Salifort Motors

Employee Retention Project

ISSUE / PROBLEM

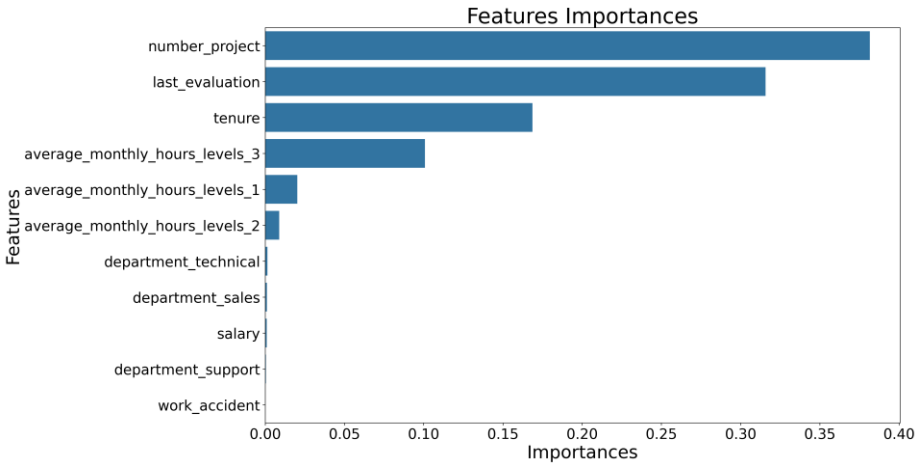
Salifort Motors is experiencing a high employee turnover rate. This project aims to uncover the key factors driving employees to leave and provide practical recommendations to address the issue.

RESPONSE

A comprehensive Exploratory Data Analysis (EDA) was performed to examine the dataset. Following that, several classification machine learning models were developed and could identify the most influential factors contributing to it. Among the models, the Decision Tree classifier demonstrated the best overall performance.

IMPACT

The model successfully predicts which employees are likely to leave and identifies the key factors contributing to employee turnover. These insights provide a strong foundation for taking actionable steps to address the issue and improve employee retention.



The most influential features in employees trnover are `number_project`, `last_evaluation`, `tenure`, and `average_monthly_hours` in that order.

KEY INSIGHTS

- The analysis shows the employee management process needs improvement in workload, promotions, evaluations, and salaries.
- The model identified the (number_of_projects, last_evaluation, tenure, working hours) as key factors in turnover.
- Recommended Actions

1. Distribute projects more evenly to ensure a balanced workload among employees.
2. Increase satisfaction via promotions and rewards for high-effort employees.
3. Balance hours, salaries, and workload across tenure groups.
4. Establish a fair and balanced evaluation system that takes into account work quality, time commitment, and overall employee contribution.