

# Hiring Process Analytics

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## Project Description:

Hiring process is the fundamental and the most important function of a company. Here, the MNCs get to know about the major underlying trends about the hiring process. Trends such as- number of rejections, number of interviews, types of jobs, vacancies etc. are important for a company to analyse before hiring freshers or any other individual.

Being a Data Analyst, our job is to go through these trends and draw insights out of it for hiring department to work upon.

We are working for a MNC such as Google as a lead Data Analyst and the company has provided with the data records of their previous hirings and have asked us to answer certain questions making sense out of that data.

We will use EDA to generate different insights and to answer the questions asked by the company. **Exploratory Data Analysis (EDA)** is an approach to analyze the data using visual techniques. It is used to discover trends, patterns, or to check assumptions with the help of statistical summary and graphical representations.

### Steps for EDA:

1. Understanding data columns and data
2. Checking for missing data
3. Clubbing columns with multiple categories
4. Checking for outliers
5. Removing outliers
6. Drawing Data Summary

We will also use our knowledge in statistics and use different formulas in excel and draw necessary conclusions about the company

The things that we are going to find out through this project are:

- **Hiring:** How many males and females are Hired ?
- **Average Salary:** What is the average salary offered in this company ?
- **Class Intervals:** Draw the class intervals for salary in the company ?
- **Charts and Plots:** Draw Pie Chart / Bar Graph ( or any other graph ) to show proportion of people working different department ?
- **Charts:** Represent different post tiers using chart/graph?

## Approach:

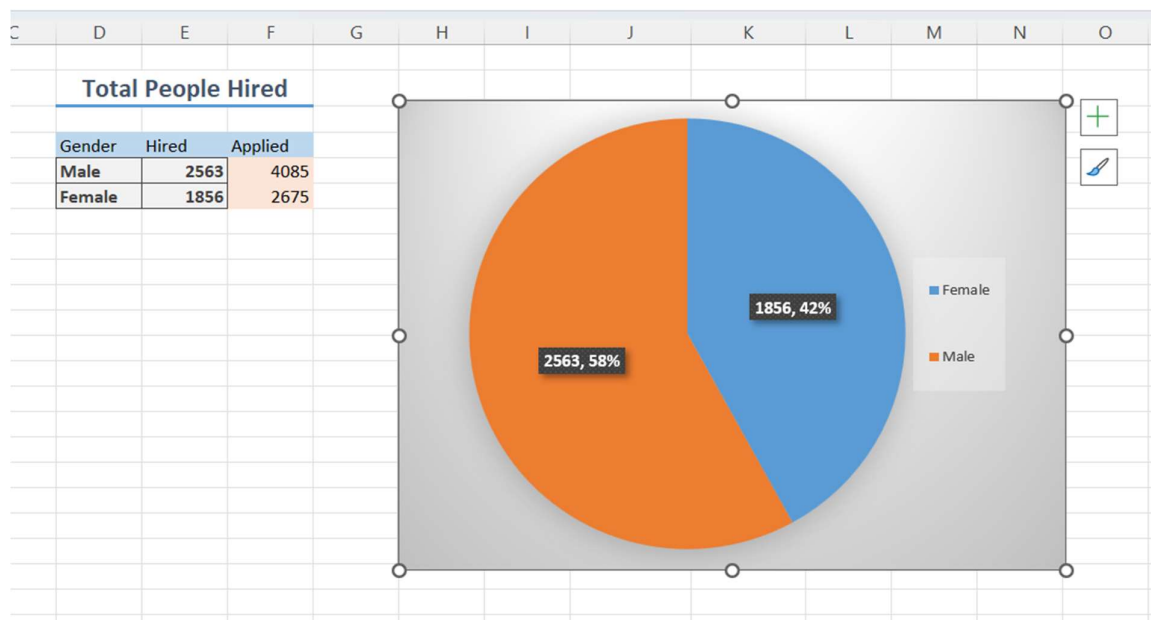
The dataset given by the company contains the details about people who registered for a particular post in a department of this company. I used MS Excel to analyze the data with different tables and columns.

