**Attrition Based on Employee Performance**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Count of EmployeeID** | **Column Labels** |  |  |  |  |
| **Row Labels** | **1** | **2** | **3** | **4** | **Grand Total** |
| 3 | 48 | 150 | 321 | 69 | 588 |
| 4 | 6 | 30 | 78 | 9 | 123 |
| **Grand Total** | **54** | **180** | **399** | **78** | **711** |

It is seen that only Excellent and Outstanding performers are leaving the company. The non-performers may not find a suitable job, hence there is no attrition.

Among the performers, Excellent performers having medium to high job involvement has the most tendency to change job.

**Attrition based on overall satisfaction level**

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of EmployeeID** | **Column Labels** |  |  |
| **Row Labels** | **No** | **Yes** | **Grand Total** |
| 3 | 40.00% | 60.00% | 100.00% |
| 4 | 70.59% | 29.41% | 100.00% |
| 5 | 72.68% | 27.32% | 100.00% |
| 6 | 72.71% | 27.29% | 100.00% |
| 7 | 81.36% | 18.64% | 100.00% |
| 8 | 84.72% | 15.28% | 100.00% |
| 9 | 87.82% | 12.18% | 100.00% |
| 10 | 87.70% | 12.30% | 100.00% |
| 11 | 94.85% | 5.15% | 100.00% |
| 12 | 83.33% | 16.67% | 100.00% |
| **Grand Total** | **83.80%** | **16.20%** | **100.00%** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of EmployeeID** | **Column Labels** |  |  |
| **Row Labels** | **No** | **Yes** | **Grand Total** |
| 3 | 6 | 9 | 15 |
| 4 | 36 | 15 | 51 |
| 5 | 141 | 53 | 194 |
| 6 | 333 | 125 | 458 |
| 7 | 576 | 132 | 708 |
| 8 | 843 | 152 | 995 |
| 9 | 714 | 99 | 813 |
| 10 | 656 | 92 | 748 |
| 11 | 276 | 15 | 291 |
| 12 | 45 | 9 | 54 |
| **Grand Total** | **3626** | **701** | **4327** |

As can be seen the attrition number is high among the mid (6,7,8) satisfaction level but percentage wise it is high among the low and low satisfaction level employees.

**Travel time to work based Attrition:**

|  |  |
| --- | --- |
| **Row Labels** | **Average of DistanceFromHome** |
| No | 9.227088402 |
| Yes | 9.012658228 |
| **Grand Total** | **9.192517007** |

Travel time is not a driving factor as on average travel time is same for both segment.

**Age as factor:**

|  |  |
| --- | --- |
| **Row Labels** | **Average of Age** |
| No | 37.56123277 |
| Yes | 33.60759494 |
| **Grand Total** | **36.92380952** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Average of Age** | **Column Labels** |  |  |  |
| **Row Labels** | **Divorced** | **Married** | **Single** | **Grand Total** |
| No | 37.70408163 | 38.07640068 | 36.57428571 | 37.56123277 |
| Yes | 35.57575758 | 35.52380952 | 31.725 | 33.60759494 |
| **Grand Total** | **37.48929664** | **37.75780089** | **35.33617021** | **36.92380952** |

Relatively younger people are more inclined towards job change.

**Department wise Attrition:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of EmployeeID** | **Column Labels** |  |  |
| **Row Labels** | **No** | **Yes** | **Grand Total** |
| Human Resources | 69.84% | 30.16% | 100.00% |
| Research & Development | 84.29% | 15.71% | 100.00% |
| Sales | 84.98% | 15.02% | 100.00% |
| **Grand Total** | **83.88%** | **16.12%** | **100.00%** |

Clearly the company is facing an average of 16% attrition dominated by HR department.

**Stock Options:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of EmployeeID** | **Column Labels** |  |  |
| **Row Labels** | **No** | **Yes** | **Grand Total** |
| 0 | 83.20% | 16.80% | 100.00% |
| 1 | 84.90% | 15.10% | 100.00% |
| 2 | 82.28% | 17.72% | 100.00% |
| 3 | 84.71% | 15.29% | 100.00% |
| **Grand Total** | **83.88%** | **16.12%** | **100.00%** |

Doesn’t seem to have any effect on attrition chances.

**Gender Wise Attrition:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of EmployeeID** | **Column Labels** |  |  |
| **Row Labels** | **No** | **Yes** | **Grand Total** |
| **Female** | **84.69%** | **15.31%** | **100.00%** |
| Divorced | 90.98% | 9.02% | 100.00% |
| Married | 87.23% | 12.77% | 100.00% |
| Single | 76.63% | 23.37% | 100.00% |
| **Male** | **83.33%** | **16.67%** | **100.00%** |
| Divorced | 89.27% | 10.73% | 100.00% |
| Married | 87.72% | 12.28% | 100.00% |
| Single | 73.08% | 26.92% | 100.00% |
| **Grand Total** | **83.88%** | **16.12%** | **100.00%** |

Not a driving variable. Same trend seen among both the genders and marital state.

