

# **Hiring Process Analytics**

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**PROJECT**

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# Project Description

- This project focuses on Hiring Process Analytics of MNCs, and aims to find insights about how data analytics can identify major trends in the hiring process.
- Using a given dataset from a company, the task is to provide information on a specific hiring process, including the number of individuals who registered for a particular position in a department, as well as the average salary offered.
- By using various tech tools to analyze the data, a report will be presented summarizing the findings and recommendations.

# Approach

This project focuses on Hiring Process Analytics of MNCs. The approach consists of several steps:

1. Database analysis: Firstly, the database should be thoroughly analyzed to identify errors, duplicates, and blank data. Pivot tables can be created by combining columns to better understand the data.
2. Data cleaning: Basic statistical knowledge in Excel is required to solve problems, including understanding terms like mean, mode, and average. To ensure accurate results, outliers in the data must be identified and removed using median and average calculations. (Outliers removed are shown later)
3. Data formatting: All the cleansed data is then converted into a tabular format, making use of pivot tables to solve problems.
4. Data visualization: Graphs and charts are created to better understand the solved tasks, using different tech tools.
5. Report preparation: Finally, a report is created in a presentable and easily understandable manner to communicate the findings and recommendations.



# Removing Outliers

- ❖ The average salary for employees in the Service department is \$47,879. For the General Management post, employee i7 earns an average of \$50,356 while employee i4 earns an average of \$44,841.
- ❖ It should be noted that these three employees have salaries that are higher than the overall average for the company, which could potentially mislead conclusions. Therefore, they were removed from the database for accurate analysis.

## ❖ The outliers

application	Interview Taken on	Status	event_name	Department	Post Name	Offered Salary
649039	07-05-2014	Hired	Female	Service Department	b9	200000
874368	21-07-2014	Hired	Male	General Management	i7	300000
795330	15-06-2014	Hired	Female	General Management	i4	400000

# Tech-Stack Used



For solving tasks



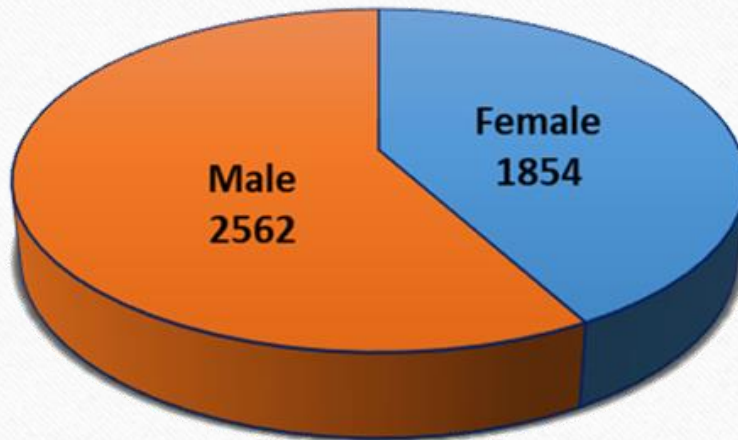
For preparing report



For sharing project

How many males and females  
are Hired ?

## Gender Ratio



## EXCEL PIVOT TABLE

Status	Hired
Row Labels	Count of event_name
-	10
Don't want to say	268
Female	1854
Male	2562
Grand Total	4694

