Hiring Process Analytics

Presented by-

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Project Description:-

As a data analyst immersed in the dynamic realm of a multinational company, akin to the scale and complexity of Google, this project delves into the meticulous analysis of the company's hiring process data. The overarching goal is to derive actionable insights that can significantly contribute to the enhancement of the company's hiring strategies and decision-making

processes.

Data Preparation Tasks:

1. Handling Missing Data:

Identify and address any missing values in the dataset to ensure the integrity of subsequent analyses. Employ suitable strategies such as imputation or exclusion based on the nature and impact of missing data.

2. Clubbing Columns:

Streamline the dataset by consolidating columns with multiple categories, simplifying the subsequent analytical process and promoting clarity in understanding.

3. Outlier Detection and Removal:

Employ statistical methods to identify outliers within the dataset that could potentially skew analyses. Decide on the most appropriate strategy, whether it involves removal, replacement, or retaining outliers based on the specific context.

4. Data Summary:

After cleaning and preparing the data, generate a comprehensive summary. Utilize statistical measures such as averages, medians, and create visualizations to provide a nuanced understanding of the dataset.

Tech-Stack Used:-

Excel served as the main data analysis program for the present study. The Microsoft Excel 2019 version was utilized. Excel offers an extensive set of features and tools to make data handling, statistical computations , and visualization easier.

Data Analytics 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?

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.

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. 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.

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.

Insights Unveiled:

A. Gender Dynamics:

- **What We Unearthed:** We took a deep dive into the data to uncover the balance between male and female hires. This not only tells us about the mix of talents but also gives a pulse on how diverse the company is.

B. Paycheck Pulse:

- **What's Beneath the Surface:** Crunching the numbers, we discovered the average salary the company dishes out. It's not just a figure; it's a key to understanding how attractive the company is in the job market competition.

C. Salary Snapshots:

- **What the Numbers Paint:** We broke down salaries into neat groups, like organizing snapshots into an album. This helps us see the salary landscape clearly, spotting trends and segments within the organization.

D. Departmental Canvas:

- **The Visual Workforce Map:** Imagine painting a picture of the company's different departments. Pie charts and bar graphs do just that, showing us how the workforce is spread out across the organization.

E. Career Elevations Charted:

- **Mapping the Corporate Peaks:** Using charts and graphs, we sketched out the various tiers of positions in the company. This visual roadmap tells us about the company's hierarchy and the journey employees take in their careers.

In essence, our data expedition isn't just about numbers; it's about painting a vivid picture of the company's inner workings. These insights aren't just facts; they're keys to unlocking better strategies and understanding the heartbeat of the organization.

Task-A:

Hiring Analysis:-

The following conclusions can be drawn from the above table and bar plot:

- 2563 men have been hired by the company for various tasks .
- Although just 1855 women have been engaged by the organization for various roles
- By evaluating the gender distribution, the organization may promote equitable opportunity for all genders and make data-driven decisions.
- Enhancing gender diversity and inclusivity inside the company may be a long-term strategic goal.

