Salifort Motors

Employee Retention Project

ISSUE / PROBLEM

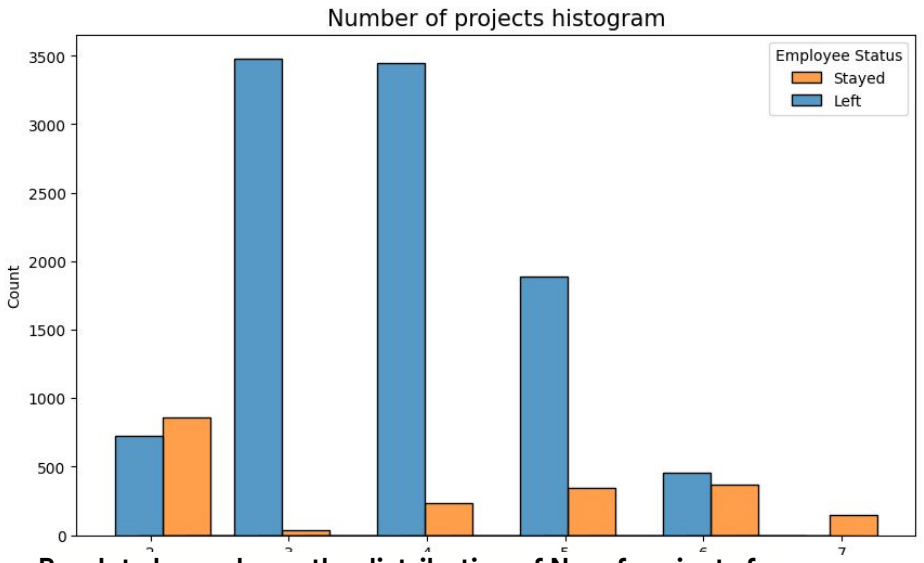
Salifort Motor fosters a corporate culture of growth and career advancement. However, the significant turnover rate brings substantial financial costs. Hence, Salifort aims to improve retention and pinpoint factors leading to departures.

RESPONSE

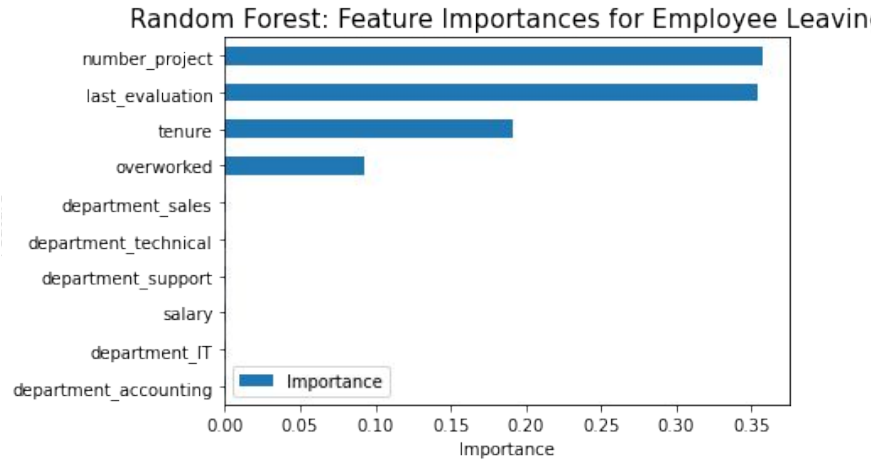
The HR department collected data from employees including satisfaction level, evaluation scores, numbers of projects, average working hour monthly, salary, among others.
With this data, a tree-based machine learning model is built to predict the retention and identify key factors.

IMPACT

This final model predicts whether an employee will leave, with an overall accuracy of 98.28%.
It also identifies which factors are most influential and uncovers some interesting patterns.



Barplot above shows the distribution of No. of projects for employees who stayed and left , respectively.



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

INSIGHTS/NEXT STEPS

- Optimize project allocation to prevent employees from working excessive overtime or getting burnt out and recognize their attribution.
- Reevaluate employees who have been with the company for at least four years, or conduct further investigation about why four-year tenured employees are so dissatisfied.
- Consider promoting long-serving employees and those with talent,
- Enhance the evaluation system to ensure that employees who contribute, possess talent, or have demonstrated prolonged effective working hours receive the deserved evaluation, rewards, or promotions.