**We are required to provide a detailed report for the data record mentioning the answers of the below questions that follows:**

A. **Hiring:** Process of intaking of people into an organization for different kinds of positions.

**Your task:** How many males and females are Hired ?

- Total number of males hired = 2563
- Total number of females hired = 1856
- Formula Used (Male) =COUNTIFS(B:B,"Male",A:A,"Hired")
- Formula Used (Female) =COUNTIFS(B:B,"Female",A:A,"Hired")



B. **Average Salary:** Adding all the salaries for a select group of employees and then dividing the sum by the number of employees in the group.

**Your task:** What is the average salary offered in this company ?

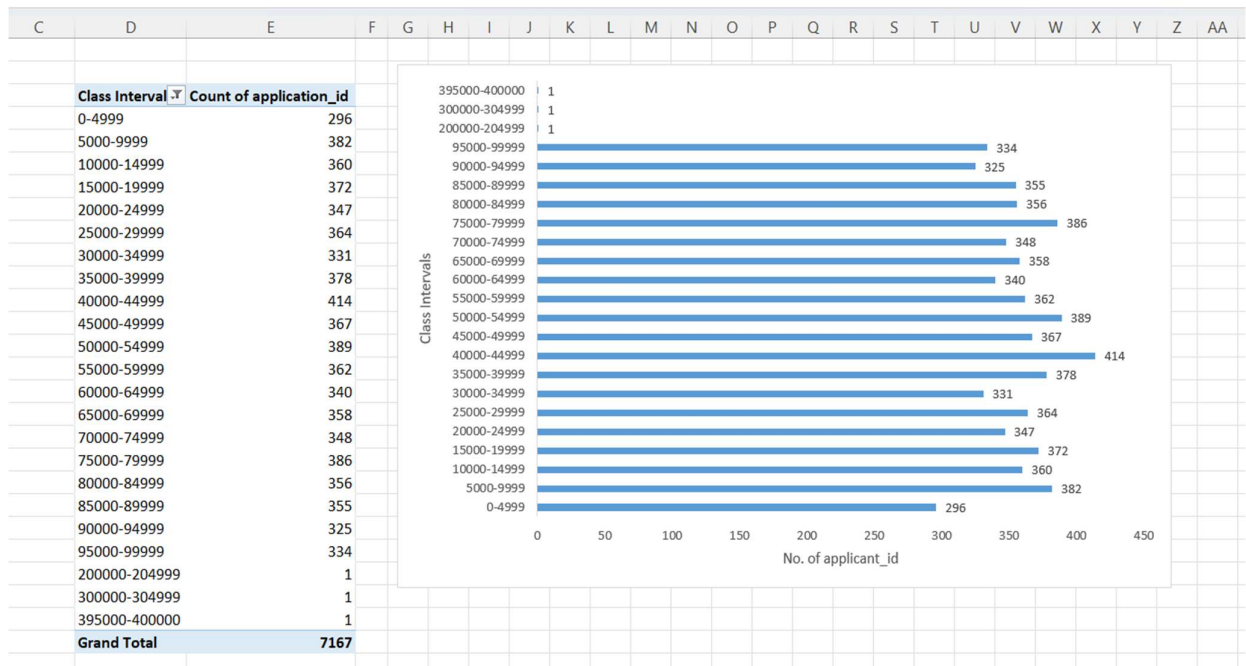
- The average salary offered in this company is Rs. 49983 (approx 50K)
- Formula Used = AVERAGE(A:A)

E4						
	A	B	C	D	E	F
1	<b>Offered Salary</b>					
2	56553					
3	22075					
4	70069		<b>Average Salary</b>		49983.0290	
5	3207					
6	29668					
7	85914					
8	69904					
9	11758					
10	15156					
11	49515					
12	26990					
13	200000					
14	86787					
15	2308					
16	56688					
17	81757					
18	15134					
19	100					
20	73579					
21	50351					
22	38462					
23	82510					