**Salary hike:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of EmployeeID** | **Column Labels** |  |  |
| **Row Labels** | **No** | **Yes** | **Grand Total** |
| 11 | 85.71% | 14.29% | 100.00% |
| 12 | 84.85% | 15.15% | 100.00% |
| 13 | 83.73% | 16.27% | 100.00% |
| 14 | 85.57% | 14.43% | 100.00% |
| 15 | 79.21% | 20.79% | 100.00% |
| 16 | 87.18% | 12.82% | 100.00% |
| 17 | 81.71% | 18.29% | 100.00% |
| 18 | 85.39% | 14.61% | 100.00% |
| 19 | 81.58% | 18.42% | 100.00% |
| 20 | 83.64% | 16.36% | 100.00% |
| 21 | 81.25% | 18.75% | 100.00% |
| 22 | 82.14% | 17.86% | 100.00% |
| 23 | 82.14% | 17.86% | 100.00% |
| 24 | 85.71% | 14.29% | 100.00% |
| 25 | 72.22% | 27.78% | 100.00% |
| **Grand Total** | **83.88%** | **16.12%** | **100.00%** |

Doesn’t look like… In every hike percentage slab, the percent of attrition is almost same.

**Workex:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of EmployeeID** | **Column Labels** |  |  |
| **Row Labels** | **No** | **Yes** | **Grand Total** |
| 0 | 54.55% | 45.45% | 100.00% |
| 1 | 50.83% | 49.17% | 100.00% |
| 2 | 70.97% | 29.03% | 100.00% |
| 3 | 78.57% | 21.43% | 100.00% |
| 4 | 80.95% | 19.05% | 100.00% |
| 5 | 81.82% | 18.18% | 100.00% |
| 6 | 82.40% | 17.60% | 100.00% |
| 7 | 77.78% | 22.22% | 100.00% |
| 8 | 84.69% | 15.31% | 100.00% |
| 9 | 89.55% | 10.45% | 100.00% |
| 10 | 87.60% | 12.40% | 100.00% |
| 11 | 80.19% | 19.81% | 100.00% |
| 12 | 89.58% | 10.42% | 100.00% |
| 13 | 91.67% | 8.33% | 100.00% |
| 14 | 87.10% | 12.90% | 100.00% |
| 15 | 87.50% | 12.50% | 100.00% |
| 16 | 91.89% | 8.11% | 100.00% |
| 17 | 90.91% | 9.09% | 100.00% |
| 18 | 85.19% | 14.81% | 100.00% |
| 19 | 86.36% | 13.64% | 100.00% |
| 20 | 93.26% | 6.74% | 100.00% |
| 21 | 97.06% | 2.94% | 100.00% |
| 22 | 90.32% | 9.68% | 100.00% |
| 23 | 90.91% | 9.09% | 100.00% |
| 24 | 83.33% | 16.67% | 100.00% |
| 25 | 92.86% | 7.14% | 100.00% |
| 26 | 92.86% | 7.14% | 100.00% |
| 27 | 100.00% | 0.00% | 100.00% |
| 28 | 92.86% | 7.14% | 100.00% |
| 29 | 100.00% | 0.00% | 100.00% |
| 30 | 100.00% | 0.00% | 100.00% |
| 31 | 88.89% | 11.11% | 100.00% |
| 32 | 100.00% | 0.00% | 100.00% |
| 33 | 85.71% | 14.29% | 100.00% |
| 34 | 80.00% | 20.00% | 100.00% |
| 35 | 100.00% | 0.00% | 100.00% |
| 36 | 100.00% | 0.00% | 100.00% |
| 37 | 100.00% | 0.00% | 100.00% |
| 38 | 100.00% | 0.00% | 100.00% |
| 40 | 0.00% | 100.00% | 100.00% |
| **Grand Total** | **83.89%** | **16.11%** | **100.00%** |

Freshers are more likely to leave the company and the attrition gradually drops with few spikes in the middle.

**Promotion:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Count of EmployeeID** | **Column Labels** |  |  |
| **Row Labels** | **No** | **Yes** | **Grand Total** |
| 0 | 81.07% | 18.93% | 100.00% |
| 1 | 86.27% | 13.73% | 100.00% |
| 2 | 83.02% | 16.98% | 100.00% |
| 3 | 82.69% | 17.31% | 100.00% |
| 4 | 91.80% | 8.20% | 100.00% |
| 5 | 95.56% | 4.44% | 100.00% |
| 6 | 81.25% | 18.75% | 100.00% |
| 7 | 78.95% | 21.05% | 100.00% |
| 8 | 100.00% | 0.00% | 100.00% |
| 9 | 76.47% | 23.53% | 100.00% |
| 10 | 83.33% | 16.67% | 100.00% |
| 11 | 91.67% | 8.33% | 100.00% |
| 12 | 100.00% | 0.00% | 100.00% |
| 13 | 80.00% | 20.00% | 100.00% |
| 14 | 88.89% | 11.11% | 100.00% |
| 15 | 76.92% | 23.08% | 100.00% |
| **Grand Total** | **83.88%** | **16.12%** | **100.00%** |

Mixed pattern seen for this attribute.