

Providing data-driven suggestions for HR Salifort Motors project proposal

Subtitle

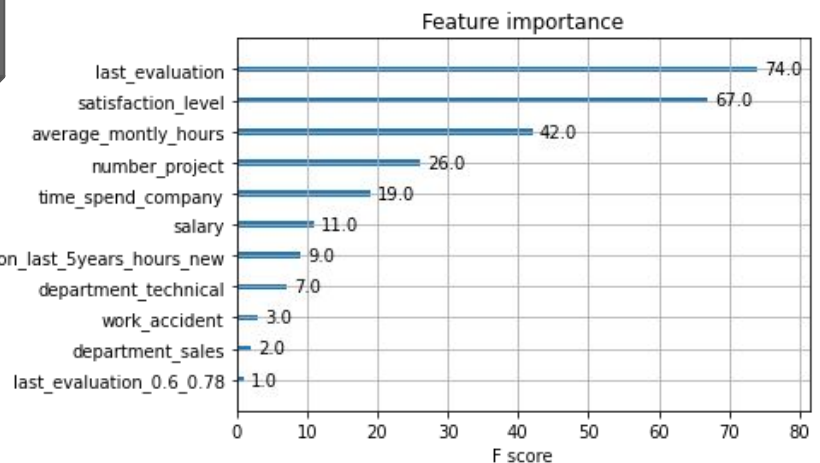
Project Overview

Salifort motors has high employee turnover recently. With the given data, we are about to explore the reasons that might have caused the employee turnover and suggest ways to improve employee satisfaction and retain them long term.

Key Insights

- We need to predict the employees that are likely to quit.
- If we can predict, it might be possible to identify factors that contribute to their leaving.
- Based on the EDA, salary, time spent in the company, number of projects assigned and satisfaction level are major factors.
- We also can see the people are not leaving when their monthly hours is the same even though their number of projects increase.
- So, it was clear from the EDA that people are leaving only when the number of projects and their monthly hours both increase at the same time.
- We are expecting both variables to be in the top 10 features.
- We built the model to predict whether employee left with the features we have and the results are given with graphs.

Details



Barplot above shows the most relevant variables fetched by the XGBoost model:

'last_evaluation', 'satisfaction_level', 'average_monthly_hours', 'number_project' and some feature engineered variables ('promotion_last5_years_new', 'last_evaluation_0.6_0.78') at the top 10.

Next Steps

In order to retain the employees in the company

- Salary package can be increased
- Promotion should be given regardless of the average hours worked. It should be based on the quality of the work.
- Evaluation should be done properly. Mediocre average people are leaving more. Should give more constructive feedbacks and appreciation.
- Number of projects should be limited
- Give overtime pay or don't ask them to work overtime. We can see that people who work overtime are leaving the company more.