

Salifort Motors Employee Retention

Employee Retention Prediction Modeling

ISSUE / PROBLEM

Salifort Motors aims to increase their rate of employee retention, as well as identify factors likely to make employees leave the company.

RESPONSE

The predicted variable was categorical, so logistic regression and tree-based models were used.

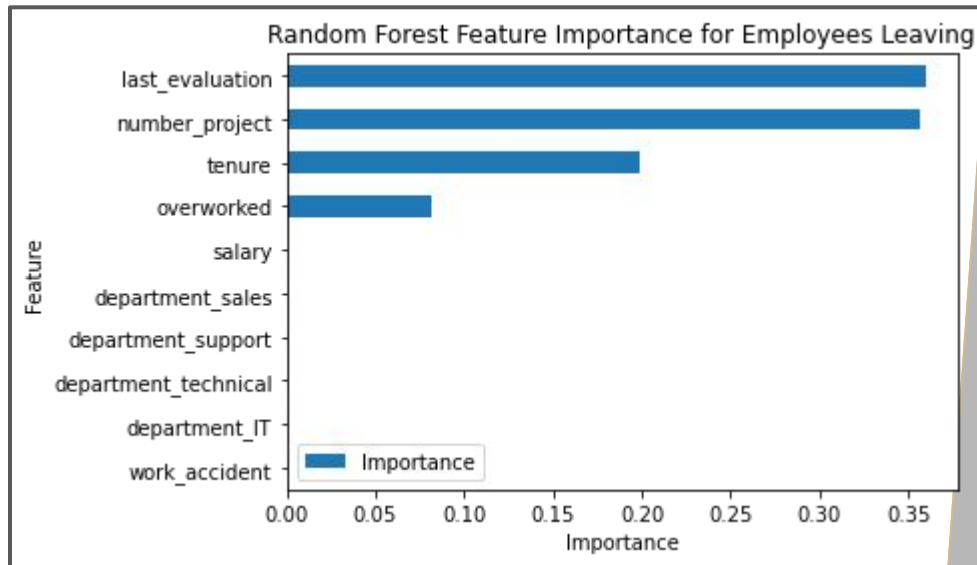
In a comparison of tree-based models, the random forest model was able to outperform the decision tree model.

IMPACT

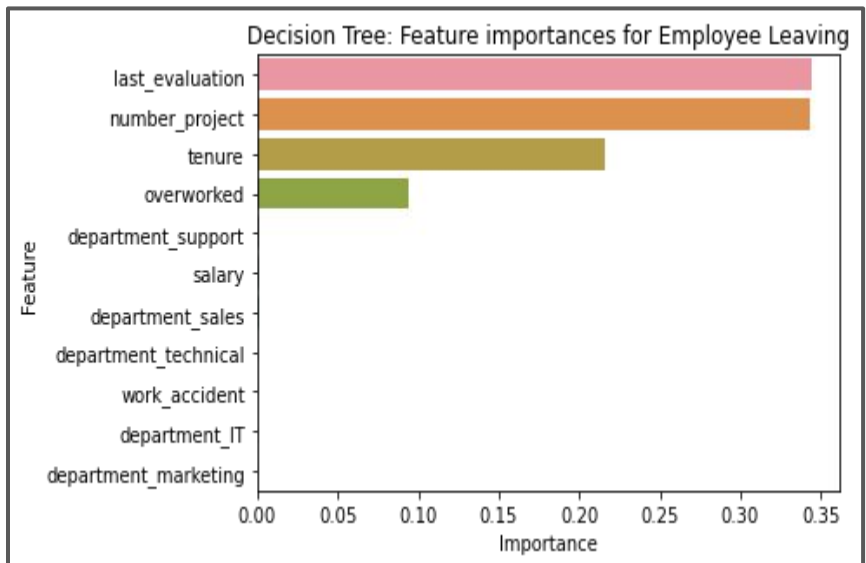
The model will help predict whether an employee will leave the company, as well as identify influential factors in leaving. This can help HR improve employee retention going forward.

KEY INSIGHTS

- As a measure to prevent employees from being overworked, limit the number of projects an employee can work on.
- Consider capabilities of the company to promote employees who have been with the company for 5 or more years, or investigate the lower satisfaction scores of employees with 5 or 6 years of tenure at the company.
- Enforce an upper limit to the number of hours an employee may work per month, or implement a system of additional benefits for doing so.
- Practices around employee evaluations should be revisited. It may be worth shifting reward benchmarks for employee evaluations down. This would reward a broader group of employees, and a different reward system could be implemented for those exceeding this new reward threshold structure.



Barplot of ranked feature importance from random forest model: 'last_evaluation', 'number_project', 'tenure', and the engineered feature, 'overworked'. These features are most helpful in predicting an employee's 'left' status.



Barplot of ranked feature importance from decision tree model. Top features are 'last_evaluation', 'number_project', 'tenure', and 'overworked', the same features as the random forest model as shown above.