great attention to detail, delivering valuable insights that can help streamline the hiring process for the organization, with a focus on optimizing the recruitment of freshers.

TECH-STACK USED:

- Microsoft Excel

INSIGHTS:

Through my involvement in this project, I gained valuable experience and insights into leveraging advanced formulas and pivot tables in Microsoft Excel to extract valuable insights from the database. One key potential insight that emerged from the analysis is the ability to understand the demographic makeup of the company's hiring process. This information can be used to identify opportunities to enhance recruitment strategies and attract a more diverse pool of candidates, ultimately leading to a more inclusive and effective workforce.

A) Hiring: How many males and females are Hired ?

SOLUTION:

Total number males hired

=COUNTIFS(A:A,A2,B:B,B7)

Total number females hired

=COUNTIFS(A:A,A3,B:B,B3)

Other persons hired

=SUM((COUNTIFS(A:A,A17,B:B,B3)),(COUNTIFS(A:A,A23,B:B,B7)))

Total number males hired	Total number females hired	Other persons hired
2563	1856	278

B) Average Salary: What is the average salary offered in this company ?

SOLUTION:

Finding unique values in a group:

=UNIQUE(C:C)

Finding average salary for group of departments:

=ROUND(AVERAGEIF(C:C,$E2,B:B),2)

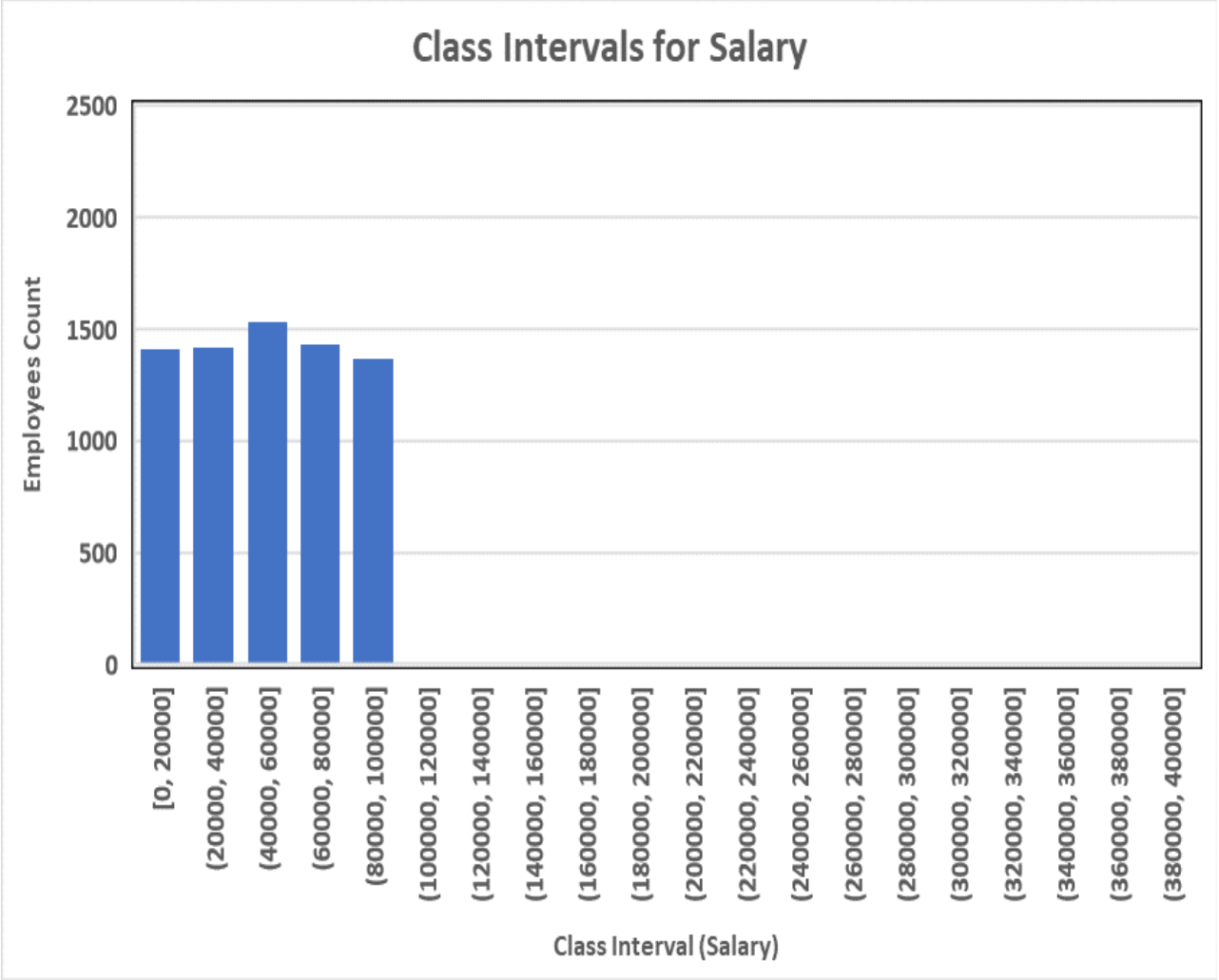
Departments	**Average Salary**
Service Department	₹ 50,629.88
Operations Department	₹ 49,151.35
Sales Department	₹ 49,310.38
Finance Department	₹ 49,628.01
Production Department	₹ 49,448.48
Purchase Department	₹ 52,564.77
Marketing Department	₹ 48,489.94
General Management	₹ 58,722.09
Human Resource Department	₹ 49,002.28

