# **Attrition Prevention Suggestions**

#### 1. Workload and Promotion-Related Drivers

### SHAP Evidence:

- OverTime Yes: Positively correlated with attrition (Logistic & Tree)
- YearsSinceLastPromotion: Longer durations linked to higher attrition
- YearsInCurrentRole & YearsWithCurrManager: Plateaued roles often indicate stagnation

## HR Strategy:

- Actively monitor employees with no recent promotions or role changes (esp. > 3 years)
- Offer development plans, job rotation, or promotion tracks
- Avoid overtime dependency ensure equitable workload distribution and promote work-life balance

## 2. Compensation and Financial Satisfaction

#### SHAP Evidence:

- MonthlyIncome, MonthlyRate, DailyRate: Lower values trend toward higher attrition
- PercentSalaryHike: Important in Tree model, low hikes lead to dissatisfaction

## **HR** Strategy:

- Periodically benchmark salary vs. industry standards
- Use structured and transparent hike cycles
- Provide performance-linked bonuses or non-monetary perks (remote options, flexible timing)

#### 3. Career Path & Skill Development

#### SHAP Evidence:

 TotalWorkingYears & TrainingTimesLastYear: Higher values reduce attrition Employees without recent upskilling are more likely to leave

## HR Strategy:

- Create learning plans and reward upskilling
- Offer certifications, sponsored courses, and internal workshops
- Encourage internal mobility let employees move across departments to align with their interests

## 4. Demographic and Life Stage Considerations

#### SHAP Evidence:

- AgeBand: Younger employees are more likely to leave (Tree)
- MaritalStatus Single: Singleness correlates with higher attrition
- BusinessTravel: Frequent travel slightly increases attrition risk

## HR Strategy:

- For younger/single employees, offer mentorship and career coaching
- Customize engagement strategies clubs, community events, or peer groups
- Allow role flexibility or travel opt-outs where possible

### **5. Managerial & Proximity Factors**

#### SHAP Evidence:

- DistanceFromHome: Longer distances slightly increase attrition (Logistic)
- YearsWithCurrManager: Lower values = less stability → higher attrition risk

## **HR Strategy:**

- Encourage manager-employee bonding through one-on-ones, skip-level meetings
- Promote hybrid work models or location-based flexibility to reduce commute fatigue

#### **Conclusion:**

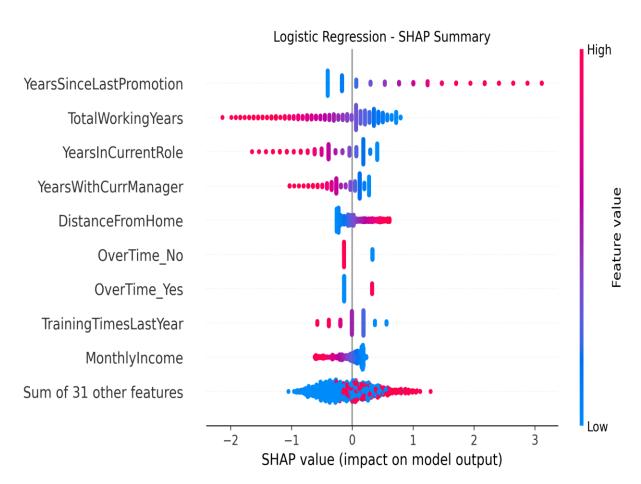
The SHAP value analysis emphasizes that attrition is not random — it is driven by real patterns: career stagnation, compensation gaps, overwork, and lack of engagement.

#### To retain talent:

- Personalize retention policies
- Invest in employee growth
- Recognize & respond to burnout signs
- Focus on experience equity across age, role, and life stage

#### Reference:

Logistic Regression - SHAP Summary



## Decision Tree - SHAP Summary

