Project No.-3

Project Title

HR Analytics - Predict Employee Attrition



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Introduction

Employee attrition is one of the most critical challenges faced by organizations today. High turnover not only increases recruitment and training costs but also impacts team morale, knowledge continuity, and overall organizational performance.

This report aims to provide data-driven insights and strategic recommendations to prevent unwanted attrition. The analysis is based on the organization's HR data, including employee demographics, department-wise distribution, recruitment sources, performance ratings, satisfaction levels, and engagement scores.

Key visualizations from the HR dashboard have been used to highlight patterns in attrition across departments, performance segments, and employee satisfaction categories. These patterns form the basis for the preventive strategies outlined in this report.

By proactively identifying at-risk employee segments and addressing underlying causes of dissatisfaction or disengagement, the organization can build a more resilient, committed, and productive workforce

Attrition Prevention Suggestions Based on Dashboard Data

1. Target High-Attrition Departments (Production & IT/IS)

Observation:

- Production department has 209 employees, but high attrition (likely from the 104 terminated).
- IT/IS has 50 employees second highest.

c Suggestion:

- Conduct exit interviews to identify pain points.
- Launch department-specific engagement or mentoring programs.
- Introduce rotation or upskilling to break monotony in repetitive production roles.
- 2. Boost Performance & Address "Needs Improvement" & "PIP" Employees

Observation:

- 13 employees are on PIP (Performance Improvement Plan)
- 37 are in "Needs Improvement" zone.

Suggestion:

- Provide coaching, performance counseling, or buddy systems.
- Introduce monthly feedback loops to reduce anxiety about performance.

- Reward small improvements with **recognition** to boost morale.
- 3. Increase Satisfaction of "Low" and "Very Low"
 Rated Employees

Observation:

- 98 employees are "Low" satisfaction
- 13 employees are "Very Low" satisfaction
 Together, they form ~35% of workforce, a major flight risk.

c Suggestion:

- Conduct anonymous pulse surveys to pinpoint dissatisfaction.
- Address workload, manager behavior, or promotion concerns.
- Offer mental health support and flexible work options.
- 4. Focus on Retention from Certain Recruitment Sources

Observation:

• Top sources: Indeed (87), LinkedIn (76), Google Search (49) But they may not be yielding long-term employees.

Suggestion:

- Analyze attrition rate by source → Are Indeed hires leaving faster?
- Adjust recruiting strategy: Focus on employee referrals or diversity job boards.
- Add pre-hiring screening for cultural fit and long-term intent.
- 5. Support New Hires in Early Years (2006–2018)

Observation:

Multiple year-wise hires shown (2006–2018).
 Likely, some attrition is within 1–2 years of joining.

c Suggestion:

- Build strong onboarding experience
- First 90-day and 6-month check-ins.
- Pair new hires with **mentors** from day one.

6. Use Engagement Surveys Proactively

Observation:

- Engagement scores are available in dataset.
- But terminations still high → surveys might not be acted on.

c Suggestion:

- Turn surveys into actionable dashboards for managers
- Ask for monthly follow-up feedback on implemented changes
- Create an "Engagement Champion" for each team