C) Class Intervals: Draw the class intervals for salary in the company ?

SOLUTION:

Class interval of salary	Number of employees
<1	1
1-20000	1410
20001-40000	1421
40001-60000	1531
60001-80000	1432
80001-100000	1370
180001-200000	1
280001-300000	1
380001-400000	1
Grand Total	7168

HISTOGRAM CHART:



D) Charts and Plots: Draw Pie Chart / Bar Graph (or any other graph) to show proportion of people working different department ?

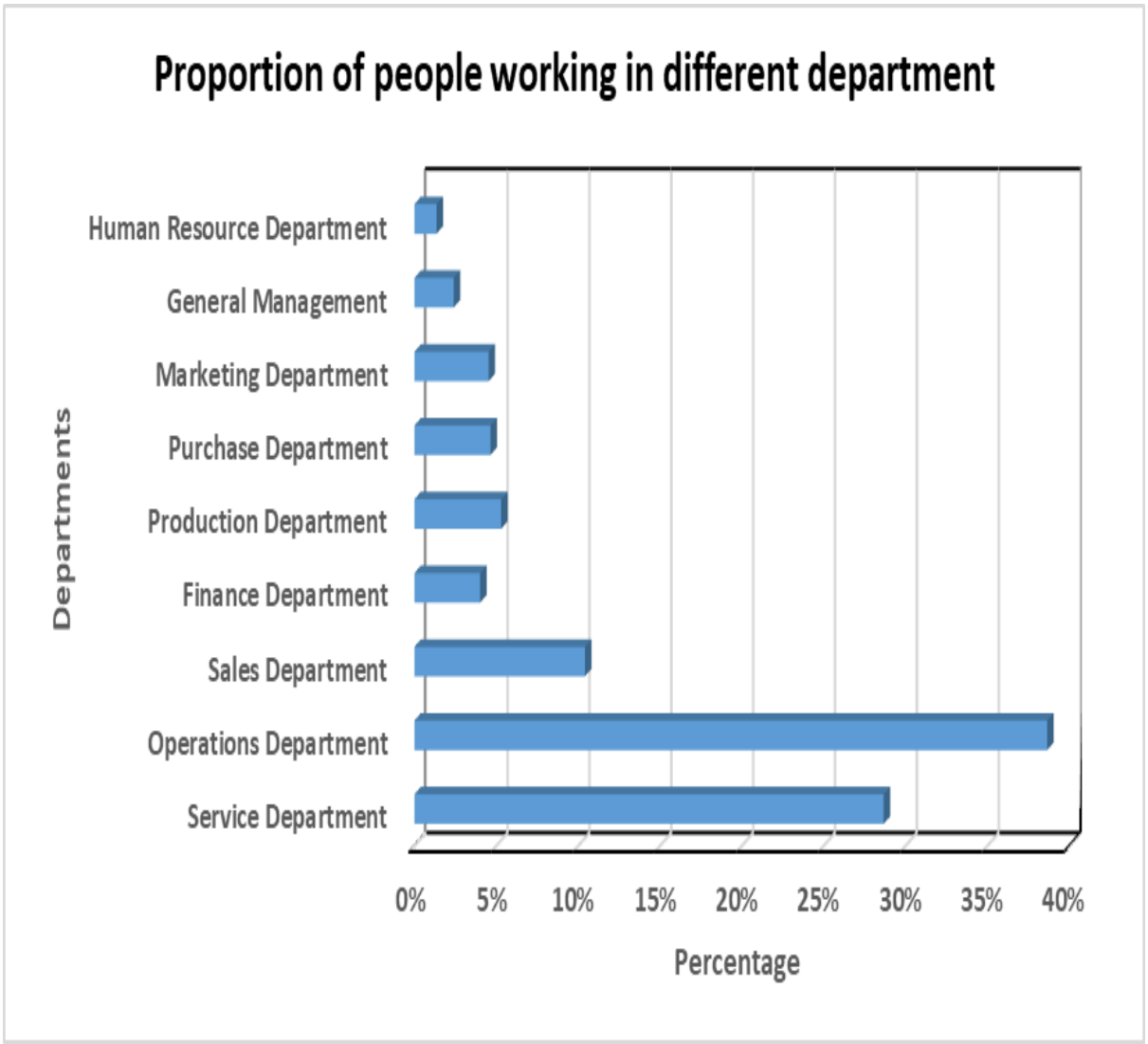
SOLUTION:

To calculate the proportion of people working different department:

=COUNTIF(B:B,$E2)/COUNT(A:A)

Departments	**Percentage**
Service Department	29%
Operations Department	39%
Sales Department	10%
Finance Department	4%
Production Department	5%
Purchase Department	5%
Marketing Department	5%
General Management	2%
Human Resource Department	1%

BAR CHART


Proportion of people working in different department
Departments
Human Resource Department
General Management
Marketing Department
Purchase Department
Production Department
Finance Department
Sales Department
Operations Department
Service Department
0%
5%
10%
15%
20%
25%
30%
35%
40%
Percentage

E) Charts: Represent different post tiers using chart/graph?

