Reducing Employee Turnover at Salifort Motors

A Data-Driven Approach to Understanding and Predicting Attrition

ISSUE / PROBLEM

Salifort Motors is experiencing a significant and costly employee turnover rate (16.6% in our analysis), leading to increased recruitment expenses, loss of institutional knowledge, and decreased productivity. The specific, data-backed reasons for this high attrition rate were previously unknown, making it difficult to address the problem effectively.

IMPACT

By leveraging the model's insights to implement targeted retention strategies, *Salifort* can significantly reduce its turnover rate. This will lead to substantial cost savings in recruitment and training, improved team stability and morale, and the retention of valuable, high-performing employees. The predictive model enables a strategic shift from a reactive to a proactive talent retention strategy.

RESPONSE

- We conducted a comprehensive analysis of employee survey data and developed a highly accurate machine learning model (*Random Forest*) to identify the key factors driving turnover.
- The model can predict which employees are at high risk of leaving with **99% accuracy** and successfully identifies **92% of all employees who will leave (*Recall*)**.

KEY INSIGHTS

- **Satisfaction is the #1 Predictor**: Low employee satisfaction is, by a large margin, the most important factor driving turnover.
- **Two Key At-Risk Profiles Exist**: The company is losing two distinct groups:
  1) Overworked, high-performing employees who are likely experiencing burnout.
  2) Under-engaged, low-performing employees.
- **Lack of Growth is a Major Factor**: Employees with low salaries and those who have not been promoted in the last five years are significantly more likely to leave.
- **There is a 3-5 Year "Danger Zone":** The highest risk of turnover occurs among employees who have been with the company for 3 to 5 years, highlighting a critical window for intervention.