# Salifort Motors

## Employee Retention Project

**Overview**

Salifort Motors aims to enhance employee retention by addressing the question: What factors are most likely to cause employees to leave the company?

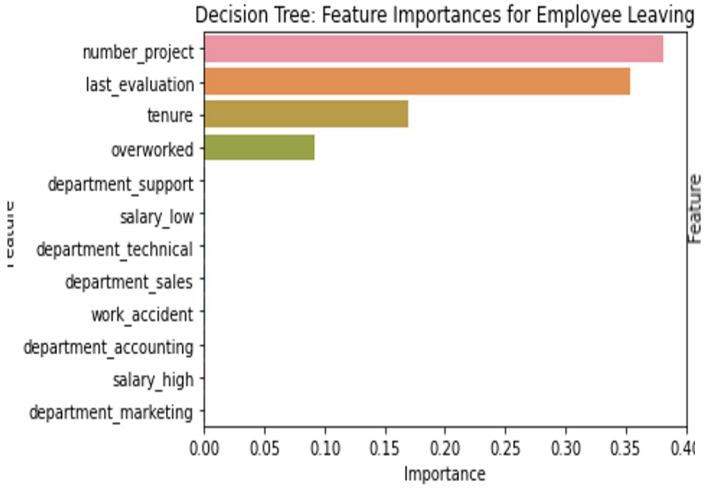
**Response**

Given that the target variable is categorical, the team considered building either a logistic regression model or a tree-based machine learning model. The random forest model performed slightly better than the decision tree model.

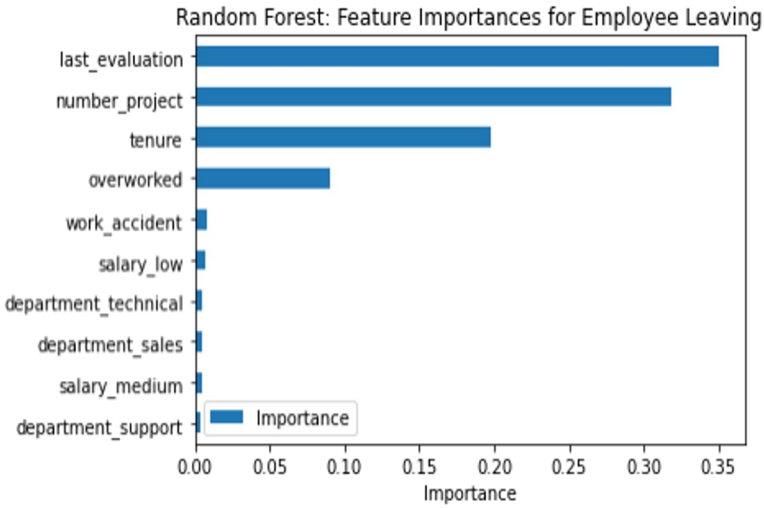
**Impact**

This model predicts whether an employee is likely to leave and identifies the most influential factors. These insights enable HR to make informed decisions to enhance employee retention.

**Details**




**Barplot shows the most relevant variables: *'last_evaluation', 'number_project', 'tenure'* and *'overworked'*.**




**In the random forest model above, *`last_evaluation`, `tenure`, `number_project`, `overworked`, `salary_low`,* and *`work_accident`* have the highest importance. These variables are most helpful in predicting the outcome variable, *`left`*.**

**Next Steps**

- *Limit the number of projects per employee.*
- *Promote or investigate dissatisfaction among employees with over four years of tenure.*
- *Reward long hours or reduce the expectation of extended work.*
- *Clarify overtime pay policies and expectations for workload and time off.*
- *Facilitate discussions on company culture both broadly and within teams.*
- *Implement a fair evaluation system, rewarding effort proportionately rather than based solely on hours worked.*