

# Salifort Motors Employee Retention Analysis

## BUSINESS PROBLEM

Salifort Motors seeks to understand the key drivers of employee retention. This analysis aimed to identify factors contributing to turnover, a costly issue that impacts productivity and morale, and to answer the following question:

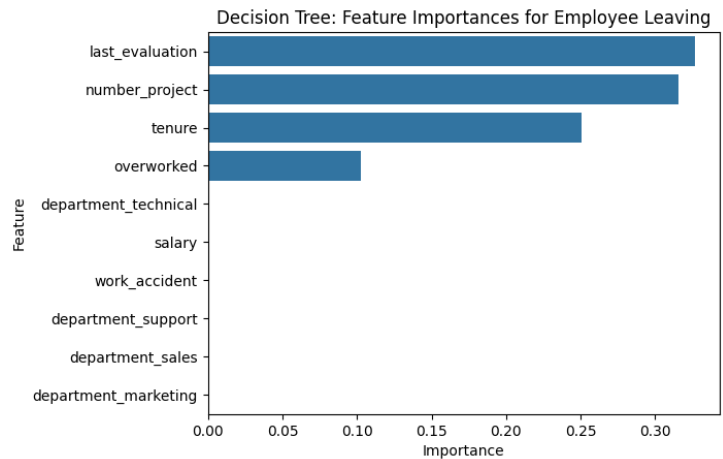
**What's likely to make the employee leave the company?**

## RESPONSE

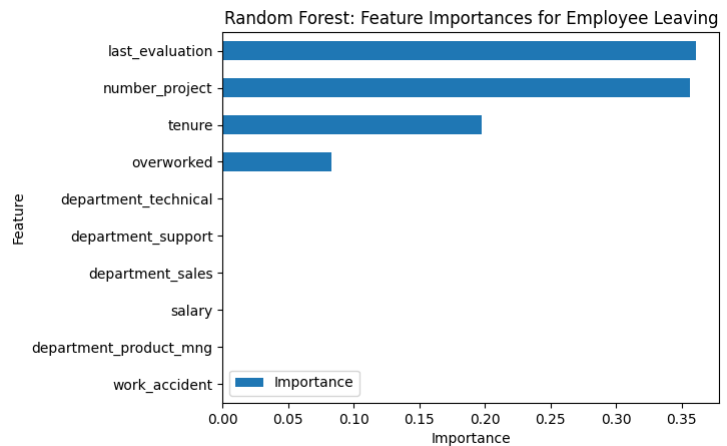
To predict this categorical outcome, we evaluated several machine learning models. A Random Forest model was selected, as it demonstrated the highest accuracy and predictive power, slightly outperforming a standard decision tree and logistic regression model.

## IMPACT

This model provides a powerful tool for the HR department. It predicts whether an employee will leave but also identifies the key factors driving that decision. These insights enable HR to shift from a reactive to a proactive approach, implementing targeted interventions to improve employee retention before valuable talent is lost.



This chart displays the most relevant. The top four factors are **last\_evaluation**, **number\_project**, **tenure**, and **overworked**.



This chart confirms the findings from the decision tree. The same variables, **last\_evaluation**, **number\_project**, **tenure**, and **overworked**, are identified as the most significant predictors.

## INSIGHTS/NEXT STEPS

### Manage Workload and Prevent Burnout:

- Cap the number of projects assigned to an employee. Data suggests 3-4 projects is sustainable.
- Re-evaluate overtime expectations. Incentivize or reduce overtime and ensure workload and time-off policies are explicit.

### Improve Career Progression and Recognition:

- Investigate dissatisfaction among 4-year tenured employees. This group may lack growth opportunities and implement clear promotion paths.
- Reform the performance evaluation system. Reward employees for contribution and impact, not just hours worked.

### Enhance Workplace Culture:

- Facilitate discussions to openly address the work culture and identify pain points within different departments.