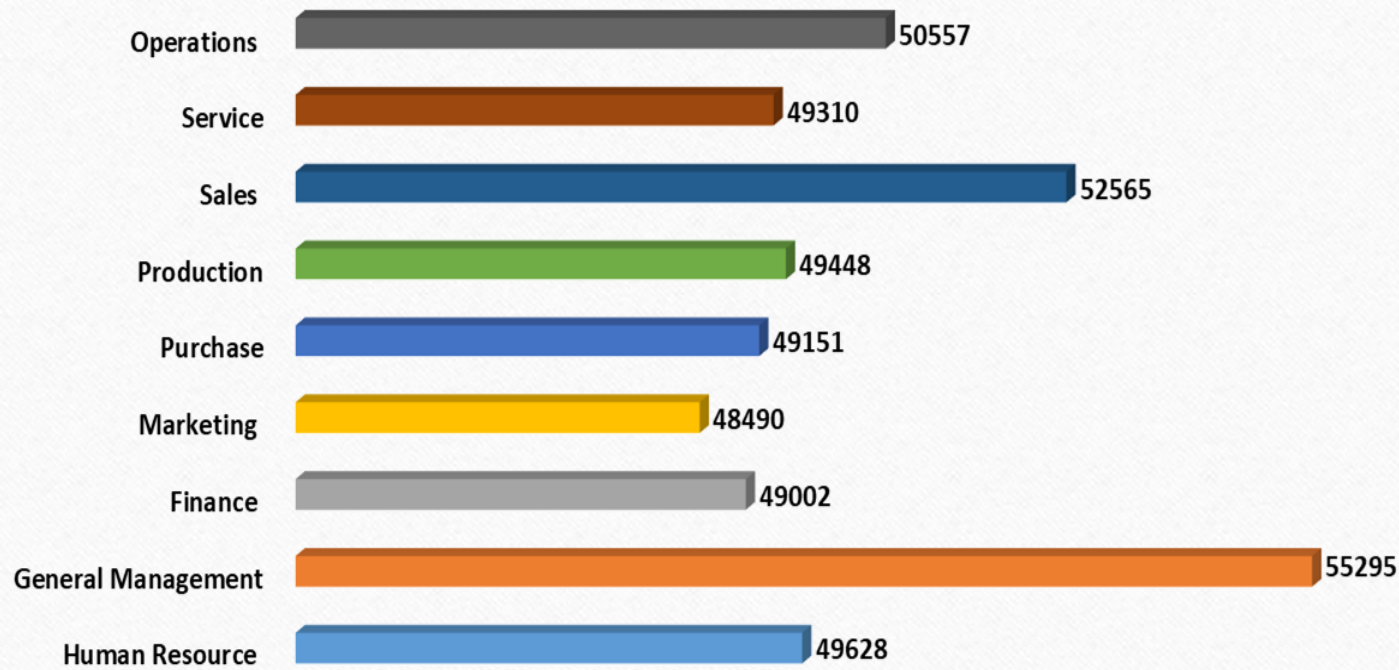
## PIVOT TABLE FIELDS

<b>Filters</b>	<b>Rows</b>
Status	event_name
<b>Columns</b>	<b>Σ Values</b>
	Count of event_name



# What is the average salary offered in this company ?

Average Salary Offered By Company



## EXCEL PIVOT TABLE

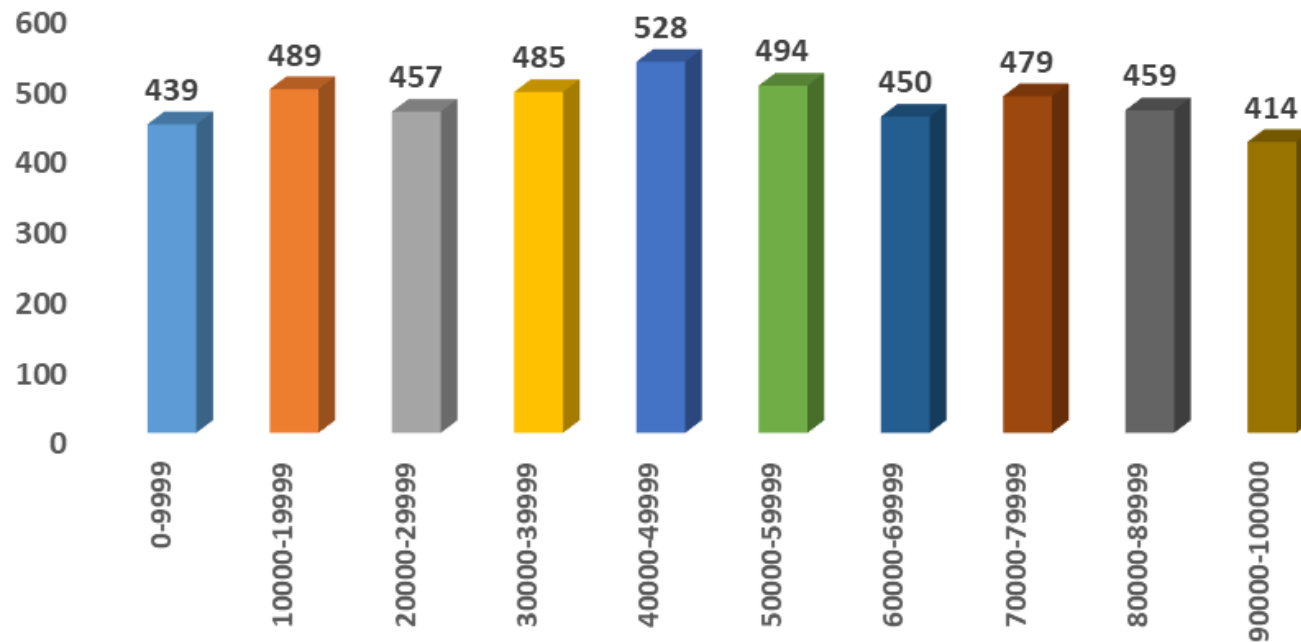
Status	(All)
Row Labels	Average of Offered Salary
⊕ Finance Department	49628
⊕ General Management	55295
⊕ Human Resource Department	49002
⊕ Marketing Department	48490
⊕ Operations Department	49151
⊕ Production Department	49448
⊕ Purchase Department	52565
⊕ Sales Department	49310
⊕ Service Department	50557
Grand Total	49878

