HIRING PROCESS ANALYTICS

Project Description:

As a data analyst data wrangling is important. This involves handling missing data, simplifying the dataset, detecting and dealing with outliers, and summarizing your findings. Therefore, the main goal is to provide meaningful conclusions that can help the company enhance its hiring process and decision-making.

In this project, I am analyzing hiring process data to gain insights from about records of previous hires within a multinational company. By analyzing this data, I am aiming to uncover valuable trends and information about the company's hiring process, which can contribute to making informed decisions and improvements for the future.

Approach:

A. Hiring Analysis

Determining the gender distribution of hires. Calculating the number of males and females that have been hired by the company.

B. Salary Analysis

Calculating the average salary offered by the company using Excel functions.

C. Salary Distribution

Creating class intervals for the salaries in the company. This will help in visualizing and understanding the distribution of salaries.

D. Departmental Analysis

Utilizing a suitable visualization, such as a pie chart or bar graph, to represent the proportion of employees working in different departments.

E. Position Tier Analysis

Using a chart or graph to illustrate the distribution of different position tiers within the company.

Tech-Stack Used:

The project utilized MS-EXCEL, a powerful tabular Data tool. I used Excel to query and analyse the data, thanks to its robust support and data manipulation capabilities.

Data Wrangled
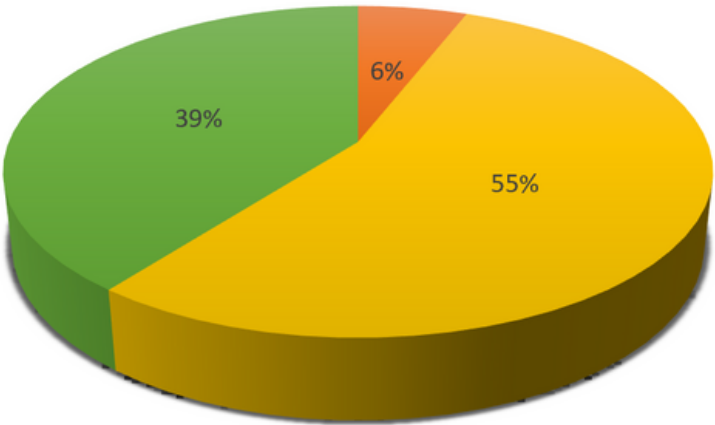
Hiring Analysis

Gender	Hired Employess	All People
Unknown	278	408
Male	2563	4085
Female	1856	2675
Total	4697	7168

Hired Gender Distribution

- Unknown 6%
- Male 55%
- Female 39%

B. Salary Analysis

Salary Analysis

	Q1	Q3	IQR	Lower	Upper	Min	Max
	25452.75	74429	48976.25	-48011.6	147893.375	0	400000
Outliers Count				0	3		

Avg Total Salary offered without Outliers $ 49878

Avg Total Salary offered with Outliers $ 49976

Salary Distribution

Class	Lower	Upper	Hired Frequency	Total Frequency
Below 40000	0	39999	1870	2831
40000-59999	40000	59999	1022	1532
60000-79999	60000	79999	929	1432
80000-99999	80000	99999	873	1370
100000-199999	100000	119999	0	0
120000-139999	120000	139999	0	0
140000 Above	140000	400000	3	3
Total			4697	7168

