

Salifort Motors

Employee Retention Strategies

ISSUE / PROBLEM

Salifort Motors seeks to improve employee retention and answer this question:

What's likely to make the employee leave the company?

RESPONSE

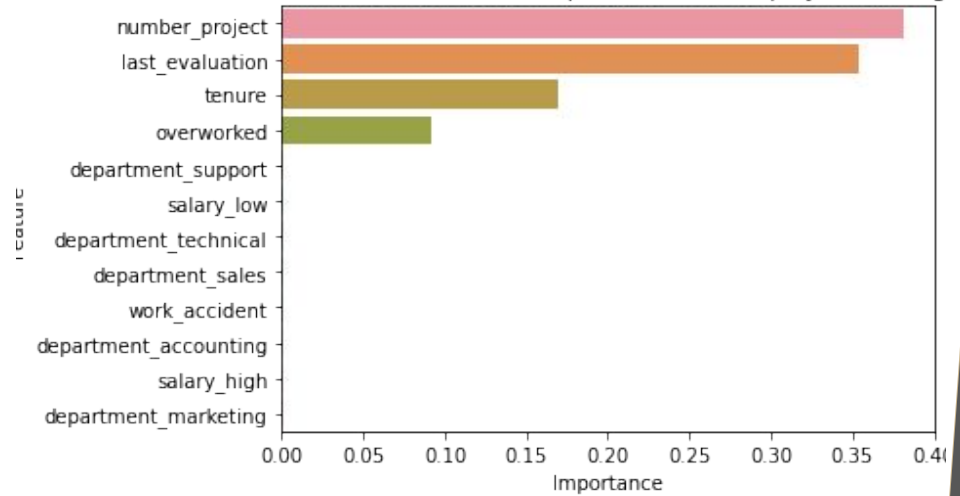
Since the variable we are seeking to predict (leave or not leave) is categorical, we use a logistic regression or a tree-based random forest model.

The random forest model outperforms the decision tree model by a little bit.

IMPACT

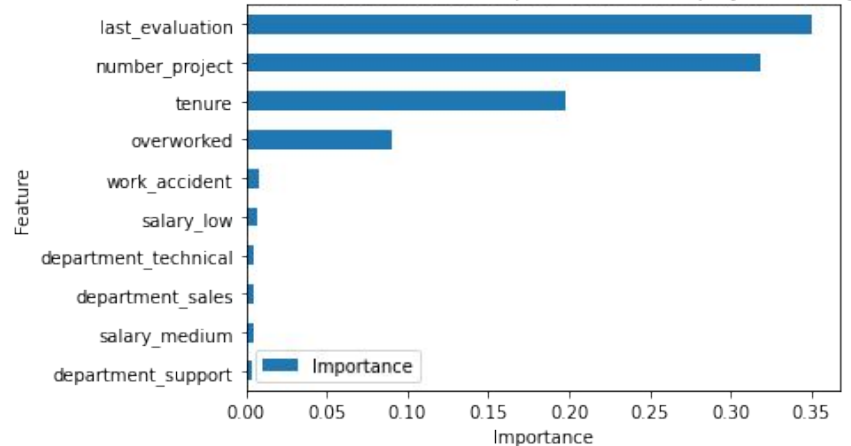
This model identifies helps predict whether an employee will stay or leave, and identifies which factors are most influential in this decision. Understanding these factors helps HR in improving employee retention.

Decision Tree: Feature Importances for Employee Leaving



'last_evaluation', 'number_project', 'tenure' and 'overworked' are the most relevant variables in the decision tree model.

Random Forest: Feature Importances for Employee Leaving



'last_evaluation', 'tenure', 'number_project', 'overworked', 'salary_low', and 'work_accident' are the most relevant variables in the random forest model.

INSIGHTS/NEXT STEPS

- Conduct interviews to understand high dissatisfaction among 4 year tenured employees.
- Consider promotions for 4 year tenured employees
- Consider limiting the number of projects, or perhaps hours per project, for each employee
- Hold meetings or send messages to ensure all employees are familiar with the company's overtime policies. All policies should be clear and transparent.
- Make sure overtime is optional. Implement a plan to reward employees who work overtime.
- Hold a meeting with management to discuss policy for fair promotions and evaluations. Consider a proportionate scale to reward employees who contribute with their effort, not only their time.