Salifort Motor

Employee Churn Prediction

Project Overview

To predict whether an employee will leave the company using statistical model like logistic regression or machine learning model such as decision tree, random forest, XGBoost.

Key Insights

Key Findings

- Employee satisfaction is the strongest predictor of turnover.
- Work-related factors (tenure, project load, hours) significantly impact retention.
- Department and salary level have moderate influence on turnover.
- Performance evaluations correlate with turnover decisions.

Business Recommendations

Immediate Actions

- Implement regular satisfaction surveys and feedback sessions
- Review workload distribution for employees with multiple projects
- Develop clear career progression paths based on tenure milestones

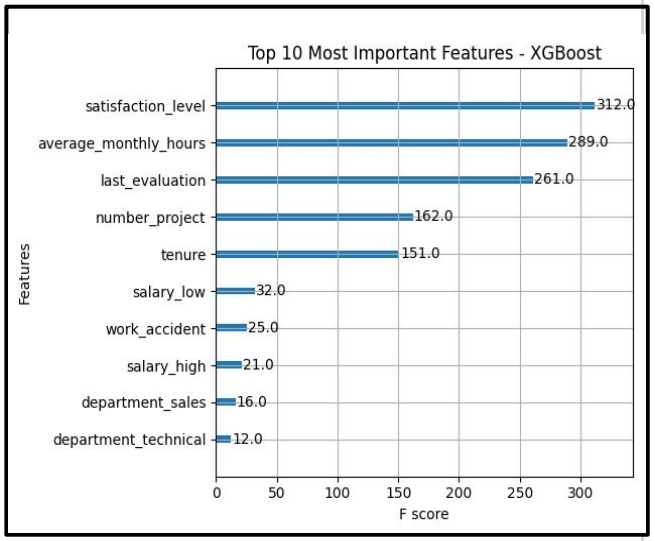
Policy Changes

- Establish workload limits (number of concurrent projects)
- Create structured promotion and salary review cycles
- Implement work-life balance initiatives to manage monthly hours

Department-Specific

- Focus on R&D and Management departments where turnover risks are higher
- Review salary structures, particularly for high-risk departments

Details



Top 10 Important Features - XGBoost Model

Next Steps

- Deploy XGBoost model for ongoing turnover risk assessment.
- Set up regular model performance monitoring.
- Collect additional data on:
  - Employee feedback
  - Project complexity
  - Team dynamics
  - Work-life balance metrics