**Hiring Process Analytics**

The project was designed to conduct comprehensive data analytics on the hiring process within a company, , with the primary objective of gaining insights into various aspects such as gender distribution, salary analysis, departmental composition, and position tiers. By analyzing these factors, the project aimed to provide valuable insights into hiring patterns and organizational dynamics.

**Approach**

I have used Microsoft Excel for its extensive data analysis functionalities, including pivot tables, charts, and statistical functions, It facilitated in-depth exploration and visualization of the hiring data, enabling a thorough understanding of the underlying trends and patterns.

A dataset containing relevant information on hires, including gender, salary, department, and position, was obtained

**Insights**

# Analysis of People hired and rejected gender wise

# Analysis of salary department Wise and overall average

1. **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?

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of event\_name** | **Column Labels** |  |  |
| **Row Labels** | **Female** | **Male** | **Grand Total** |
| Hired | 1856 | 2572 | 4428 |
| Rejected | 819 | 1527 | 2346 |
| **Grand Total** | **2675** | **4099** | **6774** |

1. 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.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | Overall Average Salary | Department Wise Salary | | 49978.01493 | |  |  | | --- | --- | | **Row Labels** | **Sum of Offered Salary** | | Finance Department | 14292866 | | General Management | 10100200 | | Human Resource Department | 4753221 | | Marketing Department | 15759229 | | Operations Department | 136198403 | | Production Department | 18790424 | | Purchase Department | 17504070 | | Sales Department | 36749608 | | Service Department | 104044412 | | **Grand Total** | **358192433** | | |  |

1. 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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | Lower | Upper |  | Freq | | 0 | 10000 |  | 676 | | 10001 | 20000 |  | 730 | | 20001 | 30000 |  | 708 | | 30001 | 40000 |  | 710 | | 40001 | 50000 |  | 781 | | 50001 | 60000 |  | 748 | | 60001 | 70000 |  | 697 | | 70001 | 80000 |  | 733 | | 80001 | 90000 |  | 708 | | 90001 | 100000 |  | 659 | | 100001 | 110000 |  | 0 | | 110001 | 120000 |  | 0 | | 120001 | 130000 |  | 0 | | 130001 | 140000 |  | 0 | | 140001 | 150000 |  | 0 | | 150001 | 160000 |  | 0 | | 160001 | 170000 |  | 0 | | 170001 | 180000 |  | 0 | | 180001 | 190000 |  | 0 | | 190001 | 200000 |  | 0 | | 200001 | 210000 |  | 0 | | 210001 | 220000 |  | 0 | | 220001 | 230000 |  | 0 | | 230001 | 240000 |  | 0 | | 240001 | 250000 |  | 0 | | 250001 | 260000 |  | 0 | | 260001 | 270000 |  | 0 | | 270001 | 280000 |  | 0 | | 280001 | 290000 |  | 0 | | 290001 | 300000 |  | 1 | | 300001 | 310000 |  | 0 | | 310001 | 320000 |  | 0 | | 320001 | 330000 |  | 0 | | 330001 | 340000 |  | 0 | | 340001 | 350000 |  | 0 | | 350001 | 360000 |  | 0 | | 360001 | 370000 |  | 0 | | 370001 | 380000 |  | 0 | | 380001 | 390000 |  | 0 | | 390001 | 400000 |  | 1 | |

1. 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.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | **Count of Status** | **Column Labels** |  | | **Row Labels** | **Hired** | **Grand Total** | | Finance Department | 176 | 176 | | General Management | 113 | 113 | | Human Resource Department | 70 | 70 | | Marketing Department | 202 | 202 | | Operations Department | 1843 | 1843 | | Production Department | 246 | 246 | | Purchase Department | 230 | 230 | | Sales Department | 484 | 484 | | Service Department | 1332 | 1332 | | **Grand Total** | **4696** | **4696** | |  |