Status	Gender	Count
Hired	Male	2563
Hired	Female	1855


Proportion of Male and females hired
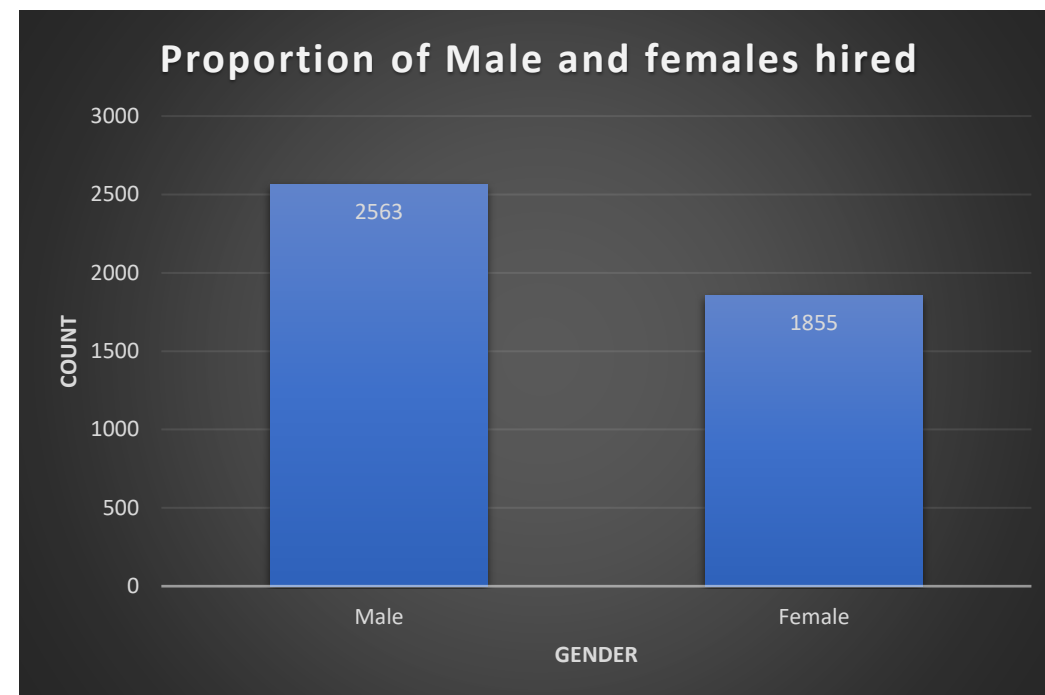
Task B:-

B. Salary Analysis:

- For calculating Average salary at first we have filtered out the data by removing the outliers like salaries greater than 1000 and less than 100000 to get the accurate result.

- According to the statistics, the average offered salary is $49983.02902.This average salary serves as a baseline for evaluating the company's compensation plan.

- The average pay gives useful information regarding the company's competitiveness in the job market.

| Lowest Salary	Avg Salary	Highest Salary
100	49983.029	200000
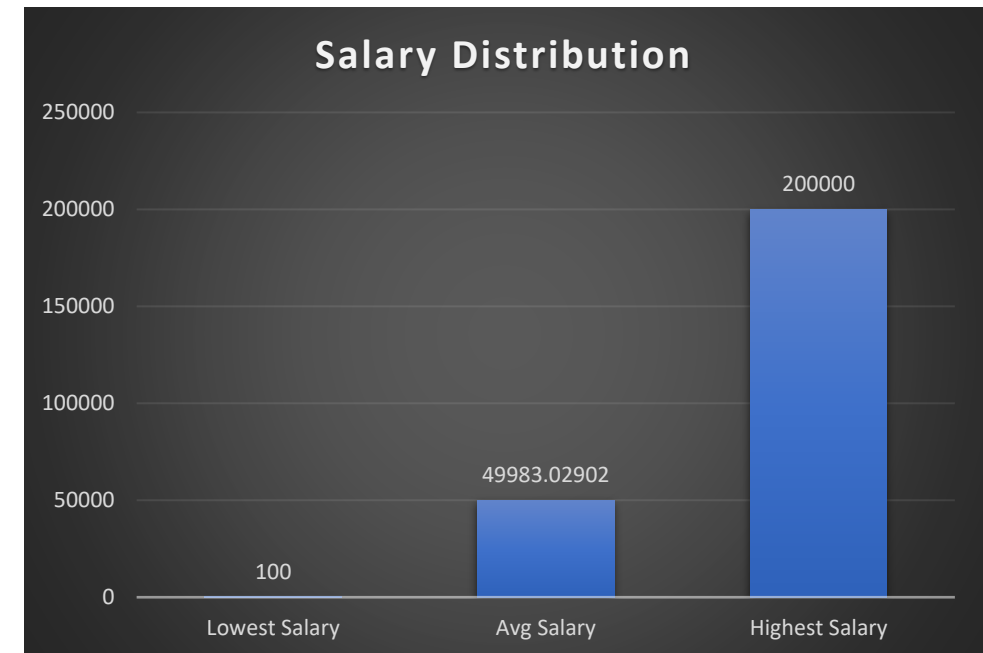
Task C:-

C. Salary Distribution:

According to the Bar plot, the maximum number of posts (both employed and rejected) is 781 for the pay range 40001-50000.

