

Hiring Process Analytics

Statistics

Project Description

In this project, we will perform statistical analysis in order to understand hiring process. 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.

Approach

Using MS Excel we will do statistical analysis of data records of companies previous hiring.

Tech-Stack Used: Microsoft Excel 2016

- MS Excel 2016 is a spreadsheet program where one can record data in the form of tables.
- It is easy to analyse numerical data in an Excel spreadsheet.
- It features calculation or computation capabilities, graphing tools, pivot tables, and a macro programming language called Visual Basic for Applications (VBA).

Insights:

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

- Functions used: **COUNTIFS**
- Generic Formulas:

COUNTIFS(criteria_range1, **criteria1**, [criteria_range2, criteria2], [criteria_range3, ...])

- Formulas:

To calculate no of hired women:

Female	=COUNTIFS(D2:D7169,"female",C2:C7169,"=hired")
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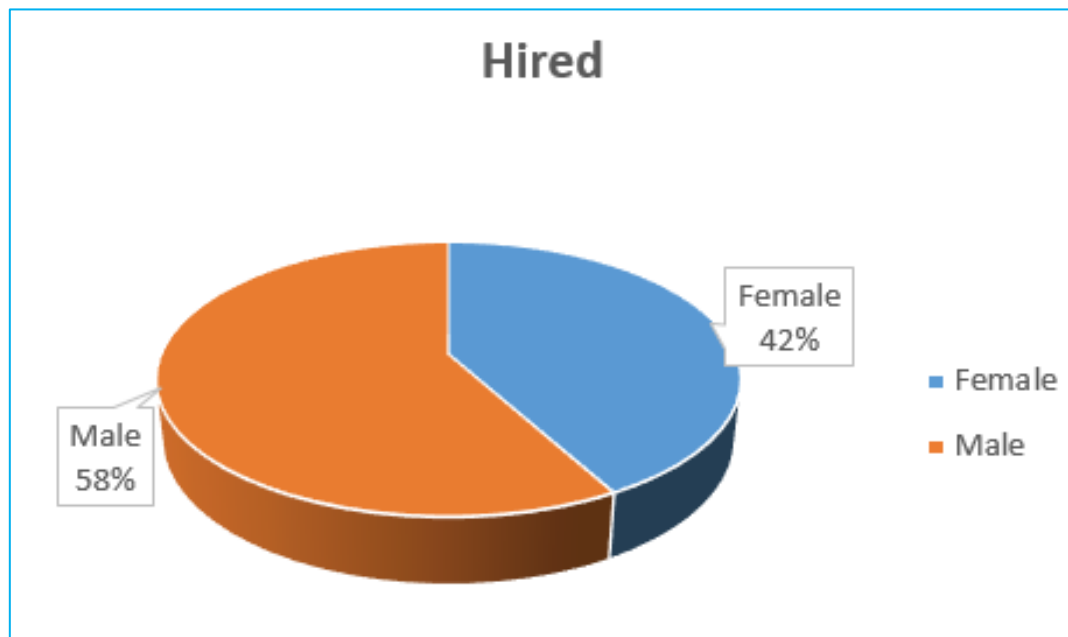
To calculate no of hired men:

Male	=COUNTIFS(D2:D7169,"male",C2:C7169,"=hired")
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No of males and females are hired are as follow:

event_name	Count
Female	1856
Male	2563

Graphical representation:



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.

- Functions used: **AVERAGEIFS**
- Generic Formulas:

AVERAGEIFS(average_range, criteria_range1, criteria1, [criteria_range2, criteria2], ...)