Hired Salary Distribution
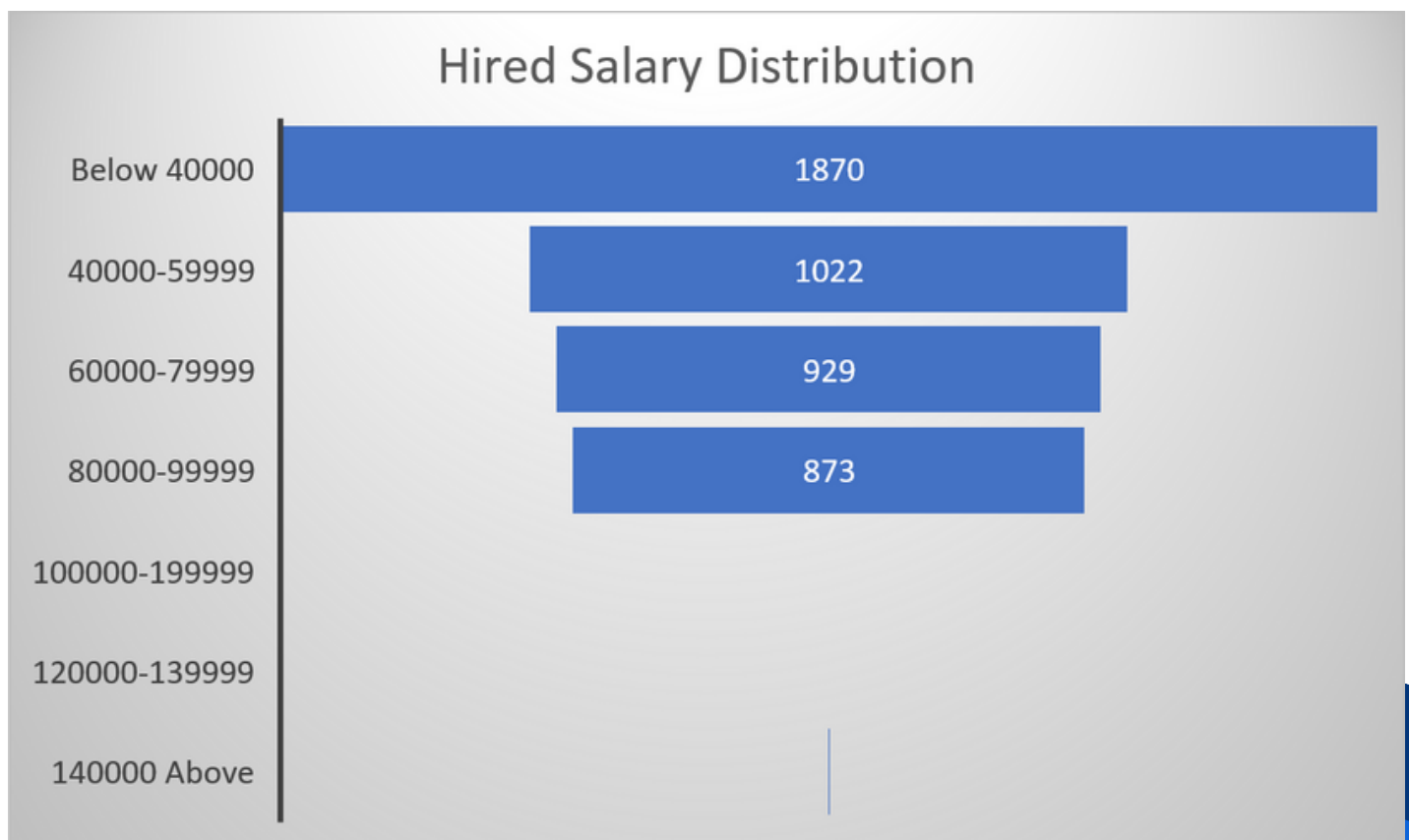
C. Salary Distribution

