

Attrition Prevention Suggestions

Introduction

This document provides actionable strategies to reduce employee attrition, based on insights from the HR Analytics project conducted for Elevate Labs (Phase 2, Project #3). The analysis identified key drivers of attrition: low salaries, overtime, short tenure, and high turnover in the Sales department. Below are targeted suggestions to address these issues and improve retention.

Suggestions

1. Increase Salaries for At-Risk Employees

- ***Insight*:** Employees who leave have lower salaries (median ~4,000 vs 7,000 for those who stay), and low `MonthlyIncome` is a top driver of attrition (SHAP analysis).
- ***Action*:**
 - Conduct a salary review for employees earning below the median (~6,500).
 - Prioritize raises for those with `MonthlyIncome` < 4,500, especially in high-risk groups (e.g., Sales, short-tenured employees).
 - Example: Increase salaries by 10–15% for employees earning < 4,500, potentially reducing attrition by addressing financial dissatisfaction.
- ***Impact*:** Higher salaries can improve job satisfaction and reduce turnover, especially for employees at risk of leaving.

2. Reduce Overtime and Improve Work-Life Balance

- ***Insight*:** Employees working overtime (`OverTime`=Yes) have a higher attrition rate (~30%), and `OverTime_Yes` is a top predictor of leaving.
- ***Action*:**
 - Limit mandatory overtime, especially for roles with high workload (e.g., Sales, Research & Development).
 - Hire additional staff or redistribute tasks to reduce overtime hours.
 - Introduce flexible work policies (e.g., remote work options, compressed workweeks) to improve work-life balance.
 - Example: Cap overtime at 5 hours per week and offer time-off-in-lieu for extra hours worked.
- ***Impact*:** Reducing overtime can decrease burnout, a key factor in attrition, and improve employee well-being.

3. Target Retention Strategies for the Sales Department

- ***Insight*:** The Sales department has the highest attrition rate (~17%), likely due to high stress and performance pressure.

- ***Action*:**

- Implement retention bonuses for Sales employees who stay beyond 3 years.

- Provide career development opportunities (e.g., training, mentorship) to increase engagement.

- Address stress factors: Offer stress management workshops or team-building activities.

- **Example:** Offer a 5,000 bonus for Sales employees completing 3 years, and conduct monthly team-building events.

- ***Impact*:** Targeted incentives can reduce turnover in Sales, retaining valuable talent in a high-risk department.

4. Enhance Onboarding for Short-Tenured Employees

- ***Insight*:** Employees with less than 5 years at the company (especially 0–3 years) are more likely to leave, indicating onboarding or early engagement issues.

- ***Action*:**

- Develop a robust onboarding program: Assign mentors to new hires for the first 6 months.

- Set clear career paths: Conduct 90-day check-ins to discuss goals and progress.

- Foster early engagement: Organize welcome events or peer buddy programs for new employees.

- **Example:** Pair each new hire with a mentor and schedule a 90-day review to address concerns.

- ***Impact*:** Better onboarding can improve early engagement, reducing turnover among new employees.

5. Monitor and Act on Predictive Insights

- ***Insight*:** The Logistic Regression model and SHAP analysis accurately identify at-risk employees (e.g., a sample employee with low salary and overtime has ~60% probability of leaving).

- ***Action*:**

- Use the model to predict attrition risk for current employees (e.g., input 'MonthlyIncome', 'OverTime', 'YearsAtCompany').

- Flag high-risk employees (probability > 50%) for HR intervention.

- **Example:** Run the model monthly, and for employees with >50% risk, schedule one-on-one meetings to address concerns (e.g., salary adjustments, workload reduction).

- ***Impact*:** Proactive interventions based on predictions can prevent attrition before it happens, saving recruitment costs.

Conclusion

Implementing these suggestions—salary increases, reduced overtime, targeted Sales strategies, enhanced onboarding, and predictive monitoring—can significantly reduce employee attrition. By addressing the root causes identified in the analysis (low salary, overtime, short tenure, Sales turnover), HR can foster a more engaged and satisfied workforce.