5) 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.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Count of Status** | **Column Labels** |  |  | | **Row Labels** | **Hired** | **Rejected** | **Grand Total** | | b9 | 308 | 155 | 463 | | c-10 | 105 | 127 | 232 | | c5 | 1182 | 565 | 1747 | | c8 | 193 | 127 | 320 | | c9 | 1239 | 553 | 1792 | | i1 | 151 | 71 | 222 | | i4 | 32 | 56 | 88 | | i5 | 511 | 276 | 787 | | i6 | 337 | 190 | 527 | | i7 | 635 | 347 | 982 | | m6 | 2 | 1 | 3 | | m7 |  | 1 | 1 | | n10 |  | 1 | 1 | | n6 | 1 |  | 1 | | n9 |  | 1 | 1 | | **Grand Total** | **4696** | **2471** | **7167** | |  |

**Outliers Analysis**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 1) | **Outliers detection** |  |  |  |  |  |  | |  |  |  |  |  |  |  |  | |  |  | Q1 | Q | 25460.5 |  |  |  | |  |  | Q3 | 16885.75 | 74418.5 |  |  |  | |  |  |  |  |  |  |  |  | |  |  | IQR |  | 48958 |  |  |  | |  |  |  |  |  |  |  |  | |  |  | LOWEST | -47976.5 |  | HIGHEST | 147855.5 |  | |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  | | 2) | **Number of outliers** |  |  |  |  |  |  | |  | NORMAL VALUES | 7164 |  |  |  |  |  | |  |  |  |  |  |  |  |  | |  | OUTLIERS | 3 |  |  |  |  |  | |  |  |  |  |  |  |  |  | |

**Outliers Removal**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Offered Salary** | Outliers | CLEANED |  | VALUES AFTER OUTLIERS | | 56553 | FALSE | 56553 |  | 100 | | 22075 | FALSE | 22075 |  | 800 | | 70069 | FALSE | 70069 |  | 1007 | | 3207 | FALSE | 3207 |  | 1022 | | 29668 | FALSE | 29668 |  | 1027 | | 69904 | FALSE | 69904 |  | 1035 | | 11758 | FALSE | 11758 |  | 1038 | | 15156 | FALSE | 15156 |  | 1042 | | 49515 | FALSE | 49515 |  | 1074 | | 26990 | FALSE | 26990 |  | 1079 | | 200000 | FALSE | 0 |  | 1105 | | 86787 | FALSE | 86787 |  | 1141 | | 2308 | FALSE | 2308 |  | 1155 | | 56688 | FALSE | 56688 |  | 1177 | | 81757 | FALSE | 81757 |  | 1185 | | 15134 | FALSE | 15134 |  | 1188 | | 100 | FALSE | 100 |  | 1210 | | 73579 | FALSE | 73579 |  | 1212 | | 50351 | FALSE | 50351 |  | 1216 | | 38462 | FALSE | 38462 |  | 1251 | | 82510 | FALSE | 82510 |  | 1258 | | 52554 | FALSE | 52554 |  | 1262 | | 3423 | FALSE | 3423 |  | 1282 | | 88744 | FALSE | 88744 |  | 1304 | | 70979 | FALSE | 70979 |  | 1326 | | 99574 | FALSE | 99574 |  | 1346 | | 52176 | FALSE | 52176 |  | 1351 | | 61432 | FALSE | 61432 |  | 1352 | | 87884 | FALSE | 87884 |  | 1362 | | 56229 | FALSE | 56229 |  | 1386 | | 37947 | FALSE | 37947 |  | 1389 | | 88057 | FALSE | 88057 |  | 1415 | | 72843 | FALSE | 72843 |  | 1422 | | 84513 | FALSE | 84513 |  | 1456 | | 23129 | FALSE | 23129 |  | 1458 | | 73304 | FALSE | 73304 |  | 1459 | | 85176 | FALSE | 85176 |  | 1460 | | 31854 | FALSE | 31854 |  | 1461 | | 11970 | FALSE | 11970 |  | 1469 | | 2085 | FALSE | 2085 |  | 1487 | | 800 | FALSE | 800 |  | 1513 | | 41402 | FALSE | 41402 |  | 1516 | | 48028 | FALSE | 48028 |  | 1519 | | 22832 | FALSE | 22832 |  | 1524 | | 5664 | FALSE | 5664 |  | 1531 | | 89786 | FALSE | 89786 |  | 1536 | | 51645 | FALSE | 51645 |  | 1537 | | 60294 | FALSE | 60294 |  | 1611 | | 53465 | FALSE | 53465 |  | 1619 | | 52285 | FALSE | 52285 |  | 1632 | | 2013 | FALSE | 2013 |  | 1635 | | 98622 | FALSE | 98622 |  | 1646 | | 68666 | FALSE | 68666 |  | 1659 | | 67434 | FALSE | 67434 |  | 1666 | | 12624 | FALSE | 12624 |  | 1676 | | 68466 | FALSE | 68466 |  | 1686 | | 27418 | FALSE | 27418 |  | 1710 | | 9009 | FALSE | 9009 |  | 1731 | | 40831 | FALSE | 40831 |  | 1736 | | 85140 | FALSE | 85140 |  | 1740 | |