All Salary Distribution

Salary Range	Count
Below 40000	2831
40000-59999	1532
60000-79999	1432
80000-99999	1370
100000-199999	
120000-139999	
140000 Above	
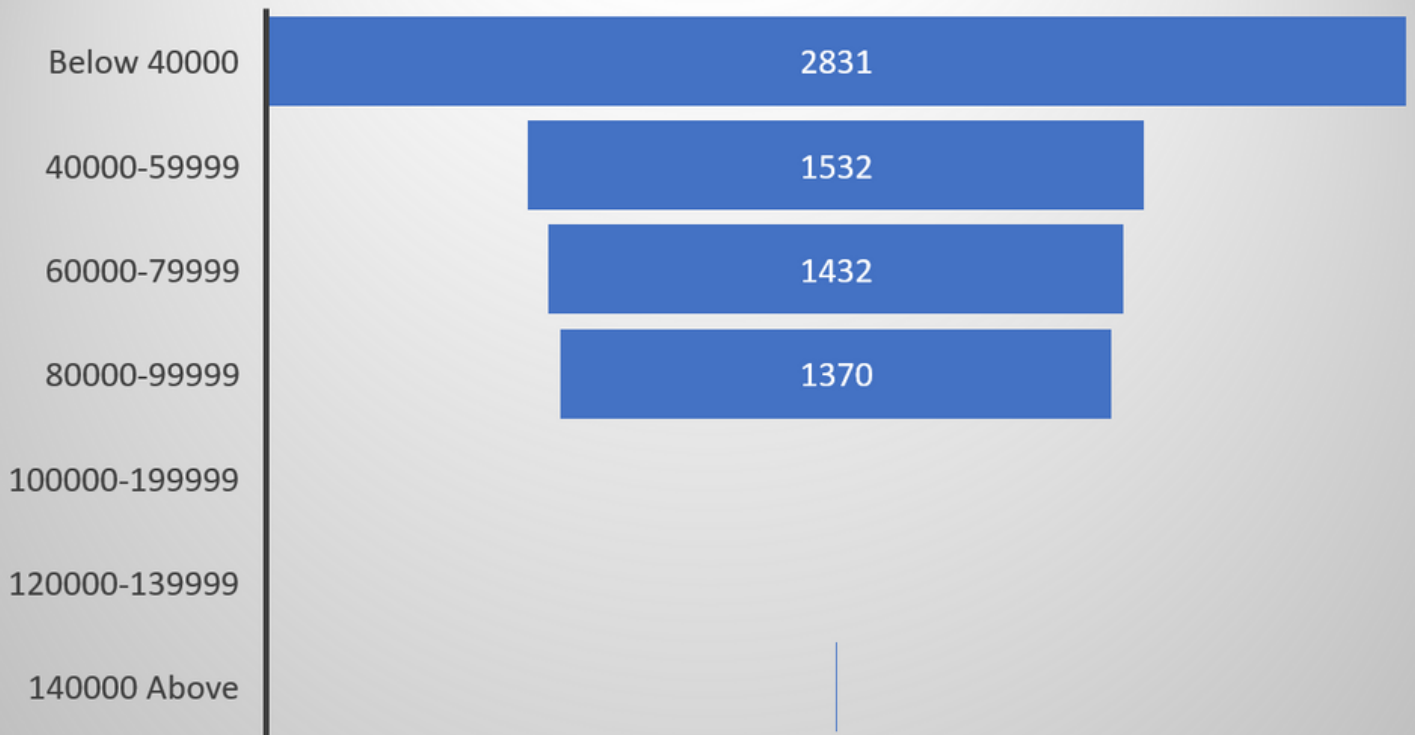
Departmental Analysis

Departments	No. Hired	No. All	% Hired	% All
Finance Department	176	288	3.75	4.02
General Management	113	172	2.41	2.40
Human Resource Department	70	97	1.49	1.35
Marketing Department	202	325	4.30	4.53
Operations Department	1843	2771	39.24	38.66
Production Department	246	380	5.24	5.30
Purchase Department	230	333	4.90	4.65
Sales Department	485	747	10.33	10.42
Service Department	1332	2055	28.36	28.67
Total	**4697**	**7168**	**100.00**	**100.00**

