# Insights & Recommendations

- We see that there are 57% male employees and 43% female employees.
- The percentages of employees with different education levels are almost same for level 1 & 2.
- 97.3% of the employees who did not get a raise.
- Almost 43% of the employees joined at lowest designation (1). 34% joined at level 2, 20% at level 3 and below 2% joined at higher levels.
- Majority (35%) of the employees currently are at designation level 2, followed by designation level 1 (31%) and 3 (26%). Less than 5% of the employees are currently in higher designations.
- Only 54.6% of the employees received a promotion, while 45.4% did not. However, only 2.6% received a raise in income.
- Number of employees has been increasing with increase in year as well as amount of reporting's.
- The majority of the employees seem to be associated with city C20.
- Scatter plot of Income shows that Income increases with increase in age but after 45-50, we see a subtle decline.
- Scatter plot of Total Business Value shows an increase with increase in Age yet we notice a decline after 45.
- Income decreases with increase in Destination as about 4% of the employees hold higher designations.
- The median of the Income for employees having higher Grades is greater.
- Distribution of Income for employees at different Education level is about a change of 3-5% with level 0.
- Joining Designation Increases with increase in Grade.
- Top reporting days is 24 days.
- About 55% of the reporting's of the employees has got Quarterly Rating 1.
- Number of reporting increases with increase in Income as well as Total Business Value.
- Recall increased after treatment of data imbalance and is performing better in Gradient Boosting.
- Precision dropped after treatment of data imbalance and is performing better in Random Forest.
- F1_score increased after the treatment of imbalanced data and in Gradient Boosting.