Employee Retention Project Executive Summary

ISSUE / PROBLEM

The HR department at Salifort Motors wants to increase employee retention and reduce the money spent in the search and interviews for replacements.

To achieve this, a question to answer is what's likely to make the employee leave the company?

RESPONSE

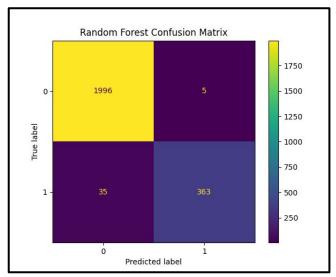
Data collected by the HR department using an employee survey was used to build different machine learning models that predict whether or not an employee will leave the company.

The models built are: Decision Trees, Random Forest and XGBoost. The Random Forest model produced the best results.

IMPACT

This model can help to:

- Predict if an employee will remain or not in the company.
- Help HR to understand what features contribute can to increasing employee retention and improve the company's policies.

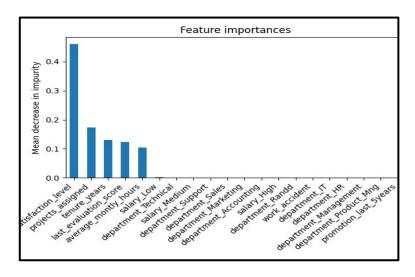


Upper left quadrant: the model correctly predicts that someone will remain in the company.

Upper right quadrant: the model incorrectly predicts that an employee will leave.

Lower left quadrant: the model incorrectly predicts that someone will stay.

Lower right quadrant : the model correctly predicts that an employee will leave the company.



KEY INSIGHTS

- Reward employees who overwork to increase their satisfaction like promoting them or give them additional payment for the extra amount of hours they do. However, give a limit to the number of hours that can be done per day or week since many employees who left worked close to 300 hours per month which is close to 13.5 hours per business day.
- Give promotions to employees starting after their 3 first years of work based on their overall performance.
- Improve the satisfaction of departments with higher employee losses and with lower employee satisfaction.
- Gather further information from the employees to improve the model's performance.
- Limit the number of projects to which a worker can simultaneously contribute to avoid work overloads.
- Hold company-wide and within-team discussions to understand and address the company work culture, across the board and in specific contexts.