

Saliford Motors

Employee Retention Project

ISSUE / PROBLEM

Saliford Motors seek to improve employee retention by finding out the factors impacting employee decisions.

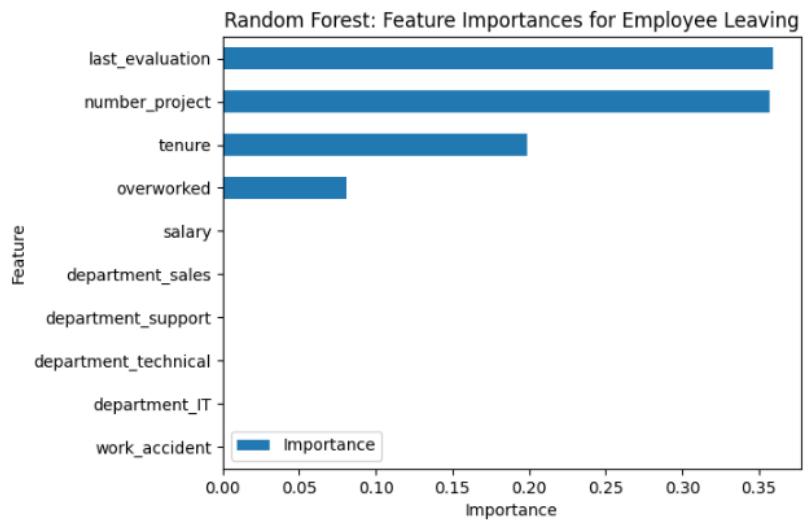
RESPONSE

Since the outcome variable is categorical, the data team have built logistic regression, decision tree, random forest & XGBoost models for predicting employee churn.

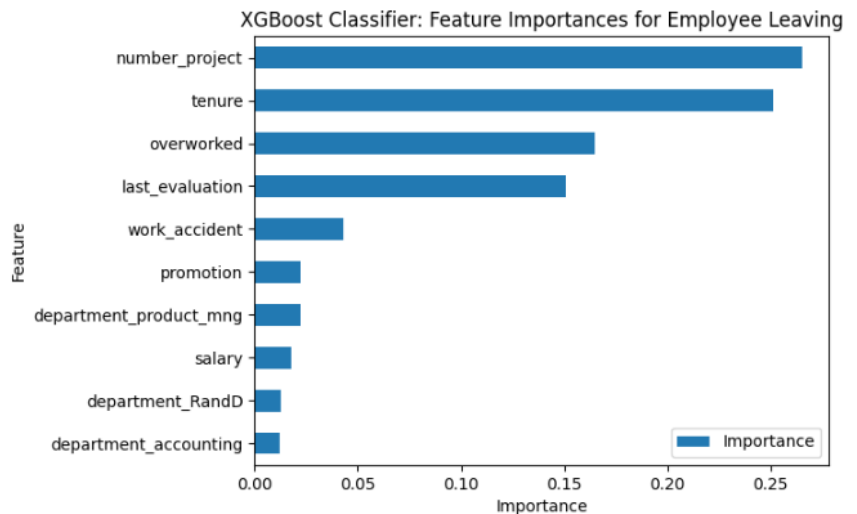
The XGBoost has outperformed all other models.

IMPACT

This model helps to accurately predict whether an employee will leave & highlight which factors contribute the most. These insights can help HR make decisions to improve employee retention.



Barplot above (from random forest model) shows 'last_evaluation', 'number_project', 'tenure', and 'overworked' as the most important features correlated to employee churning.



Likewise, the XGBoost model also shares the same features contributing to employees' decision to leave

KEY INSIGHTS

- Cap the number of projects employees can work on.
- Reward employees for working longer hours or prevent them from doing so.
- Consider promoting employees who stayed for at least 4 years or investigate why 4-year tenured staff are so dissatisfied.
- Educate employees on company's overtime pay policies and brief them on workload and time off expectations.
- Hold company-wide and team discussions to understand company's culture, and list possible improvement areas.
- Rework employee evaluation system – effort/contributions instead of more hours.