- Formulas:

Average Salary
=AVERAGEIFS(G2:G7169,C2:C7169,"hired")

Average salary offered in this company:

Average Salary
49752.8961

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

- Functions used:

- i. **MAX**
- ii. **MIN**

- Generic Formulas:

MAX:

`MAX(number1, [number2], ...)`

MIN:

`MIN(number1, [number2], ...)`

- Formulas:

To calculate upper limit:

Upper class limit
=MAX(G2:G7169)

To calculate lower limit:

Lower class limit
=MIN(G2:G7169)

To calculate class interval:

Class Interval (upper class limit -lower class limit)
=MAX(G2:G7169) - MIN(G2:G7169)

Class intervals for salary in the company:

Class Interval (upper class limit -lower class limit)
399900

WHERE,

Upper class limit	Lower class limit
400000	100

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

- **Functions used:**

- i. **COUNTIFS**
- ii. **CHART**

- **Generic Formulas:**

COUNTIFS(criteria_range1, criteria1 , [criteria_range2, criteria2], [criteria_range3, ...])
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- **Formulas:**

- i. To calculate no of employee working in Service Department:

Service Department	=COUNTIFS(E2:E7169,"Service Department",C2:C7169,"=hired")
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- ii. To calculate no of employee working in Operation Department:

Operations Departmer	=COUNTIFS(E2:E7169,"Operations Department",C2:C7169,"=hired")
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iii. To calculate no of employee working in Sales Department:

Sales Department =COUNTIFS(E2:E7169,"Sales Department",C2:C7169,"=hired")

iv. To calculate no of employee working in Finance Department:

Finance Department =COUNTIFS(E2:E7169,"Finance Department",C2:C7169,"=hired")

v. To calculate no of employee working in Production Department:

Production Departmer =COUNTIFS(E2:E7169,"Production Department",C2:C7169,"=hired")

vi. To calculate no of employee working in Purchase Department:

Purchase Department =COUNTIFS(E2:E7169,"Purchase Department",C2:C7169,"=hired")

vii. To calculate no of employee working in Marketing Department:

Marketing Departmen =COUNTIFS(E2:E7169,"Marketing Department",C2:C7169,"=hired")

viii. To calculate no of employee working in General Management:

General Management =COUNTIFS(E2:E7169,"General Management",C2:C7169,"=hired")

ix. To calculate no of employee working in Human Resource Department:

Human Resource Departn =COUNTIFS(E2:E7169,"Human Resource Department",C2:C7169,"=hired")

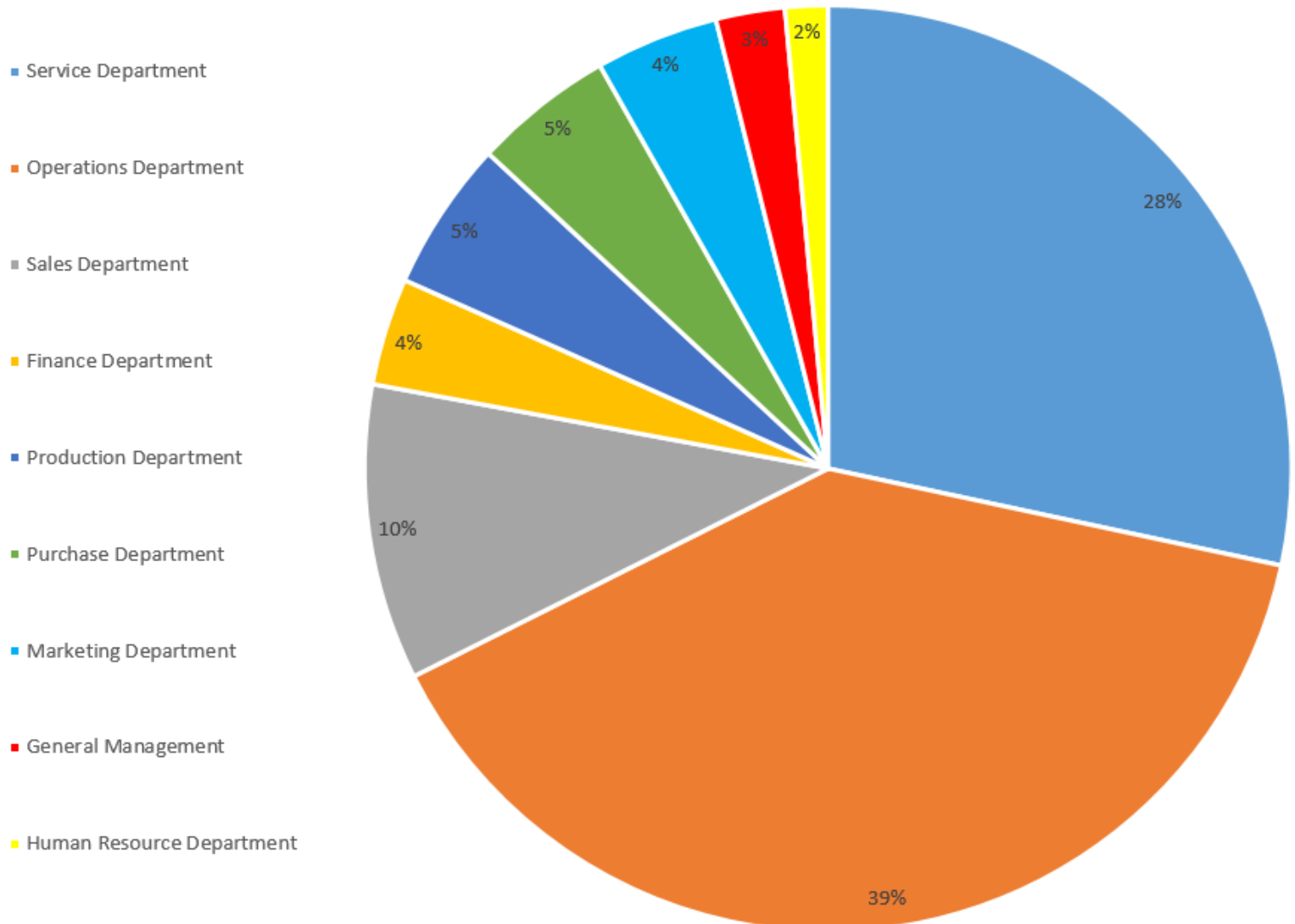
Derived pivot table:

Department	No of people working in department
Service Department	1332
Operations Department	1843
Sales Department	485
Finance Department	176
Production Department	246
Purchase Department	230
Marketing Department	202
General Management	113
Human Resource Department	70

Using above pivot table a pie chart is obtained

Pie Chart to show proportion of people working different department is as follow:

Pie Chart for people working in different department



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

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

• **Functions used:**

- COUNTIFS**
- CHART**

- Generic Formulas:

COUNTIFS(criteria_range1, **criteria1**, [criteria_range2, criteria2], [criteria_range3, ...])

- Formulas:

- i. To calculate no of employee working in tire – (unknown):

- =COUNTIFS(F2:F7169,"-",C2:C7169,"=hired")

- ii. To calculate no of employee working in b9 tire:

b9 =COUNTIFS(F2:F7169,"b9",C2:C7169,"=hired")

- iii. To calculate no of employee working in c-10 tire:

c-10 =COUNTIFS(F2:F7169,"c-10",C2:C7169,"=hired")

- iv. To calculate no of employee working in c5 tire:

c5 =COUNTIFS(F2:F7169,"c5",C2:C7169,"=hired")

- v. To calculate no of employee working in c8 tire:

c8 =COUNTIFS(F2:F7169,"c8",C2:C7169,"=hired")

- vi. To calculate no of employee working c9 in tire:

c9 =COUNTIFS(F2:F7169,"c9",C2:C7169,"=hired")

- vii. To calculate no of employee working in i1 tire:

i1 =COUNTIFS(F2:F7169,"i1",C2:C7169,"=hired")

- viii. To calculate no of employee working in i4 tire:

i4 =COUNTIFS(F2:F7169,"i4",C2:C7169,"=hired")