## PIVOT TABLE FIELDS

Filters	Rows
Status	Department
	Post Name
Columns	Σ Values
	Average of Offered Sa...

Draw the class intervals for salary in the company ?

Class Interval for Salary



## EXCEL PIVOT TABLE

Status	Hired
Row Labels	Count of application_id
0-9999	439
10000-19999	489
20000-29999	457
30000-39999	485
40000-49999	528
50000-59999	494
60000-69999	450
70000-79999	479
80000-89999	459
90000-100000	414
Grand Total	4694

## PIVOT TABLE FIELDS

Rows

Offered Salary

Filters

Status

Σ Values

Count of application\_id

Grouping

Auto

☐ Starting at: 0

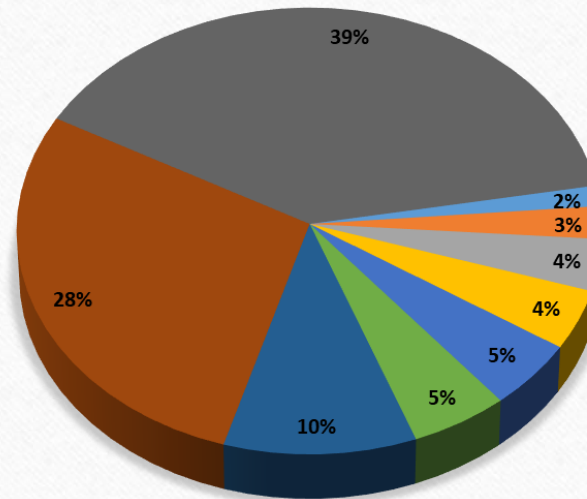
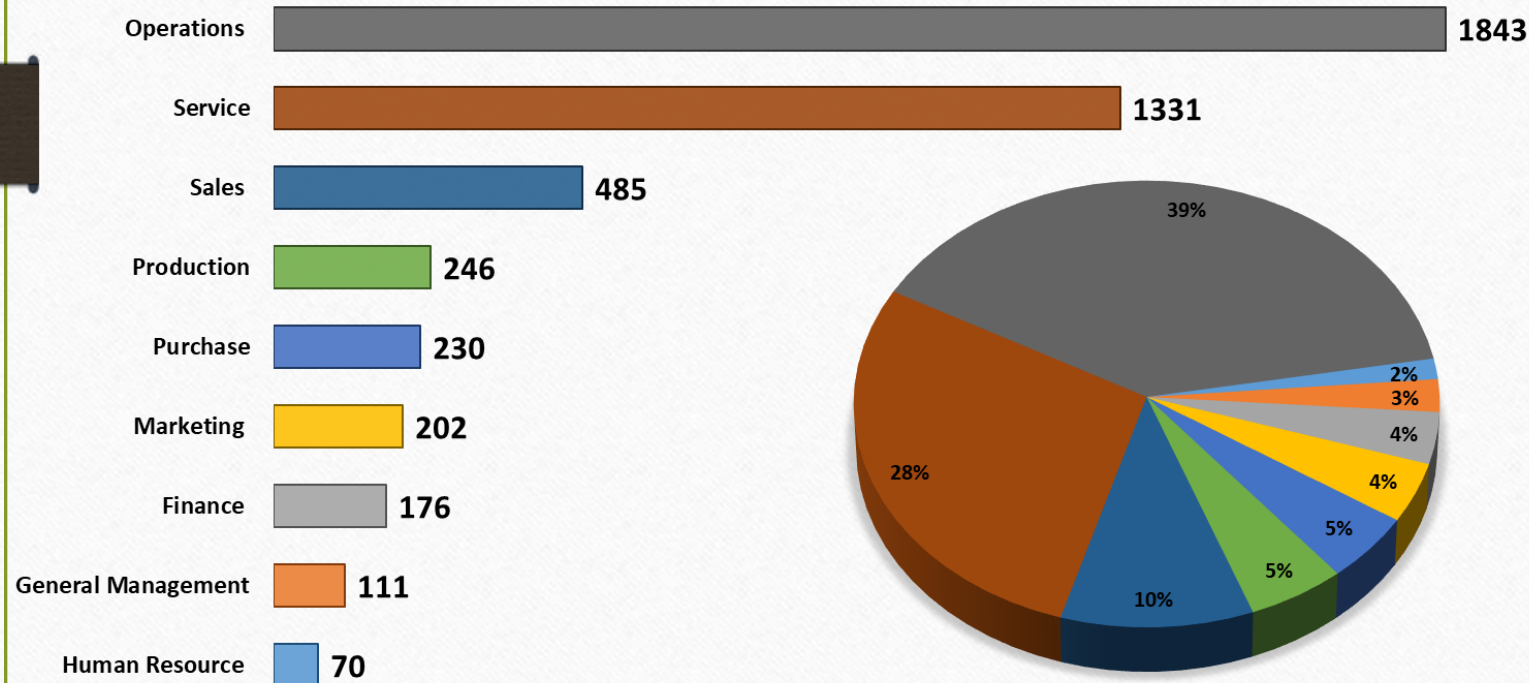
☐ Ending at: 100000

By: 10000



Draw Pie Chart / Bar Graph ( or any other graph ) to show proportion of people working different department

EMPLOYEE PROPORTION BY DEPARTMENT



## EXCEL PIVOT TABLE

Status	Hired
Row Labels	Count of application_id
Human Resource Department	70
General Management	111
Finance Department	176
Marketing Department	202
Purchase Department	230
Production Department	246
Sales Department	485
Service Department	1331
Operations Department	1843
Grand Total	4694

