

Hiring Process Analytics

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Project Description :

This project is regarding gathering of insights about Hiring Process based on data provided which can be helpful for hiring department to improve its hiring process.

Approach :

We use Microsoft Excel to clean data , gather insights and create charts and graphs with the findings which will aid the Hiring Team to improve their hiring process.

Tools/Technologies Used

In this project , we use Microsoft Excel as the primary tool to gather relevant insights from the given data.

Insights

Learnt how to use Microsoft Excel to clean and transform data into charts and graphs to make data-driven decisions. Understood the use of various Excel functions along with how to use Pivot Tables and Pivot Charts.

Result

To identify trends and patterns in the hiring process data to understand which areas are doing well and which needs improvement.

Overall Learning and Progress

Clear understanding on how to use Excel Functions , Finding and Handling Data inconsistencies , Creating Charts and Graphs to understand the data better , Use of Statistical functions to obtain the mean , median and mode for certain columns.

Link to Excel Sheet :

https://docs.google.com/spreadsheets/d/1UgQeZjqNCyaP4jSqLMf9prAuNTZB-d_n/edit?usp=sharing&oid=109364225215600406012&rtpof=true&sd=true

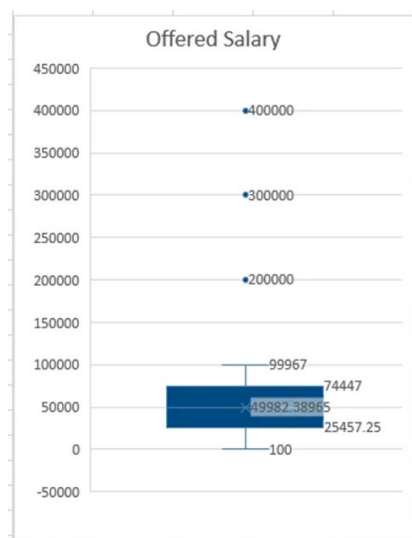
1. Handling Missing Data:

- Column “event_name” has 15 records with value “-” which means the value is NULL. We can replace it with “Don’t want to say” as it signifies the same meaning.
- Column “Offered Salary” has 1 NULL value. The corresponding values in Department is “Sales Department” and “Post Name” is i7. We can replace it with the median value of “Offered Salary” from “Sales Department” and i7 Post Name. The median value is 49625.
- Column Post Name has 1 row with “-“ as its value. It can be termed as Null value. The corresponding value in Department column is “Sales Department” and Offered Salary is “85914”. So we replaced it with majority count of Posts for candidates in Sales Department and whose Offered Salary is between 85,000 and 96,000, which is “c9”

2. Error Rectification:

- Column Post Name has a category “c-10” which seems to be a typo and the correct category should be “c10” which we rectified.
- The case of Column Headers was inconsistent. Therefore replaced “application_id” with “Application_id” and “event_name” with “Event_Name”.

3. Handling Outliers



Outcome : From the below Box Plot of Column Offered Salary, we can see that there are three rows whose Column values are outliers and the values are 200000, 300000,

400000. We replaced them with median value of Offered Salary for corresponding Department and Post Name

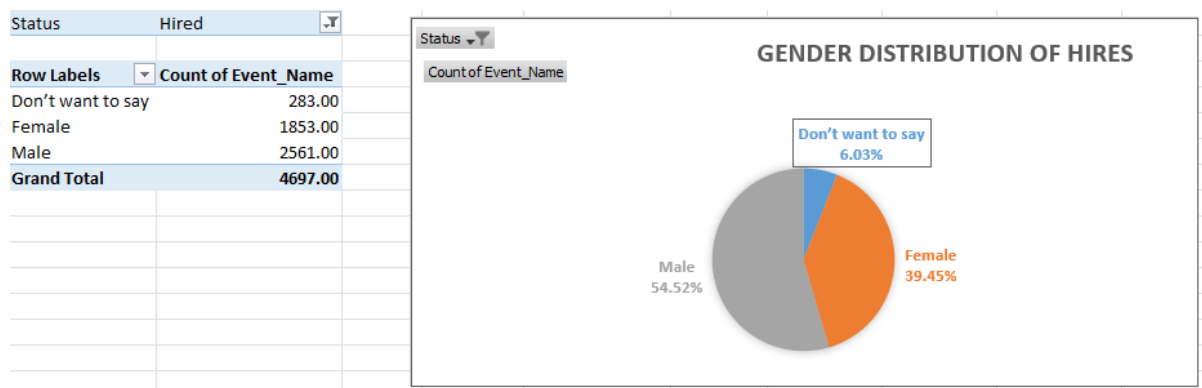
4. Handling Duplicate Values

Column Application_Id has 54 rows with duplicate values. They can be removed or replaced with correct values.

Insights

1. Hiring Analysis:

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



Outcome : As per the above pie chart representation , we can see that more than half of the company consists of male employees and only 39.45% consists of female employees. The rest prefer not to disclose their gender information.

The Organization's gender ratio should be close to 1:1 for smooth functioning. The Data Quality team should validate the information as inconsistent data can skew the analysis process.

