Salifort Motors

Employee Retention Project

ISSUE:

Salifort Motors aims to enhance employee retention and address the following inquiry:

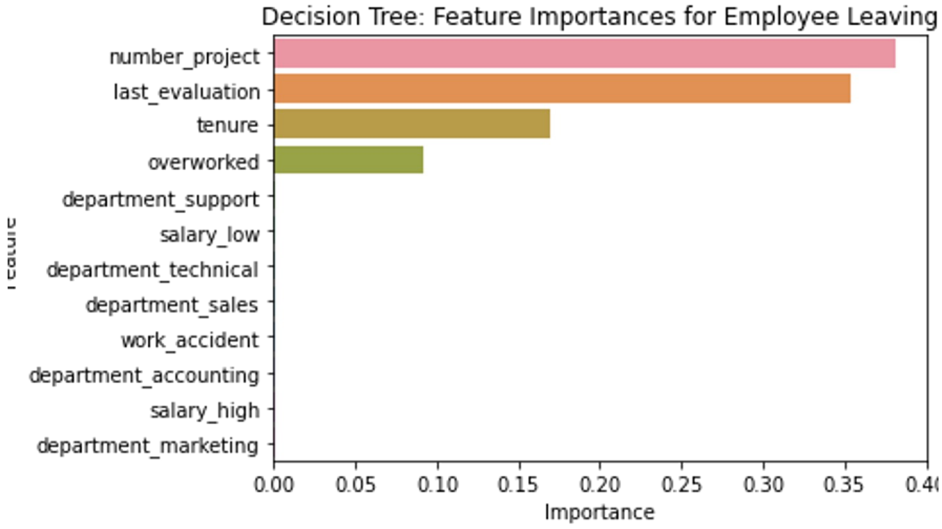
What's likely to make the employee leave the company?

RESPONSE:

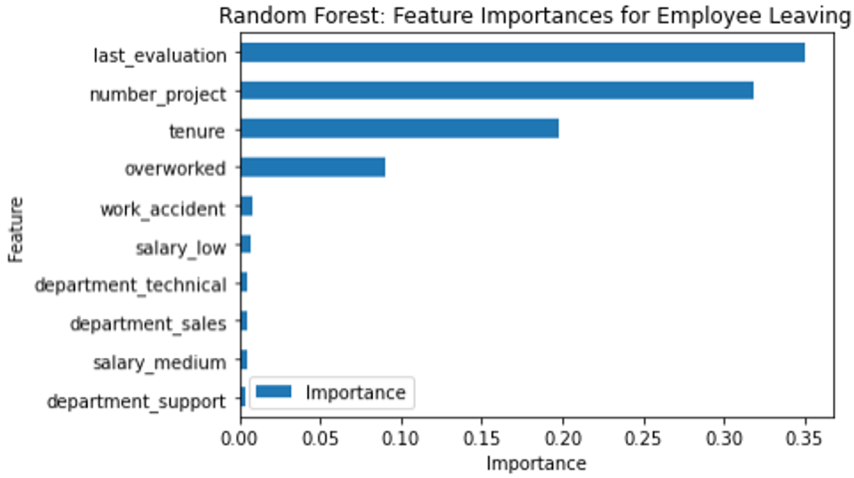
As the target variable we intend to predict is categorical, the team has the option to construct either a logistic regression or a tree-based machine learning model.
The random forest model exhibits a slight performance advantage over the decision tree model.

IMPACT:

This model assists in forecasting whether an employee will depart and determining the most influential factors. These findings can guide HR in making decisions to enhance employee retention.



Barplot above 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*`.

INSIGHTS/NEXT STEPS:

- Limit the number of projects employees can undertake.
- Evaluate the possibility of promoting employees who have completed four years with the company or investigate the causes of dissatisfaction among these employees.
- Offer rewards for extended work hours or remove the requirement for extended hours altogether.
- Ensure employees are well-informed about the company's overtime pay policies and clarify expectations regarding workload and time off.
- Organize company-wide and team-level discussions to better understand and address the company's work culture.
- Implement a proportional scale for recognizing and rewarding employees based on their contributions and effort, rather than reserving high evaluation scores solely for those working 200+ hours per month.