## PIVOT TABLE FIELDS

Filters

Status

Columns

Rows

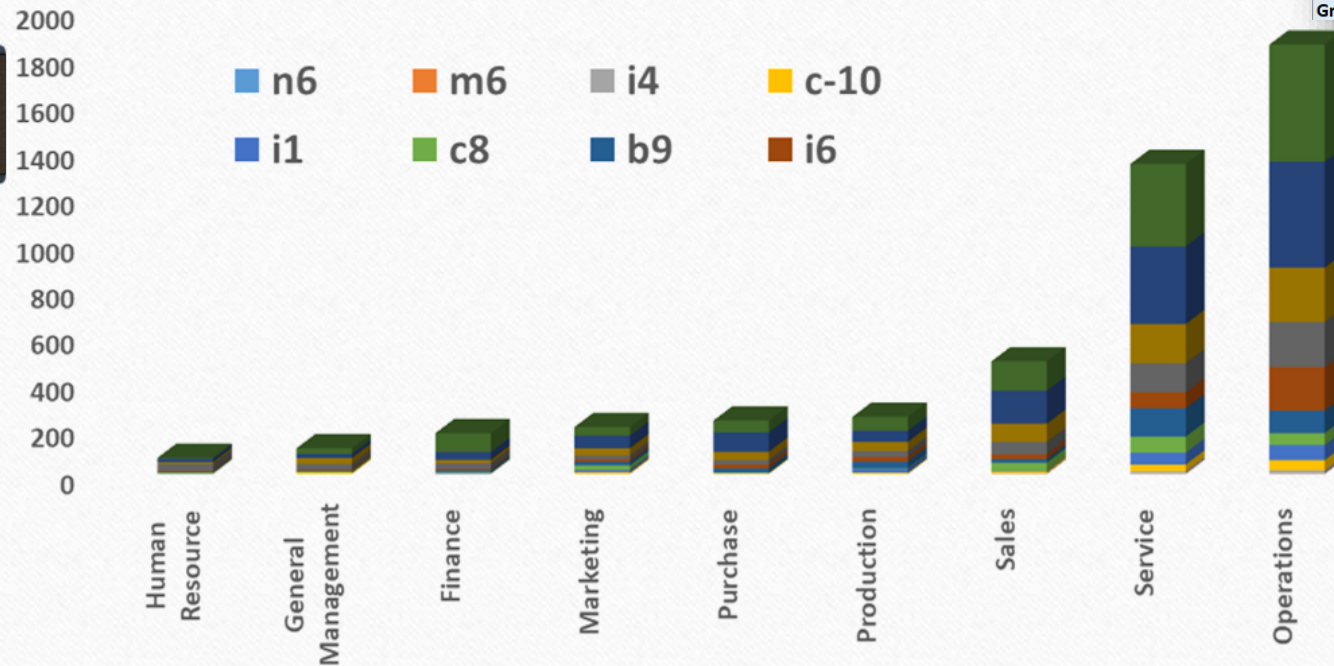
Department

Σ Values

Count of application\_id

Represent different post tiers using  
chart/graph?

Department Wise Post Tiers



## EXCEL PIVOT TABLE

Status	Hired													
Count of Post Name														
Row Labels	n6	m6	i4	c-10	i1	c8	b9	i6	i5	i7	c5	c9	Grand Total	
Finance Department					2	4	3	8	5	24	15	34	81	176
General Management					7	1	4	2	6	23	26	18	24	111
Human Resource Department						2	5	1	5	30	8	15	4	70
Marketing Department				1	7	10	19	16	10	17	31	54	37	202
Operations Department		1	15	44	65	51	97	186	194	233	455	502		1843
Production Department				1	5	16	3	29	19	26	39	48	60	246
Purchase Department		1		1	2		3	18	16	19	36	83	51	230
Sales Department				3	8	2	36	15	21	53	78	142	126	484
Service Department			1	10	30	51	69	121	69	125	168	333	354	1331
Grand Total		1	2	31	105	151	193	307	337	511	634	1182	1239	4693