Distributed Salary range	No of salary offered
1-10000	674
10001-20000	731
20001-30000	708
30001-40000	710
40001-50000	781
50001-60000	750
60001-70000	697
70001-80000	733
80001-90000	708
90001-100000	656
190001-200000	1
290001-300000	1
390001-400000	1
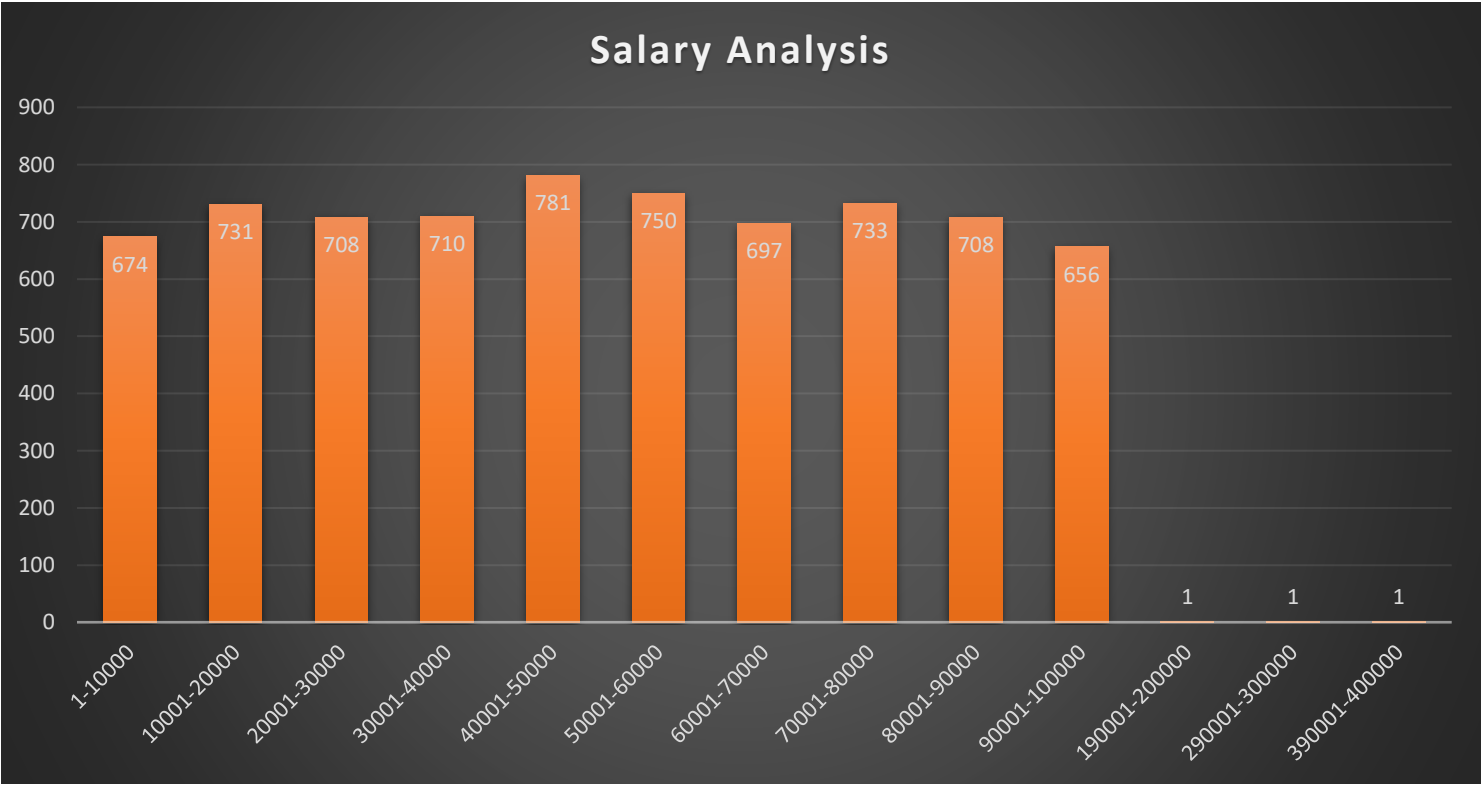
Task D:-

D. Departmental Analysis:

Department	Count
Service Department	2055
Operations Department	2771
Sales Department	747
Finance Department	288
Production Department	380
Purchase Department	333
Marketing Department	325
Human Resource Department	97

