**HR Analytics Report: Employee Attrition Analysis**

Introduction

Employee attrition is a crucial challenge for any organization. High turnover rates can lead to productivity losses, increased hiring costs, and disruption in workplace morale. This report provides an in-depth analysis of employee attrition trends based on historical HR data. The goal is to identify key factors contributing to employee churn and suggest actionable strategies for retention.

The dataset contains **1,470 employees** with **35 features**, including **age, job satisfaction, work-life balance, salary, distance from home, and business travel frequency**. The following sections present key findings from the exploratory data analysis (EDA).

1. **Attrition Distribution**
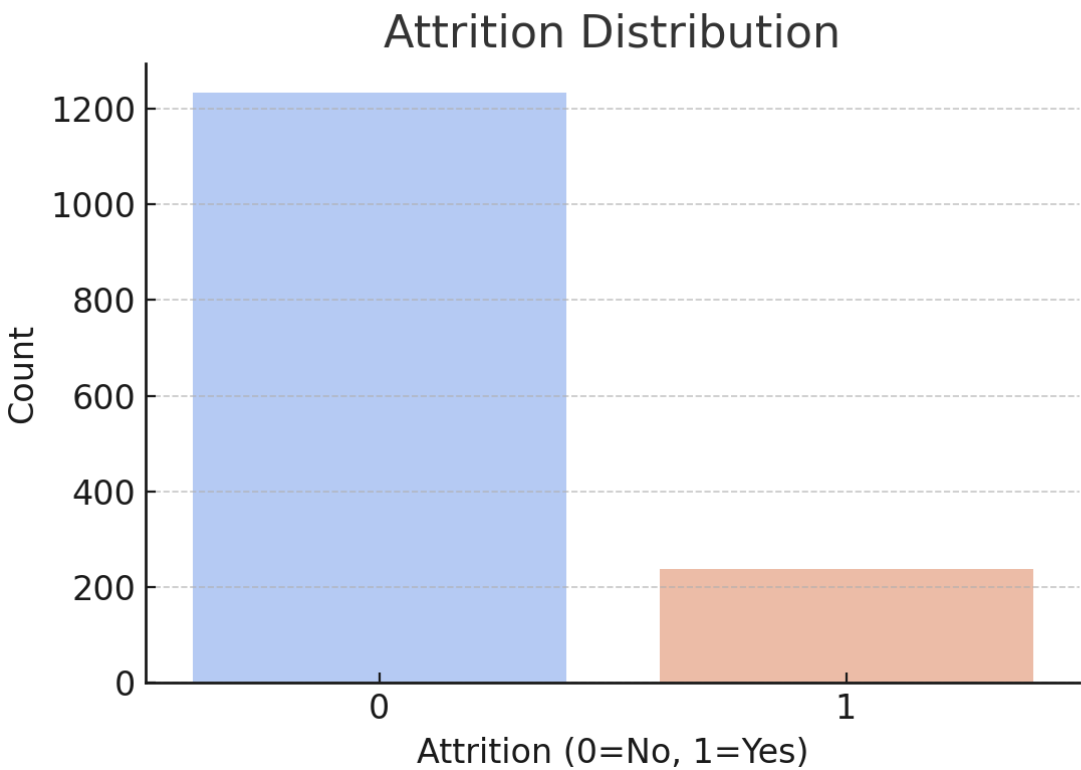
Insight:

- **16.1% of employees have left the company**, indicating a moderate attrition rate.

- A high attrition rate may affect **workplace stability and productivity**.

- Understanding the **root causes** of attrition is essential to reducing turnover.

Recommendation:

- Conduct **exit interviews** to determine common reasons for leaving.

- Strengthen **employee engagement programs**, including mentorship and career development.