C. **Class Intervals:** The class interval is the difference between the upper class limit and the lower class limit.

**Your task:** Draw the class intervals for salary in the company ?

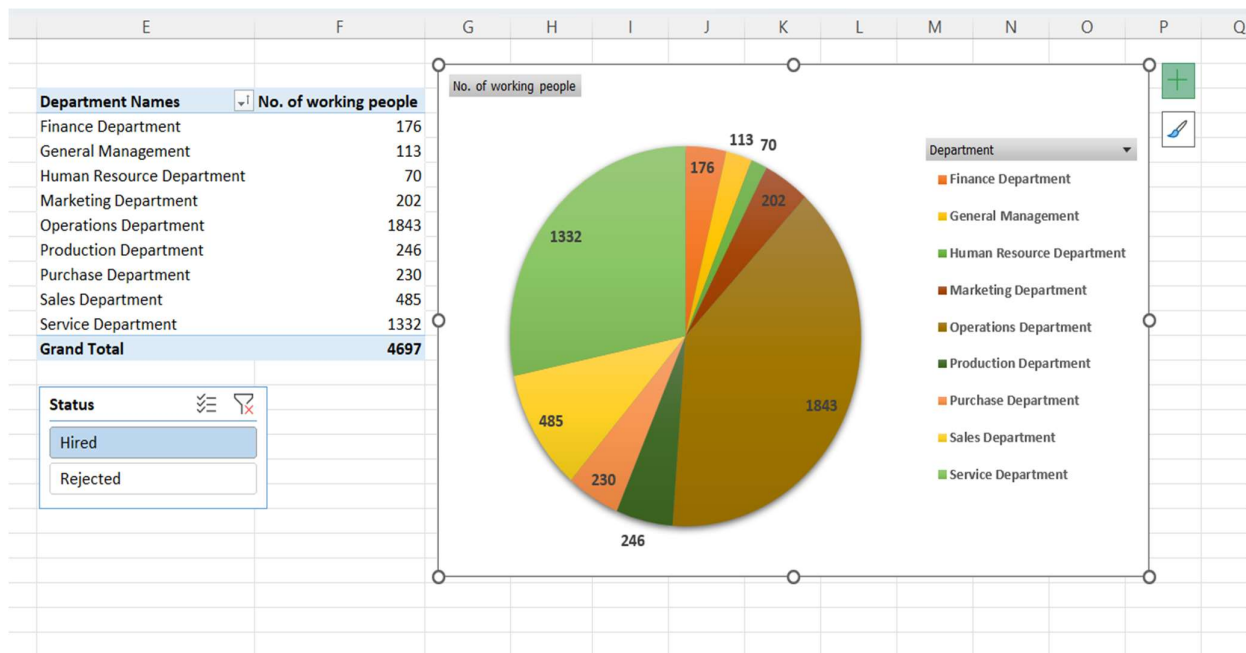
- I used the pivot table to calculate the class intervals.
- I took the class width of 5000.
- There are two columns class intervals and number of applicant id.
- I used a bar chart to represent it visually.



D. **Charts and Plots:** This is one of the most important part of analysis to visualize the data.

**Your task:** Draw Pie Chart / Bar Graph ( or any other graph ) to show proportion of people working in different department ?