2. Salary Analysis:

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

`=AVERAGE(G2:G7115)`

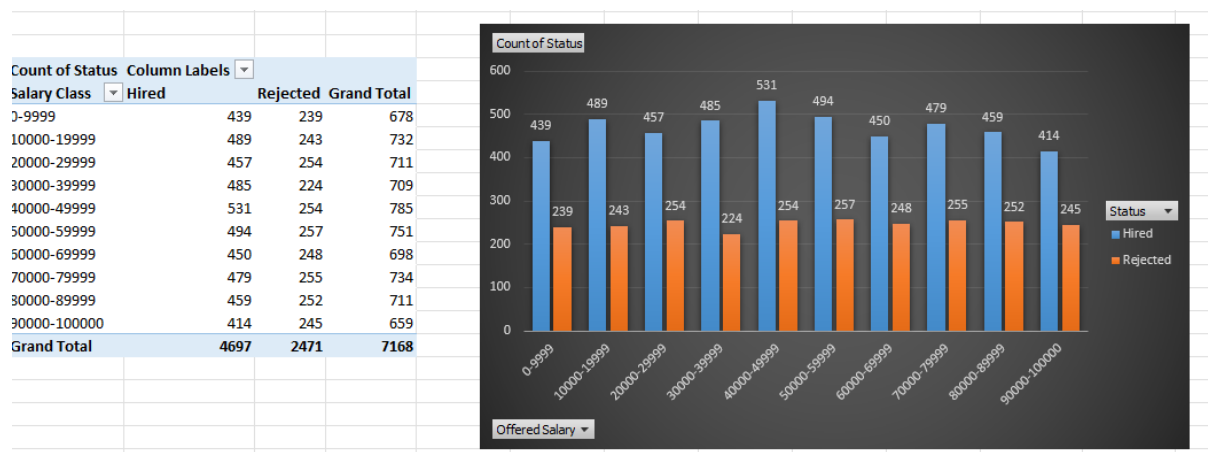
Average Salary of Employees	49889.84
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Outcome : We use the AVERAGE function in MS Excel to calculate the average of Offered Salary by the company.

The average salary of Employee is 49889.84

3. Salary Distribution:

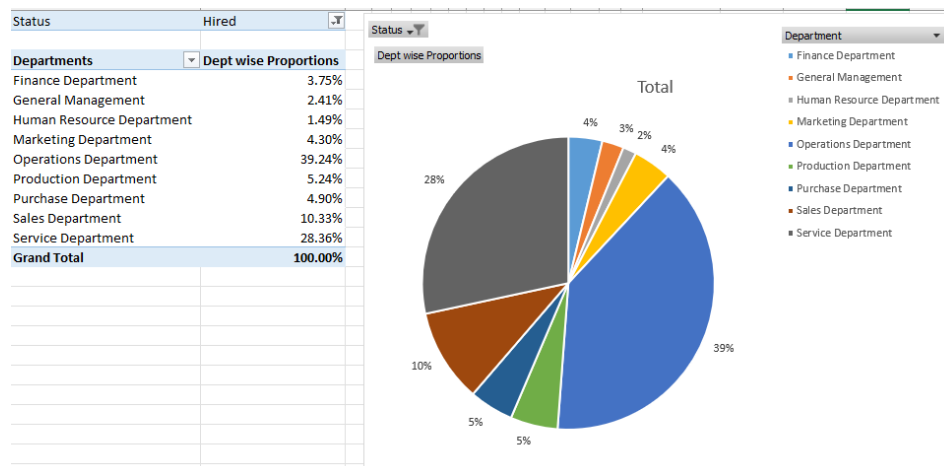
Create class intervals for the salaries in the company. This will help you understand the salary distribution.



Outcome : We can observe that maximum offered salary is in the interval of 40000-49999 and minimum offered salary is in the interval of 90000-100000.

4. Departmental Analysis:

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

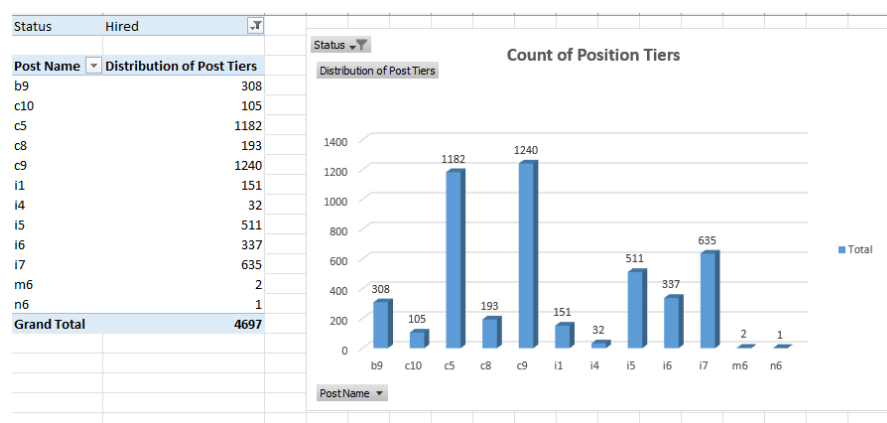


Outcome : We can observe that most candidates are hired in Operations Department followed by Services Department and Sales Department and the least candidates are hired in Human Resource Department.

These numbers may indicate the size of teams and importance of the departments in the organization.

5. Position Tier Analysis:

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.



Outcome : We can observe that the organization has hired most candidates for post tier **c9** followed by **c5** and then **i7**