Hired by Departments

Department	Value
SERVICE DEPARTMENT	1332
SALES DEPARTMENT	485
PURCHASE DEPARTMENT	230
PRODUCTION DEPARTMENT	246
OPERATIONS DEPARTMENT	1843
MARKETING DEPARTMENT	202
HUMAN RESOURCE…	70
GENERAL MANAGEMENT	113
FINANCE DEPARTMENT	176
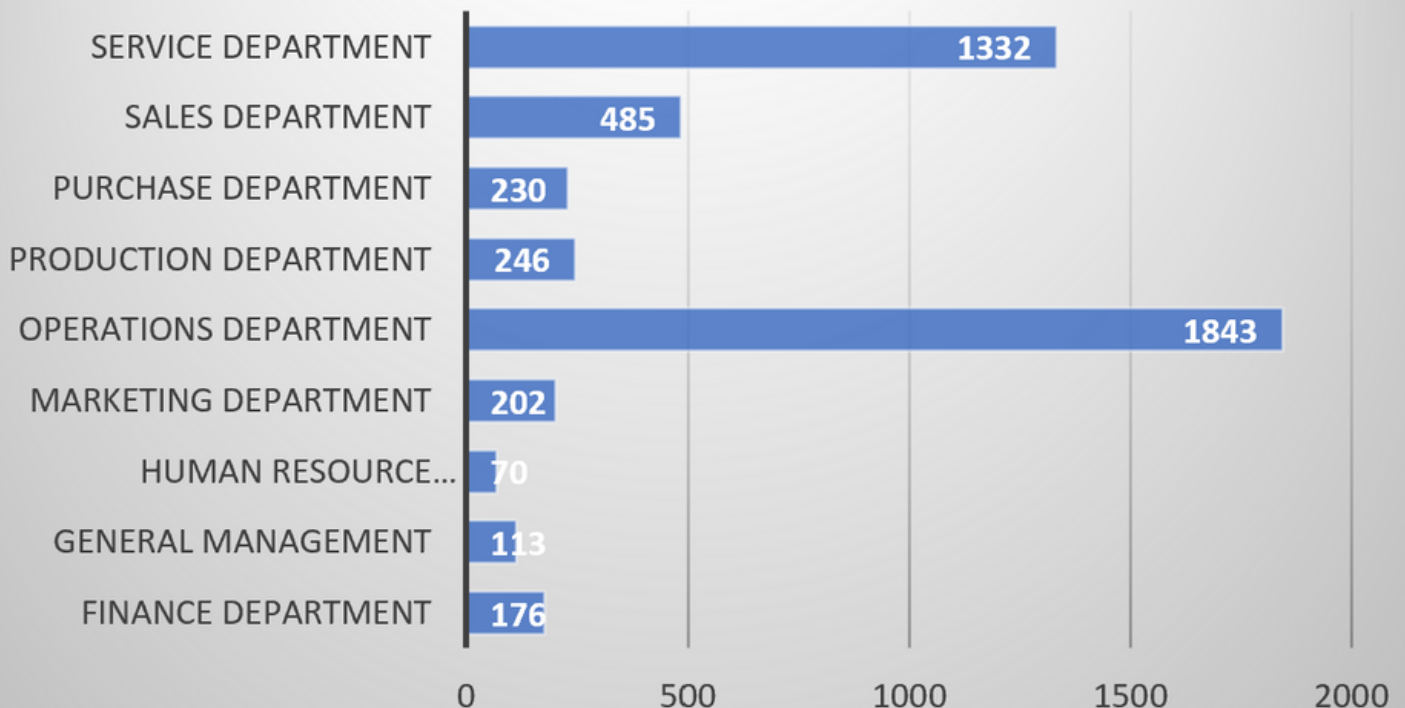
D. Departmental Analysis

All by Departments

Department	Value
SERVICE DEPARTMENT	2055
SALES DEPARTMENT	747
PURCHASE DEPARTMENT	333
PRODUCTION DEPARTMENT	380
OPERATIONS DEPARTMENT	2771
MARKETING DEPARTMENT	325
HUMAN RESOURCE DEPARTMENT	97
GENERAL MANAGEMENT	172
FINANCE DEPARTMENT	288

Position Tier Analysis

Post	Male Hired	Female Hired	Unknown Hired
b9	177	114	17
c-10	59	40	6
c5	634	487	61
c8	118	64	11
c9	656	502	81
i1	87	57	7
i4	14	15	3
i5	288	184	39
i6	195	130	12
i7	333	261	41
m6	1	1	0
m7	0	0	0
n6	0	1	0
n9	0	0	0
n10	0	0	0
Unknown	1	0	0
Total	2563	1856	278

Posts hired by Gender

Position Tier Analysis

Post	Below 40000 Hired	40000-59999 Hired	60000-79999 Hired	80000-99999 Hired	100000-199999 Hired	120000-139999 Hired	140000 Above Hired
b9	119	68	74	46	0	0	1
c-10	41	21	25	18	0	0	0
c5	471	261	214	236	0	0	0
c8	80	36	32	45	0	0	0
c9	475	271	260	233	0	0	0
i1	69	31	26	25	0	0	0
i4	14	5	9	3	0	0	1
i5	205	109	103	94	0	0	0
i6	138	84	70	45	0	0	0
i7	256	135	116	127	0	0	1
m6	2	0	0	0	0	0	0
m7	0	0	0	0	0	0	0
n6	0	1	0	0	0	0	0
n9	0	0	0	0	0	0	0
n10	0	0	0	0	0	0	0
Unknown	0	0	0	1	0	0	0
Total	1870	1022	929	873	0	0	3

Posts hired by Salary intervals

- ■ Below 40000 Hired
- ■ 40000-59999 Hired
- ■ 60000-79999 Hired
- ■ 80000-99999 Hired
- ■ 100000-199999 Hired
- ■ 120000-139999 Hired
- ■ 140000 Above Hired

