

PROJECT 04

Hiring Process Analytics

Project Description:

As a data analyst for a multinational company my task was to analyze the company's hiring process data and draw insights from it. I am given a dataset of the previous hires of the company and my job is to analyze the data given in order to help the company improve its hiring process. The analysis will require knowledge of Microsoft Excel.

Approach

Firstly, I downloaded the dataset from the given source. Next, I evaluated the dataset and understood the columns and its content. Following this, I identified any missing data and checked for outliers.

To clean the data, I eliminated the rows having empty or blank cells. And upon filtering by column name, I replaced the cells in the column 'event_name' which had '-' instead of any gender with 'Don't want to say' since there was no definite name for those cells.

Next I removed duplicate values by using the 'application_id' column. I then used Pivot tables to further conduct my analysis.

Tech Stack Used:

- Microsoft Excel 2019

Cleaning the dataset:

- To handle missing data this blank cell found in the “Offered salary” column was deleted along with its row

[illegible]

- These blank cells in the “event_name” column were changed to “Don’t want to say” as their gender as I assumed it to be neither male nor female.

The screenshot displays an Excel spreadsheet titled "Statistics.xlsx". The active sheet is "Sheet1", which contains a table with the following data:

	Status	event_name	Department	Post Name	Offered Salary
17	Hired	Don't want to say	Service Department	i7	81757
19	Rejected	-	Service Department	i5	100
1601	Hired	-	Operations Department	b9	76730
1790	Rejected	-	Operations Department	c-10	25785
2877	Hired	-	Operations Department	c5	25583
3258	Hired	-	Sales Department	c5	80262
4017	Hired	-	Service Department	i5	4308
4125	Rejected	-	Purchase Department	c5	96396
4409	Rejected	-	Service Department	c5	22393
5559	Hired	-	Marketing Department	c9	94032
5606	Rejected	-	Production Department	c9	4076
5888	Hired	-	Service Department	c5	66948
6329	Hired	-	Operations Department	i1	98070
6657	Hired	-	Service Department	c8	12470
6997	Hired	-	Service Department	i1	3134
7169			Don't want to say		

The "event_name" column is highlighted with a green border. A tooltip "Don't want to say" is visible over the first cell of this column. The bottom of the spreadsheet shows the "Formulas" tab selected in the ribbon, and the status bar at the bottom indicates the current cell is D17.

Statistics.xlsx - Excel

File Home Insert Page Layout Formulas Data Review View Help Tell me what you want to do

D17 fx Don't want to say

	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Status	event_name	Department	Post Name	Offered Salary												
17	Hired	Don't want to say	Service Department	i7	81757												
19	Rejected	Don't want to say	Service Department	i5	100												
1601	Hired	Don't want to say	Operations Department	b9	76730												
1790	Rejected	Don't want to say	Operations Department	c-10	25785												
2877	Hired	Don't want to say	Operations Department	c5	25583												
3258	Hired	Don't want to say	Sales Department	c5	80262												
4017	Hired	Don't want to say	Service Department	i5	4308												
4125	Rejected	Don't want to say	Purchase Department	c5	96396												
4407	Rejected	Don't want to say	Service Department	c5	22393												
5552	Hired	Don't want to say	Marketing Department	c9	94032												
5625	Rejected	Don't want to say	Production Department	c9	4076												
5889	Hired	Don't want to say	Service Department	c5	66948												
6329	Hired	Don't want to say	Operations Department	i1	98070												
6657	Hired	Don't want to say	Service Department	c8	12470												
6997	Hired	Don't want to say	Service Department	i1	3134												
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Ready 15 of 7167 records found Accessibility: Investigate Count: 15 79°F Sunny 16:53 06-01-2025

- Duplicate values were removed as well. 27 duplicate values were found and removed. This was done by using the “application_id” column.

Statistics.xlsx - Excel

File Home Insert Page Layout Formulas Data Review View Help Tell me what you want to do