Department Analysis

- Service Department
- Operations Department
- Sales Department
- Finance Department
- Production Department
- Purchase Department
- Marketing Department
- Human Resource Department
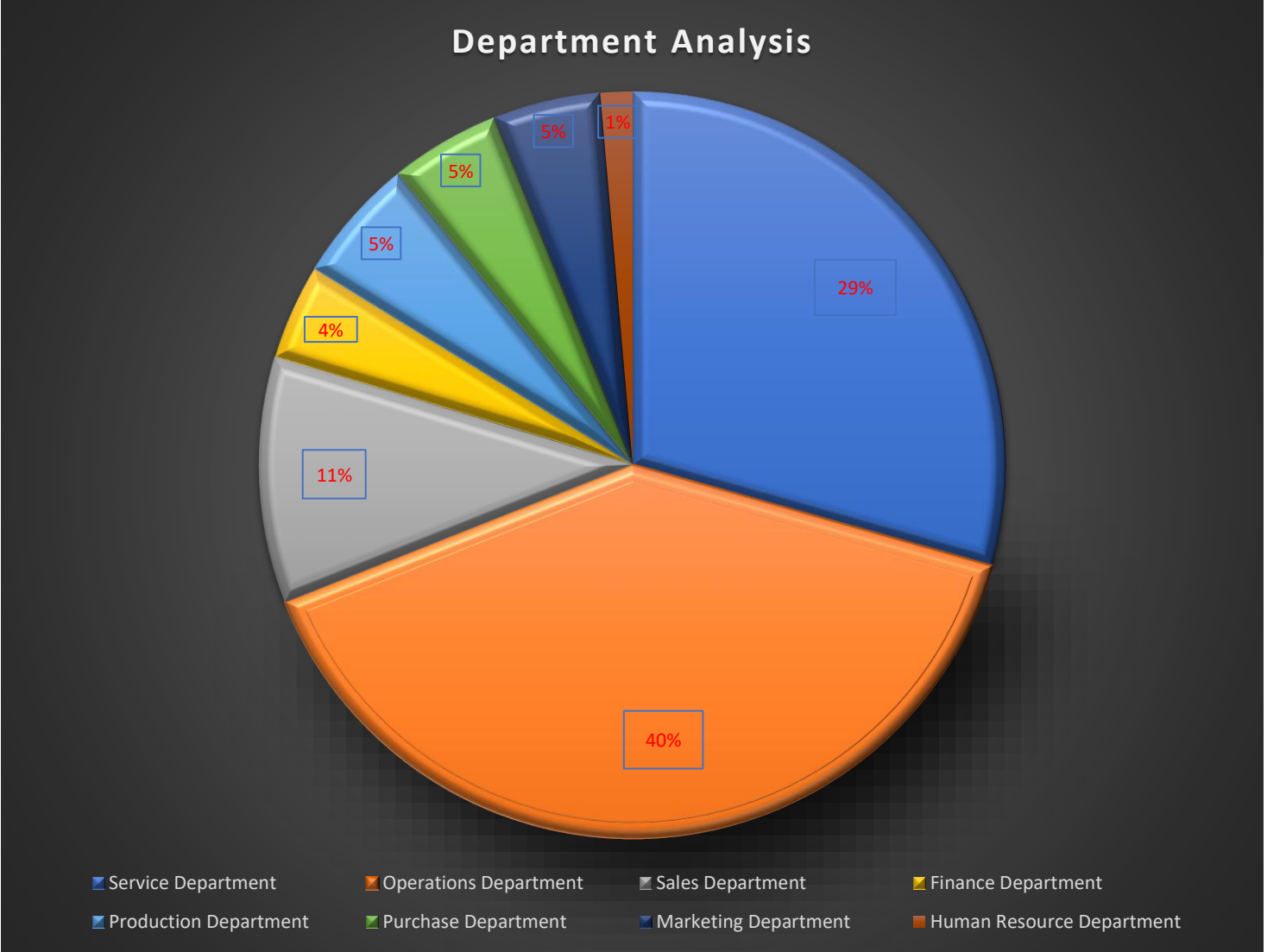
Task E:-

E. Position Tier Analysis:

According to the following table, bar plot, and pie chart, the c9 post has the most job opportunities (1792), accounting for 25% of the total job openings of the company/firm.

Post Name	Count
b9	464
c-10	232
c5	1746
c8	319
c9	1792
i1	222
i4	86
i5	787
i6	527
i7	980
m6	3
m7	1
n10	1
n6	1
n9	1