## **Salifort Motors**

**Employee Retention Project** 

### > ISSUE / PROBLEM

Salifort Motors seeks to improve employee retention and answer the following question:

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

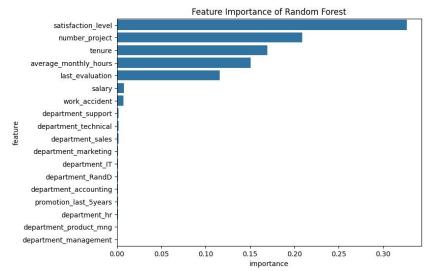
#### RESPONSE

Since the variable to predict is categorical the task is classification and the team could build a logistic regression or tree-based model

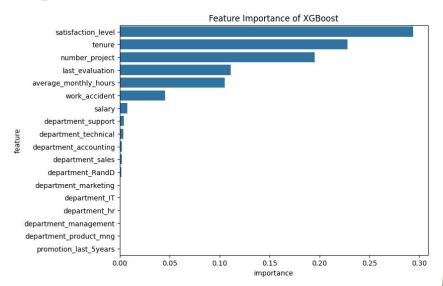
The random forest model slightly outperforms the XGBoost model.

#### IMPACT

This model helps predict whether an employee will leave and identify which factors are most influential. These insights can help HR make decisions to improve employee retention.



Barplot above shows the most relevant variables of the random forest model: 'satisfaction\_level', 'number\_project', 'tenure', 'average\_monthly\_hours', and 'last\_evaluation'.



Barplot above shows the most relevant variables of the XGBoost model: 'satisfaction\_level', 'tenure, 'number\_project', 'last\_evaluation', 'average\_monthly\_hours', and 'work\_accident'.

#### INSIGHTS/NEXT STEPS

- Cap the number of projects an employee can work on at a time.
- Reward employees for working longer hours and for working on more projects, or don't require them to do so.
- High evaluation score shouldn't just be based on the number of projects and hours worked, but also on the quality of the work.