A1 fx application_id

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	application_id	Interview Taken on	Status	event_name	Department	Post Name	Offered Salary								
2	383422	01-05-2014 11:40	Hired	Male	Service Department	c8	56553								
3	907518	06-05-2014 08:08	Hired	Female	Service Department	c5	22075								
4	176719	06-05-2014 08:08	Rejected	Male	Service Department	c5	70069								
5	429799	02-05-2014 16:28	Rejected	Female	Operations Department	i4	3207								
6	253651	02-05-2014 16:32	Hired	Male	Operations Department	i4	29668								
7	289907	01-05-2014 07:44	Hired	Male	Sales Department	c9	85914								
8	959124	06-05-2014 16:27	Rejected	Male	Sales Department	i7	69904								
9	86642	09-05-2014 13:17	Rejected	Male	Sales Department	i7	11758								
10	751029	02-05-2014 13:09	Hired	Female	Service Department	i4	15156								
11	434547	02-05-2014 13:11	Rejected	Female											
12	518854	01-05-2014 09:00	Rejected	Male											
13	649039	07-05-2014 10:48	Rejected	Female											
14	199526	07-05-2014 10:50	Hired	Male											
15	539803	15-05-2014 09:31	Hired	Male											
16	191009	09-05-2014 12:48	Hired	Female											
17	195323	09-05-2014 12:48	Hired	Don't want to say											
18	51318	02-05-2014 08:07	Hired	Male											
19	742283	02-05-2014 08:11	Rejected	Don't want to say											
20	513166	01-05-2014 22:53	Hired	Female	Operations Department	i1	73579								
21	791372	01-05-2014 22:54	Rejected	Male	Operations Department	i1	50351								
22	47857	01-05-2014 22:55	Rejected	Female	Operations Department	i1	38462								
23	834101	01-05-2014 22:53	Rejected	Don't want to say	Operations Department	i1	82510								
24	985008	01-05-2014 09:41	Rejected	Male	Service Department	i6	52554								
25	891568	01-05-2014 16:28	Hired	Female	Operations Department	i7	3423								
26	935899	10-05-2014 14:17	Rejected	Male	Service Department	i1	88744								
27	780839	10-05-2014 14:18	Hired	Female	Service Department	i1	70979								
28	851764	01-05-2014 16:01	Rejected	Male	Operations Department	i6	99574								
29	202821	01-05-2014 16:01	Hired	Male	Operations Department	i6	52176								
30	969924	01-05-2014 11:47	Rejected	Male	Finance Department	i1	61432								
31	765579	01-05-2014 09:26	Rejected	Male	Sales Department	i4	87884								
32	924976	01-05-2014 09:26	Rejected	Male	Sales Department	i4	56229								
33	896164	01-05-2014 17:21	Hired	Don't want to say	Production Department	i7	37947								
34															

Remove Duplicates Warning
Microsoft Excel found data next to your selection. Because you have not selected this data, it will not be removed.
What do you want to do?
☒ Expand the selection
☐ Continue with the current selection
Remove Duplicates... Cancel

Ready Accessibility: Investigate Average: 508703.5177 Count: 7168 Sum: 3645878111 79°F Sunny 16:58 06-01-2025

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?

A. Determining how many males and how many females were hired.			
Row Labels		Count of Status	
+ Don't want to say		408	
- Female		2675	
Hired		1856	
Rejected		819	
- Male		4084	
Hired		2563	
Rejected		1521	
Grand Total		7167	

Insights: The number of **females hired is 1856** and the number of **males hired is 2563**.

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.

B. Analysis of salaries offered	
Row Labels	
Average of Offered Salary	
Finance Department	₹ 49,628.01
General Management	₹ 58,722.09
Human Resource Department	₹ 49,002.28
Marketing Department	₹ 48,489.94
Operations Department	₹ 49,151.35
Production Department	₹ 49,448.48
Purchase Department	₹ 52,564.77
Sales Department	₹ 49,310.38
Service Department	₹ 50,629.88
Grand Total	₹ 49,983.03

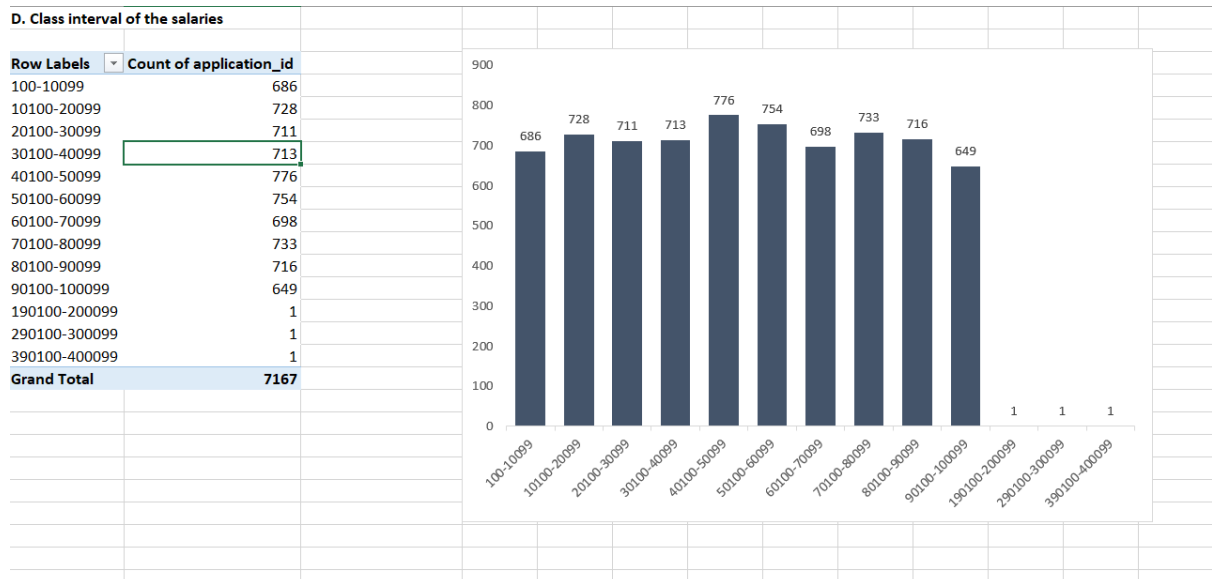
Using the function 'countif()'.