- ix. To calculate no of employee working in i5 tire:

i5 =COUNTIFS(F2:F7169,"i5",C2:C7169,"=hired")

x. To calculate no of employee working in i6 tire:

i6	=COUNTIFS(F2:F7169,"i6",C2:C7169,"=hired")
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xi. To calculate no of employee working in i7 tire:

i7	=COUNTIFS(F2:F7169,"i7",C2:C7169,"=hired")
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xii. To calculate no of employee working in m6 tire:

m6	=COUNTIFS(F2:F7169,"m6",C2:C7169,"=hired")
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xiii. To calculate no of employee working in m7 tire:

m7	=COUNTIFS(F2:F7169,"m7",C2:C7169,"=hired")
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xiv. To calculate no of employee working in n10 tire:

n10	=COUNTIFS(F2:F7169,"n10",C2:C7169,"=hired")
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xv. To calculate no of employee working in n6 tire:

n6	=COUNTIFS(F2:F7169,"n6",C2:C7169,"=hired")
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xvi. To calculate no of employee working in n9 tire:

n9	=COUNTIFS(F2:F7169,"n9",C2:C7169,"=hired")
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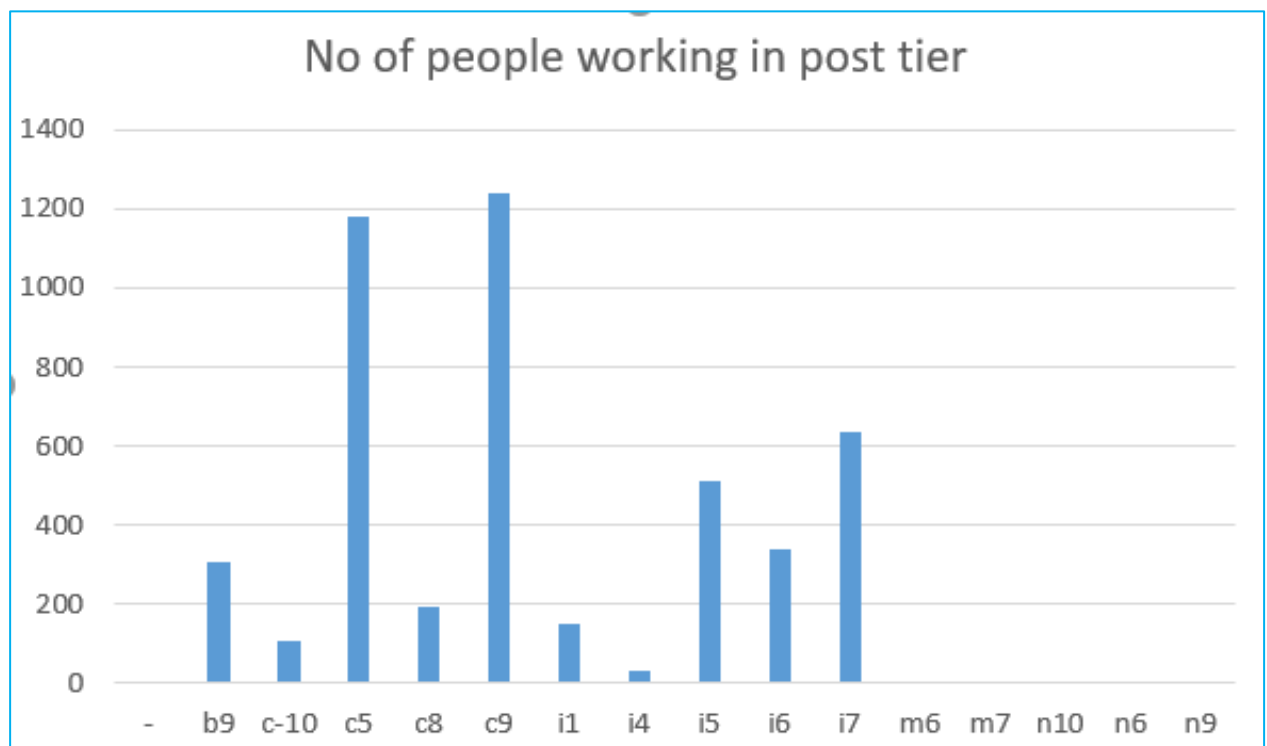
- Derived pivot table:

Post tiers	No of people working in post tier
-	1
b9	308
c-10	105
c5	1182
c8	193
c9	1239
i1	151
i4	32
i5	511
i6	337
i7	635
m6	2
m7	0
n10	0
n6	1
n9	0

