Salifort Motors

Employee Retention Project
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ISSUE / PROBLEM

Salifort Motors faces a high employee turnover rate prompting HR to ask:

What factors most strongly predict which employees are likely to leave?

RESPONSE

A comprehensive exploratory data analysis was conducted using company HR data, followed by the development of a logistic regression model (82% accuracy, weighted F1: 0.80).

The strongest predictors of attrition are satisfaction level, monthly hours, and lack of promotion.

IMPACT

The model enables HR to proactively flag at-risk employees for targeted retention efforts. While it excels at identifying those likely to stay, it currently detects about a quarter of likely leavers, highlighting future improvement opportunities.
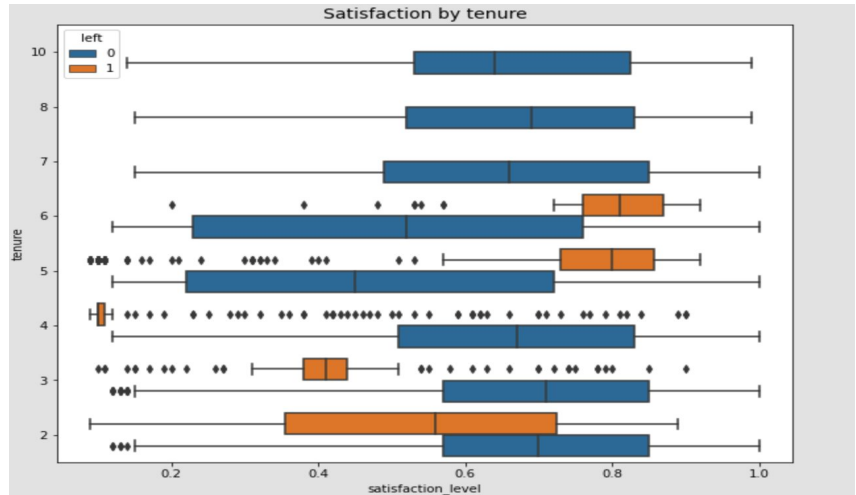
Employees who left consistently report lower satisfaction across all tenure groups, underscoring satisfaction level as a key predictor of attrition.
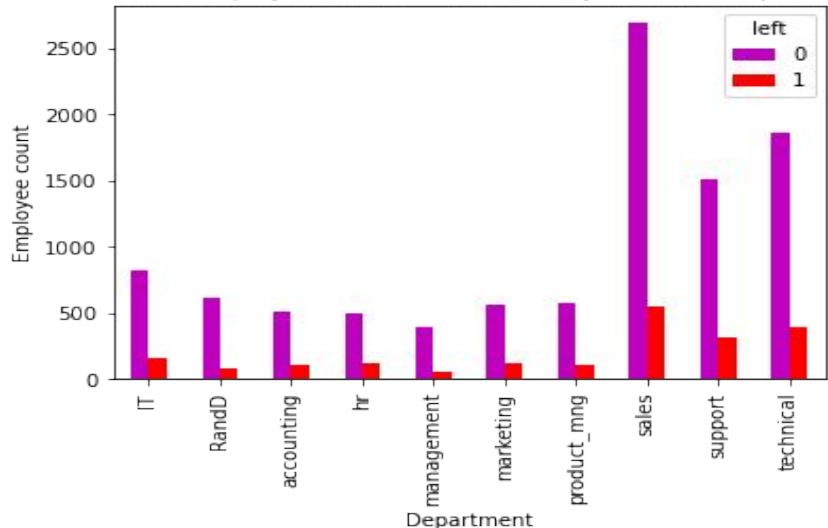
Turnover rates vary significantly by department, with certain teams experiencing much higher attrition—highlighting where targeted retention initiatives are most needed.

INSIGHTS/NEXT STEPS

- **Increase Satisfaction:** Launch quarterly pulse surveys to identify and address low satisfaction areas.
- **Balance Workloads:** Monitor and adjust high monthly hours, strengthening "right to disconnect" policies to reduce burnout.
- **Career Growth:** Improve promotion criteria and develop internal mobility programs for high performers.
- **Model Improvement:** Next, address class imbalance and test ensemble models (e.g., Random Forest) to improve recall for leavers.
- **Operationalize:** Build an HR dashboard for real-time risk scoring and pilot interventions in select teams.