**Statstical Analysis:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | Offered Salary | VALUES AFTER OUTLIERS | | 56553 | 100 | | 22075 | 800 | | 70069 | 1007 | | 3207 | 1022 | | 29668 | 1027 | | 69904 | 1035 | | 11758 | 1038 | | 15156 | 1042 | | 49515 | 1074 | | 26990 | 1079 | | 200000 | 1105 | | 86787 | 1141 | | 2308 | 1155 | | 56688 | 1177 | | 81757 | 1185 | | 15134 | 1188 | | 100 | 1210 | | 73579 | 1212 | | 50351 | 1216 | | 38462 | 1251 | | 82510 | 1258 | | 52554 | 1262 | | 3423 | 1282 | | 88744 | 1304 | | 70979 | 1326 | | 99574 | 1346 | | 52176 | 1351 | | 61432 | 1352 | | 87884 | 1362 | | 56229 | 1386 | | 37947 | 1389 | | 88057 | 1415 | | 72843 | 1422 | | 84513 | 1456 | | 23129 | 1458 | | 73304 | 1459 | | 85176 | 1460 | | 31854 | 1461 | | 11970 | 1469 | | 2085 | 1487 | | 800 | 1513 | | 41402 | 1516 | | 48028 | 1519 | | 22832 | 1524 | | 5664 | 1531 | | 89786 | 1536 | | 51645 | 1537 | | 60294 | 1611 | | 53465 | 1619 | | 52285 | 1632 | | 2013 | 1635 | | 98622 | 1646 | | 68666 | 1659 | | 67434 | 1666 | | 12624 | 1676 | | 68466 | 1686 | | 27418 | 1710 | | 9009 | 1731 | | 40831 | 1736 | | 85140 | 1740 | | 1141 | 1752 | | 39485 | 1763 | | 84675 | 1770 | | 33631 | 1808 | | 45288 | 1817 | | 46980 | 1887 | | 25621 | 1889 | | 6472 | 1898 | | 25239 | 1911 | | 94869 | 1917 | | |  |  |  | | --- | --- | --- | | **Before Removing Outliers** |  |  | |  |  |  | |  | Mean | 49978.01493 | |  | Median | 49625 | |  | Mode | 72843 | |  | STD | 28851.05436 | |  | Standard Variance | 832383337.7 | |  | Range | 399900 | |  | Min | 100 | |  | Max | 400000 | |  | count | 7167 | |  |  |  | |  |  |  | | **After Removing Outliers** |  |  | |  |  |  | |  | Mean | 49873.31561 | |  | median | 49614.5 | |  | Mode | 20666 | |  | STD | 28350.45112 | |  | Standard Variance | 803748078.7 | |  | Range | 99867 | |  | Min | 100 | |  | Max | 99967 | |  | Count | 7164 | |  |  |  | |