## PIVOT TABLE FIELDS

Filters

Status

Columns

Post Name

Rows

Department

Values

Count of Post Name

# Insights

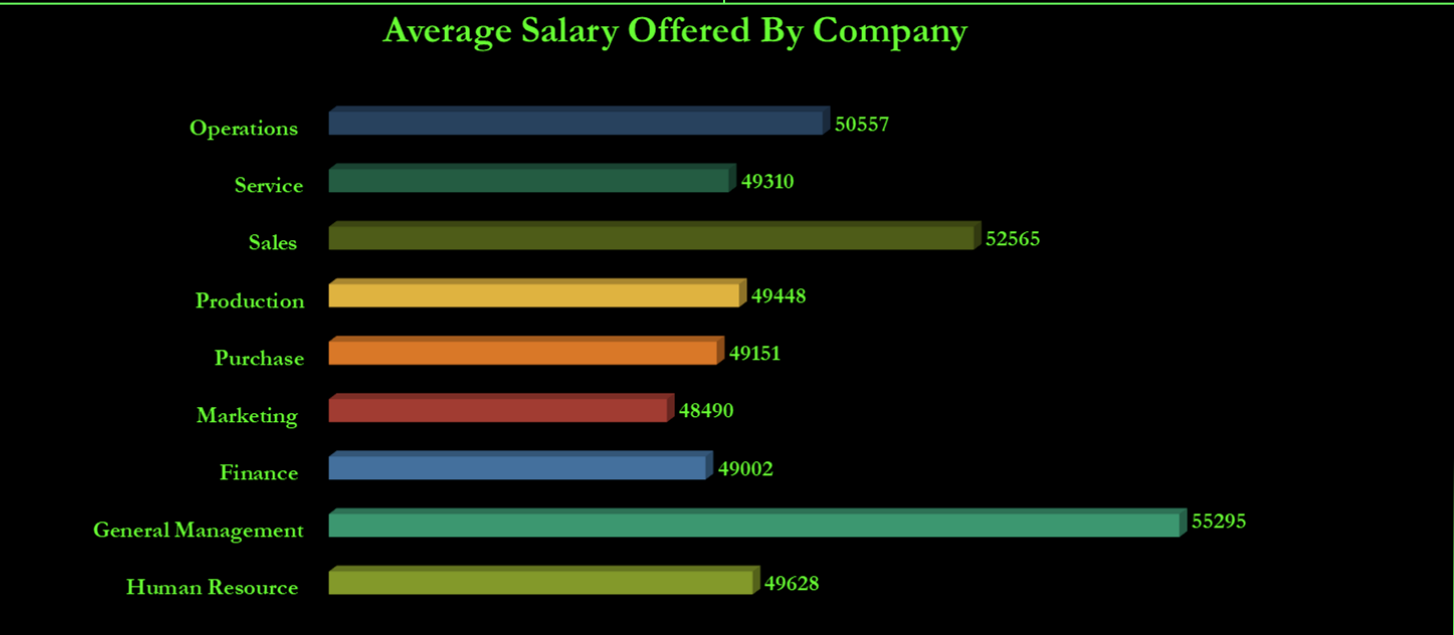
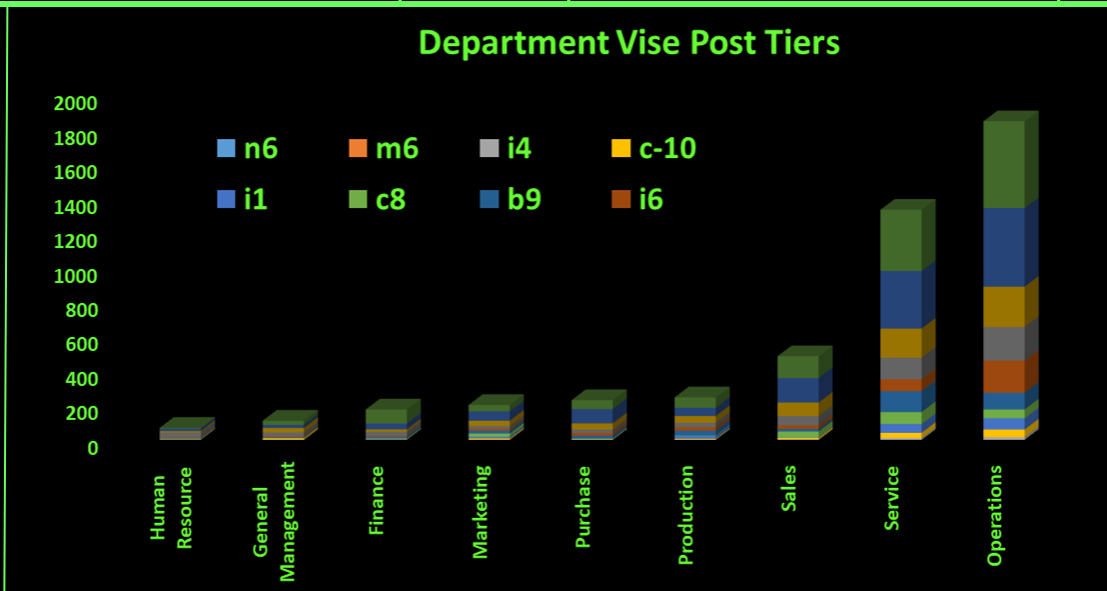
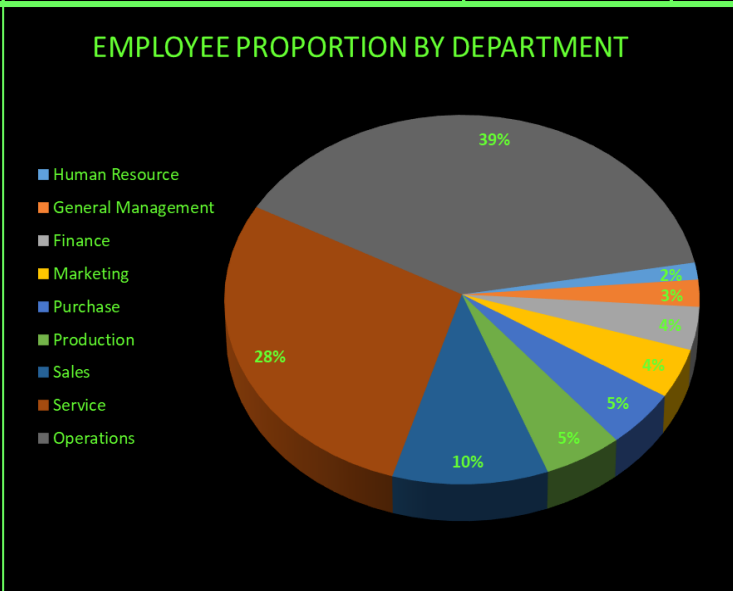
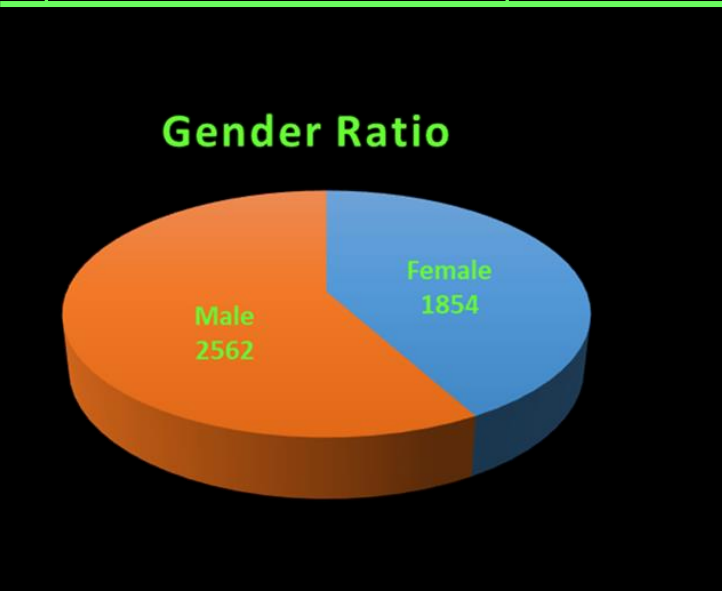
1. Hiring process indicates males to female ratio, which shows **un-biased behavior** of company.
2. Average salary of **marketing department is lowest** compare to others. So, MNCs should invest time on finding the reason for this.
3. Class intervals for salary in company gives idea about how many employees earn in some particular range and where lies maximum and minimum employees which shows **good impression of MNCs for newly coming employees**.
4. Proportion of employees indicates diversity of employees in different department. This graph shows in which department employees are needed more. (**HR need more**)
5. Different post tiers shows **diversity of post in different department**, which helps in hiring employees for particular post..



## Result

- ❑ This project have helped me to understand Hiring process from data analytics point of view and how it helps companies to announce vacancy in different department, for different posts, with how much salary offer and etc.
- ❑ I have used Excel for statistical and mathematical computation as well as for visualization. This project have provided me a better and useful understanding for Excel.

Total Interview 7168		Hired 4697		Rejected 2471		Acceptance Rate 65.5%
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Thank  
You!