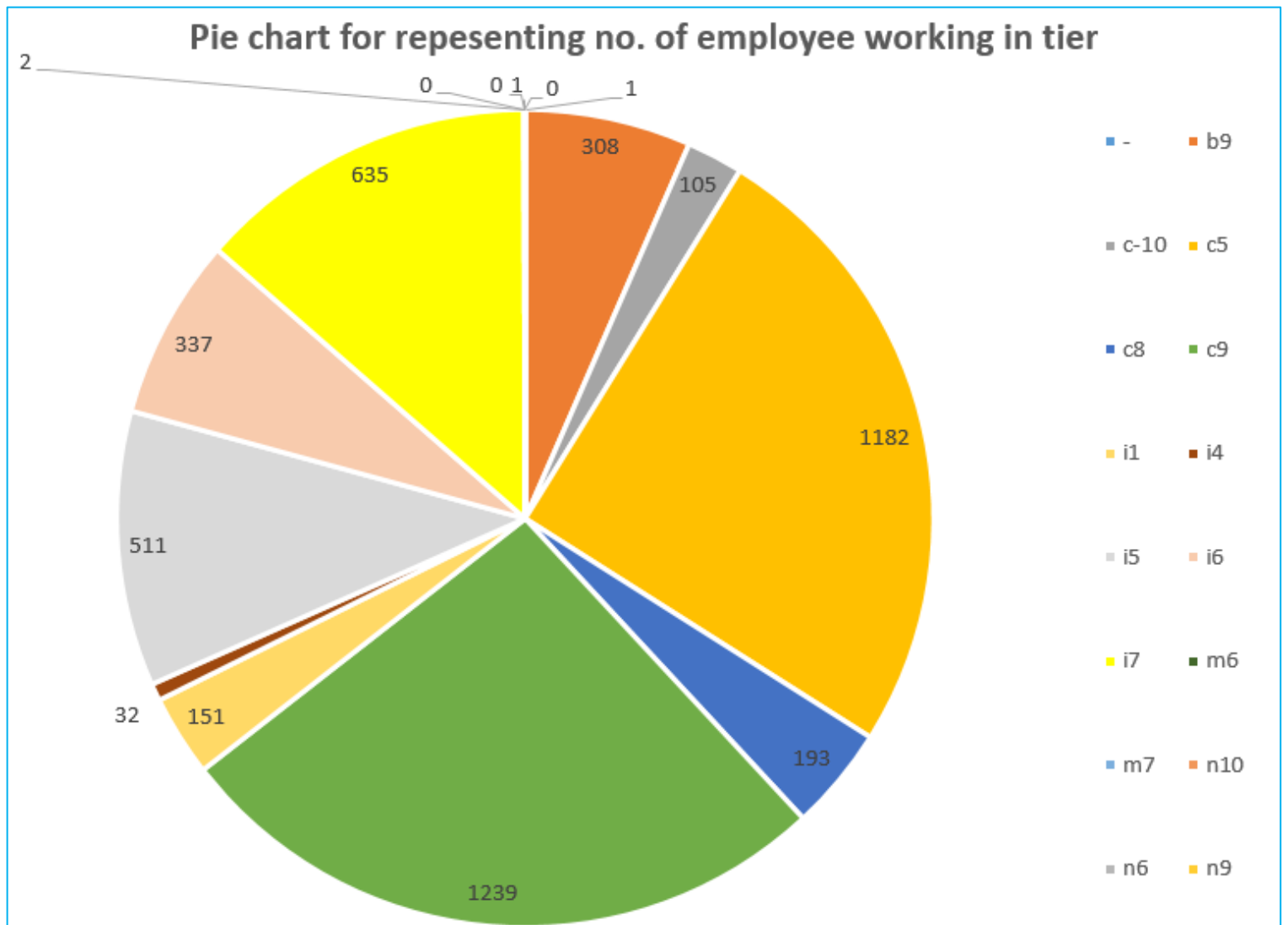
Using above pivot table a chart/graph is obtained

Representing post tiers using chart and graph:

Graph:



Pie Chart:



Result:

- In this project I have gain practical hands on knowledge to analyse numerical data in an Excel spreadsheet.
- Learnt various MS Excel functions and formulas that can be used in many companies in day to day analysis data record in their company