E. Position Tier Analysis

Position Tier Analysis

Post	Finance Department Hired	General Management Hired	Human Resource Department Hired	Marketing Department Hired	Operations Department Hired	Production Department Hired	Purchase Department Hired	Sales Department Hired	Service Department Hired
b9	8	2	1	16	97	29	18	15	122
c-10	2	7	0	7	44	5	2	8	30
c5	34	18	15	54	455	48	83	142	333
c8	3	4	5	19	51	3	3	36	69
c9	81	24	4	37	502	60	51	126	354
i1	4	1	2	10	65	16	0	2	51
i4	0	1	0	1	15	1	1	3	10
i5	24	23	30	17	194	26	19	53	125
i6	5	6	5	10	186	19	16	21	69
i7	15	27	8	31	233	39	36	78	168
m6	0	0	0	0	1	0	0	0	1
m7	0	0	0	0	0	0	0	0	0
n6	0	0	0	0	0	0	1	0	0
n9	0	0	0	0	0	0	0	0	0
n10	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	1	0
Total	176	113	70	202	1843	246	230	485	1332

Posts hired by Department
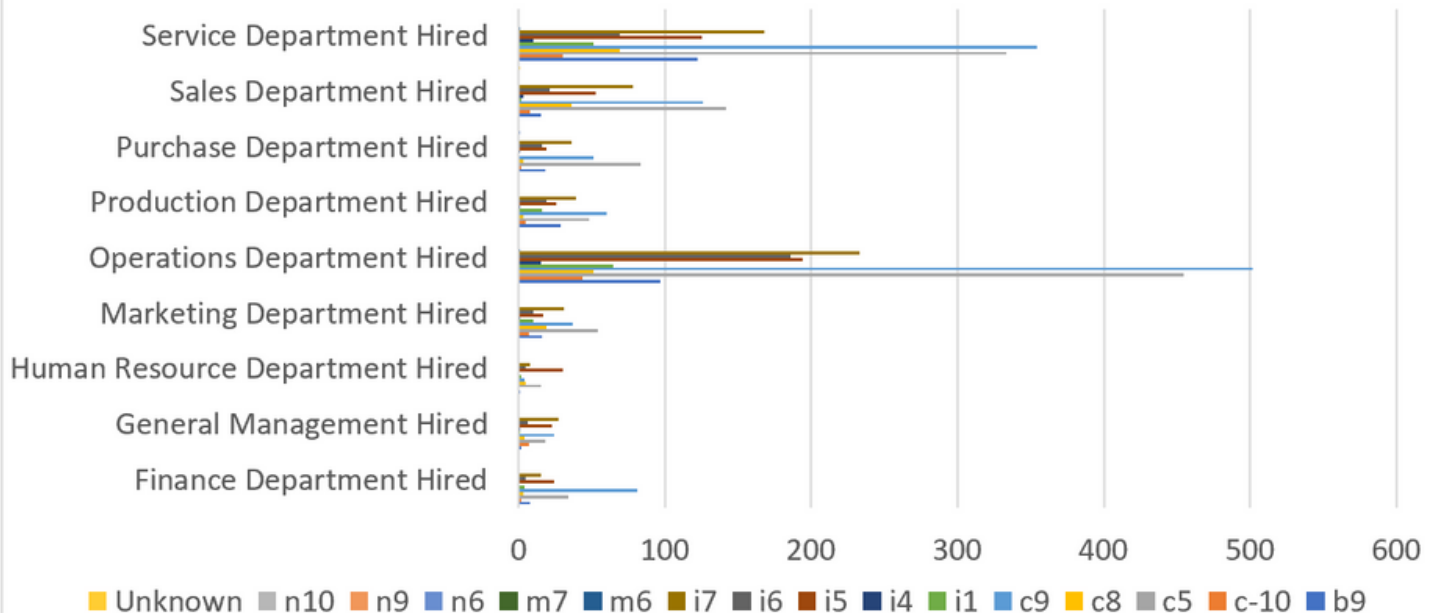
Insights

- Most hired individuals are males, 6% prefer not to state gender.
- Avg. Total Salary offered without Outliers is $49878
- Avg. Total Salary offered with Outliers is $49976
- 2892 employees had salary below $60000 out of total 4697 hired.
- 1802 employees had salary above $60000 and below $100000 out of total 4697 hired.
- Operation department had highest hires with 1843, followed by Service department with 1332 .
- Same trend for department for all non hired individual as well.
- Post c5 & c9 had the highest hired individuals, majority were males.
- Post m6, m7, n6, n9, n10 were almost non existence.
- Post c5 & c9 had majority of employees with salary below $40000.
- Post c5 & c9 employees mostly belonged to Operations Department.
- Service department also followed the same trends.