

Salifort Motors Executive Summary

OBJECTIVE

Determine the most influential factors impacting employees' decision to leave Salifort Motors, predict staff likely to leave, and provide actionable insights to improve retention.

SOLUTION

Salifort Motors' Human Resources (HR) department surveyed a sample of employees to learn what might be driving the high rate of turnover. That data was analyzed by the Advanced Analytics team to determine the most influential factors impacting employees' decision to leave the company, predict employees most likely to leave, and provide actionable insights on how to improve retention.

ANALYSIS RESULTS

Data analysis revealed that an employee's project load and their average monthly workhours are prominent among the factors influencing their choice to depart.

This is confirmed in *Figure A* which shows that **all** employees with 7 projects ended their employment, most working more than 175 hours a month, on average (see topmost boxplot).

For more details, please refer to the html report, *Salifort-Motors-Employee-Retention-Report*.

PREDICTIONS

The data science team leveraged a LightGBM machine learning model to identify key predictors of employee turnover, illustrated in *Figure B*.

The results show that longer working hours and lack of recognition are tied to negative outcomes, indicating potential burnout. Getting a promotion in the last 5 years has a clear positive impact, suggesting that recent recognition through promotions leads to positive outcomes. Employees with over six years at the company show a tendency to stay, possibly due to higher job satisfaction or loyalty.

NEXT STEPS

The analysis suggests that addressing issues like overwork, underappreciation, and ensuring competitive salaries are vital for improving employee retention.

- Cap the number of projects that employees can work on.
- Promote employees who have been with the company for at least three years to a competitive salary.
- Reeducate management as there seems to be a sizeable gulf between them and employees.
- High evaluation scores should not be reserved for employees who work 200+ hours per month. Consider a proportionate scale for rewarding employees who contribute more/put in more effort.

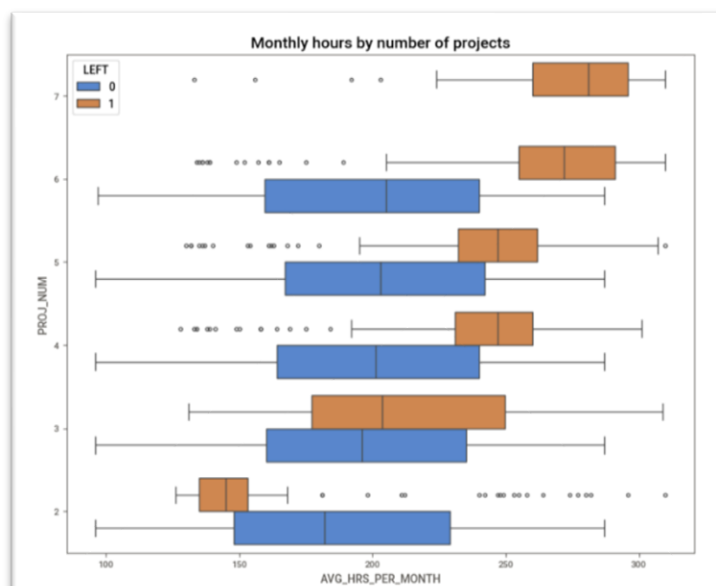


Figure A: Boxplot showing the relationship between employees that left (orange) versus stayed (blue), their number of projects (y-axis), and average workhours per month (x-axis).

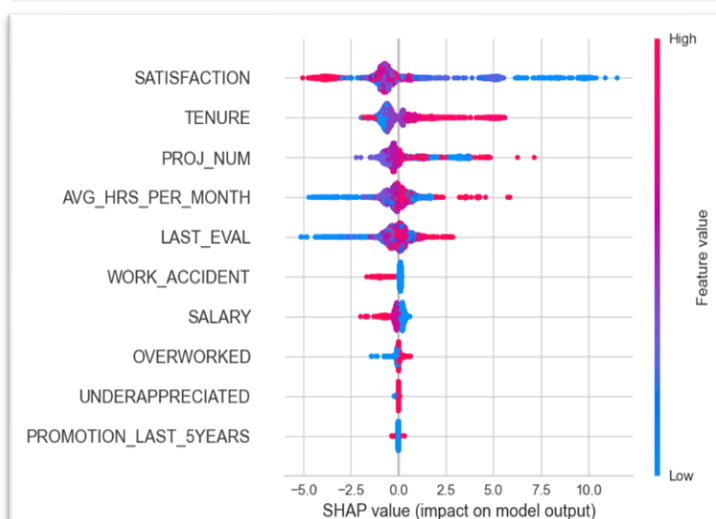


Figure B: SHAP visualize shows the distribution and impact of each feature. Red dots signify high feature values, blue dots low.