Department	Average Salary
Finance Department	49628.01
General Management	58722.09
Human Resource Department	49002.28
Marketing Department	48489.94
Operations Department	49151.35
Production Department	49448.48
Purchase Department	52564.77
Sales Department	49310.38
Service Department	50629.88

Insights: The overall average salary offered in this company is **Rs 49,983.03**

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.

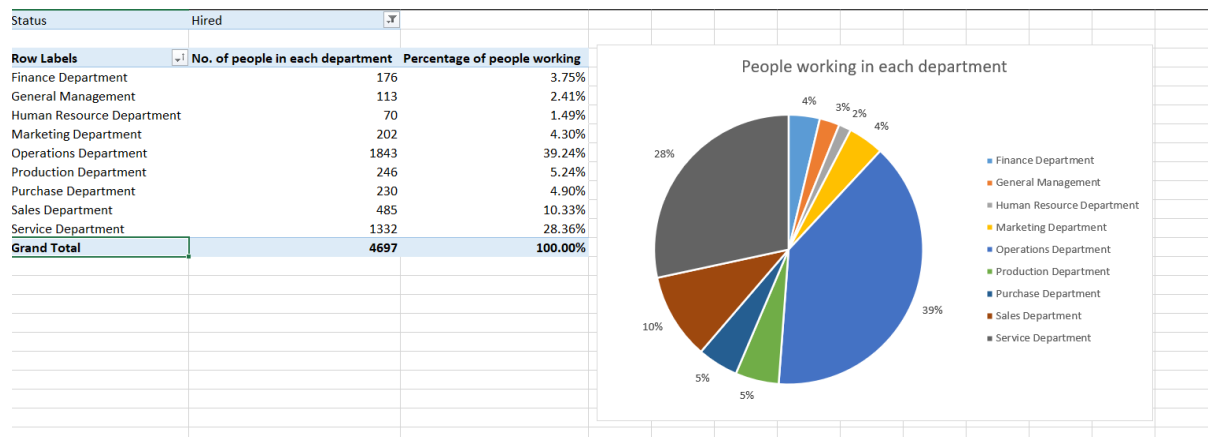


Insights: Created class intervals for salaries in the company to better understand the salary distribution within the company.

Maximum people i.e. 776 belong to the 40100 to 50099 offered salary range.

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.

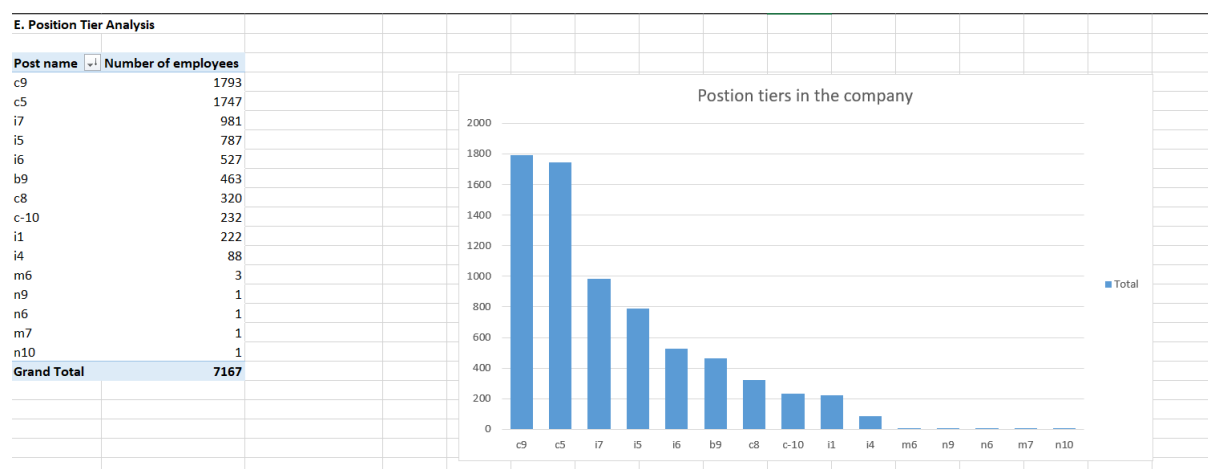


Insights: Used a pie chart to visualize the proportion of people working in different departments. Here, only hired people are considered.

Most of the employees work in the Operation Department and the least number of employees work in the Human Resource Department.

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: The post name c9 has the greatest number of employees.

Conclusion:

With this project I was able to test my excel skills and derive insights as a data analyst for a multinational company. I was able to answer various questions and I could analyse the dataset and provide insights that could potentially help the company improve its hiring process and make better hiring decisions in the future.

Link:

https://docs.google.com/spreadsheets/d/1qt-DIME-DuVUjaP10yVxERTIXE-V1tHZ/edit?usp=drive_link&ouid=109524556463170667809&rtpof=true&sd=true