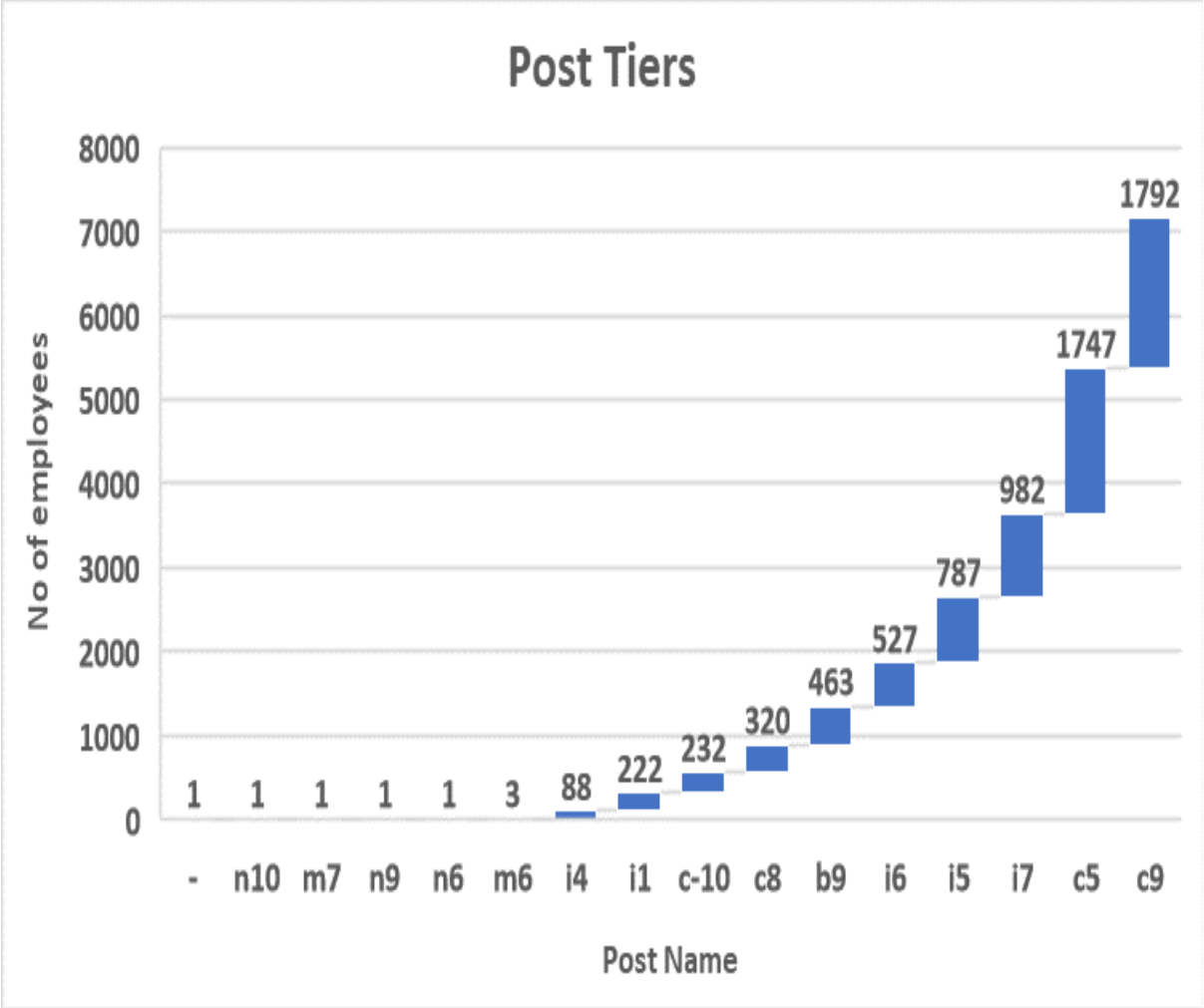
SOLUTION:

=COUNTIF(B:B,$F2)

Post Name	Number of employees
-	1
n10	1
m7	1
n9	1
n6	1
m6	3
i4	88
i1	222
c-10	232
c8	320
b9	463
i6	527
i5	787
i7	982

c5	1747
c9	1792

WATERFALL CHART



RESULTS:

- The total percentage of **mens** hired is **54.5%**, the total percentage of **womens** hired is **39.5%** and the total number of persons whose **gender is not mentioned is 5.9%.**
- The **General Management department** has the **highest** average salary and the **Marketing department** has the **lowest** average salary.
- The **majority** of the employees fall into the salary class interval of **40001-60000**.
- The **majority** of the new hires have been assigned to the **operations department,** while a **smaller** proportion of new employees have been recruited to the **human resource department.**
- The post tier **c9** has the **highest** number of employees.

DRIVE LINK:

https://docs.google.com/document/d/1t4HrkThpMwf6N1lGc4xk_sLf6WWLjuaRZ0YzOAaIoSg/edit?usp=sharing