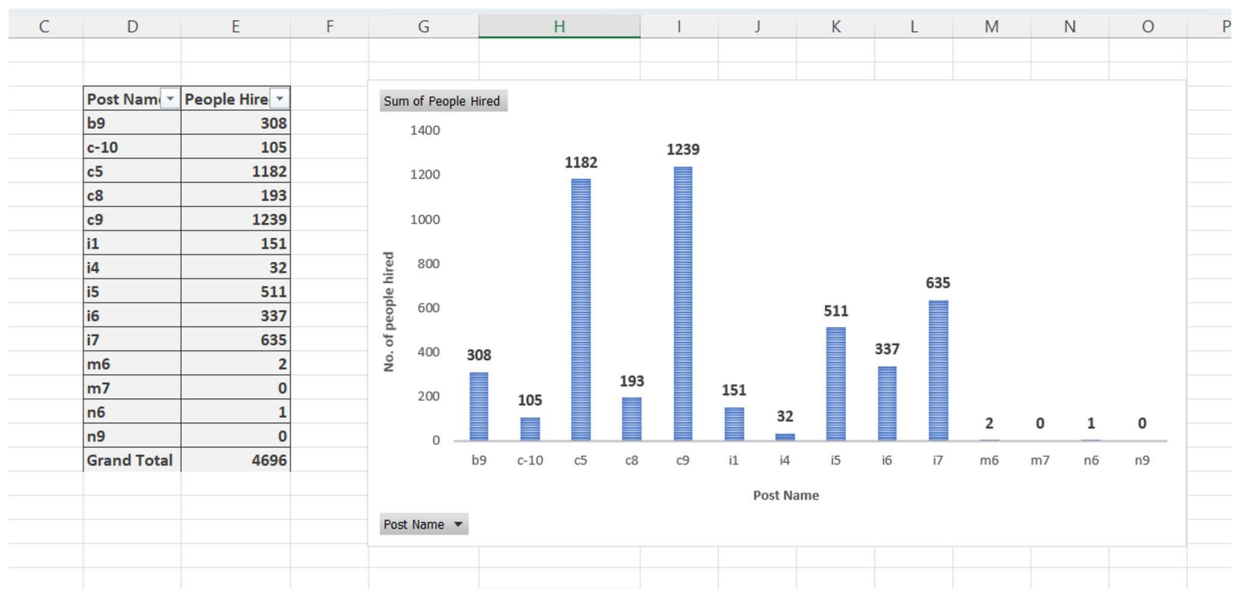
- I used pivot table and pivot chart to visualize the proportion of working in different department.
- I also used slicer panel for status.
- Pie chart is used as a graph here.



E. **Charts:** Use different charts and graphs to perform the task representing the data.

**Your task:** Represent different post tiers using chart/graph?

- Representing number of people hired against each post.
- First, I cleaned the data which has missing values under the Post name.
- Second, I selected only the hired people in the Status column.
- Formula Used to calculate the number of people hired  
=COUNTIFS(B:B,"b9",A:A,"Hired")
- And then I drag it down for others post by changing the Post Name.
- In the last column, I measured the Grand Total by using the sum formula.
- Column is used here to represent the chart.



## Tech-Stack Used:

- **Microsoft Excel 365:** It enables users to format, organize and calculate data in a spreadsheet. It organize data in an easy-to-navigate way. We need not to perform any complex mathematical functions. And it turn piles of data into helpful graphics and charts.
- **Microsoft Word 2021:** It is used to make a report (PDF) to be presented to the leadership team.

## Insights:

- The rejection rate of male applicant is 6% higher than the female applicant.
- The average salary paid in this company is 50K.
- Most of the employers are in the Operation Department and then in the Human Resource Department.

- The applicant is most likely to get hired if he/she is applying for the HR Department as the rejection rate here is the least.
- There are only 3 candidates in the company who are paid more than 100K.

## **Results:**

In this project, I applied the basic and advance Excel concepts. The concepts related to statistics and EDA have been implemented here by using MS Excel. This project helps me in how to summarize the data and generate valuable insights with the help of the simple tool. I understood how a data analyst can help in hiring process of the company. I learned to implement the learning of Excel in the real-time project. I used different formulas, functions, pivots, slicer, etc to achieve my target. It helped me in learning how the correlation is used between pivot table and slicer. Overall, it was a great learning experience while doing this project.

## **Excel Sheet link:**

[https://docs.google.com/spreadsheets/d/15W9Cgt0DApw9qi\\_0Q\\_wnZxTM7-OA9Vay/edit?usp=sharing&oid=100999225170259068481&rtpof=true&sd=true](https://docs.google.com/spreadsheets/d/15W9Cgt0DApw9qi_0Q_wnZxTM7-OA9Vay/edit?usp=sharing&oid=100999225170259068481&rtpof=true&sd=true)

Please do open in MS Excel.