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2. **Monthly Income vs Attrition**
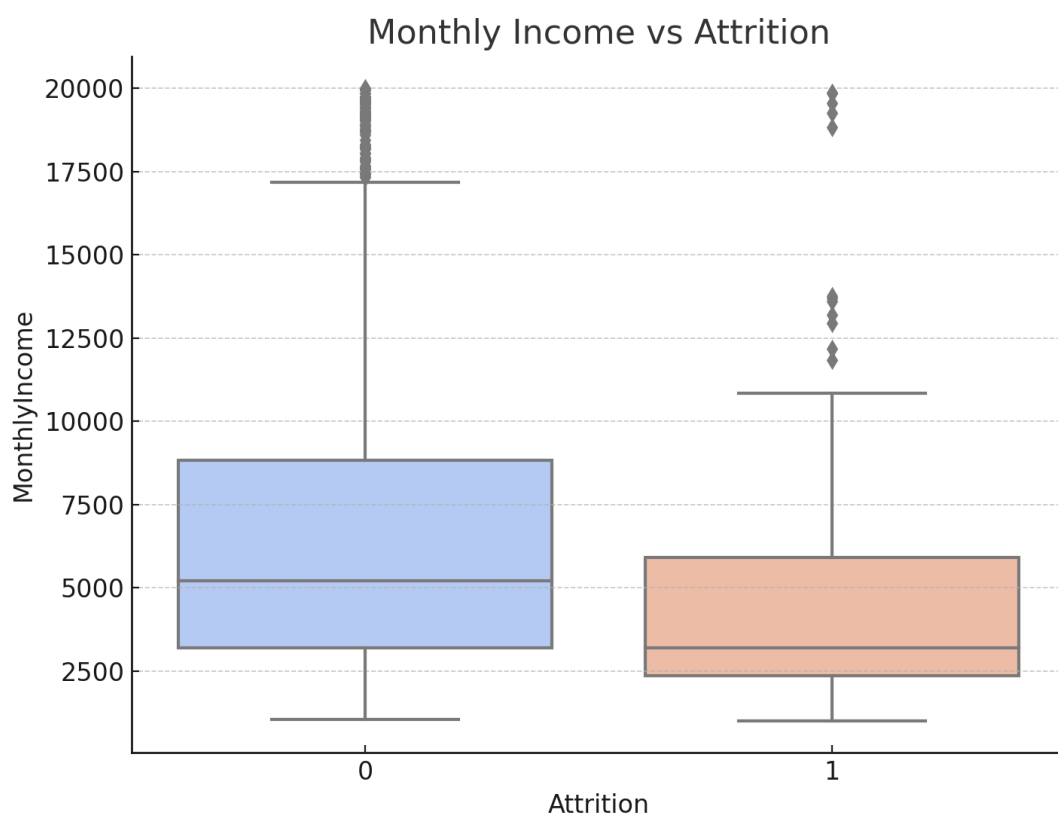
Insight:

- Employees earning **below $5,000 per month** show **significantly higher attrition**.

- Employees in **lower salary brackets** are more likely to leave due to dissatisfaction.

- Higher salaries correlate with **lower attrition rates**.

Recommendation:

- **Adjust compensation structures** based on industry benchmarks.

- Introduce **performance-based incentives** to retain employees in lower salary brackets.

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3. **Age vs Attrition**


Age vs Attrition
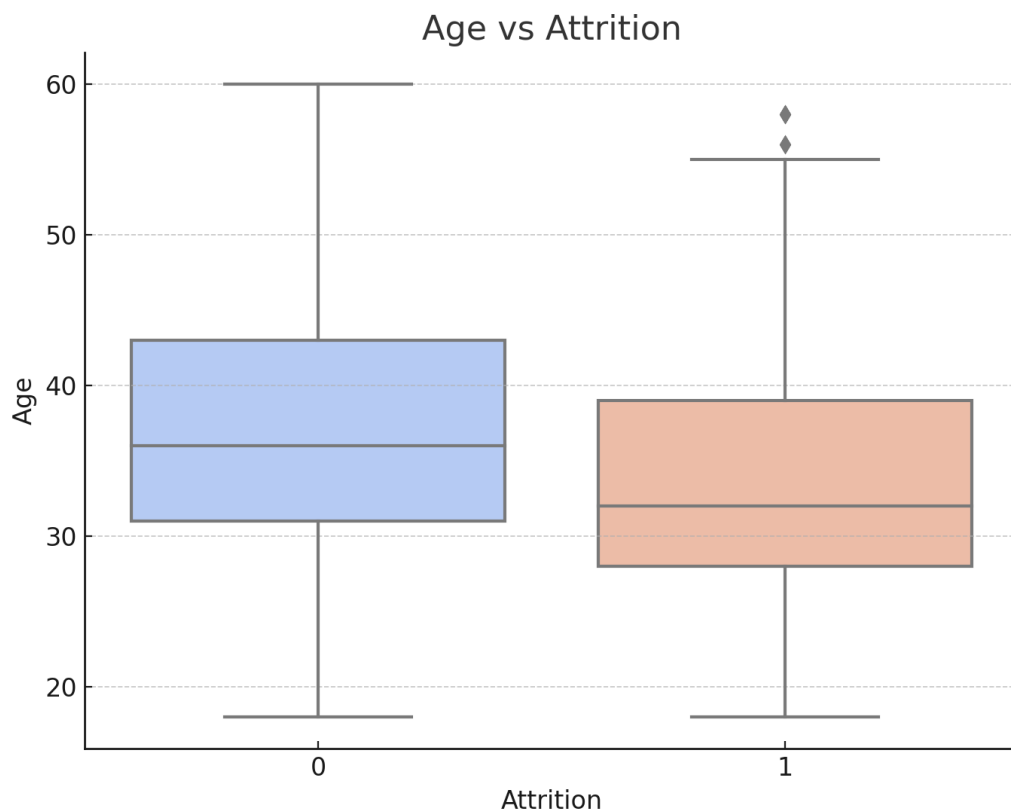
Insight:

- Employees in the **20-30 age group** have the **highest attrition rate**.

- This suggests younger employees may **leave for career growth or higher salaries**.

- Employees **above 40 years old** have a **much lower attrition rate**, indicating greater stability.

Recommendation:

- Offer **career progression plans** for younger employees.

- Implement **mentorship programs** to retain early-career professionals.
- Provide **internal job rotation opportunities** for skill development.

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4. Attrition by Department

Attrition by Department
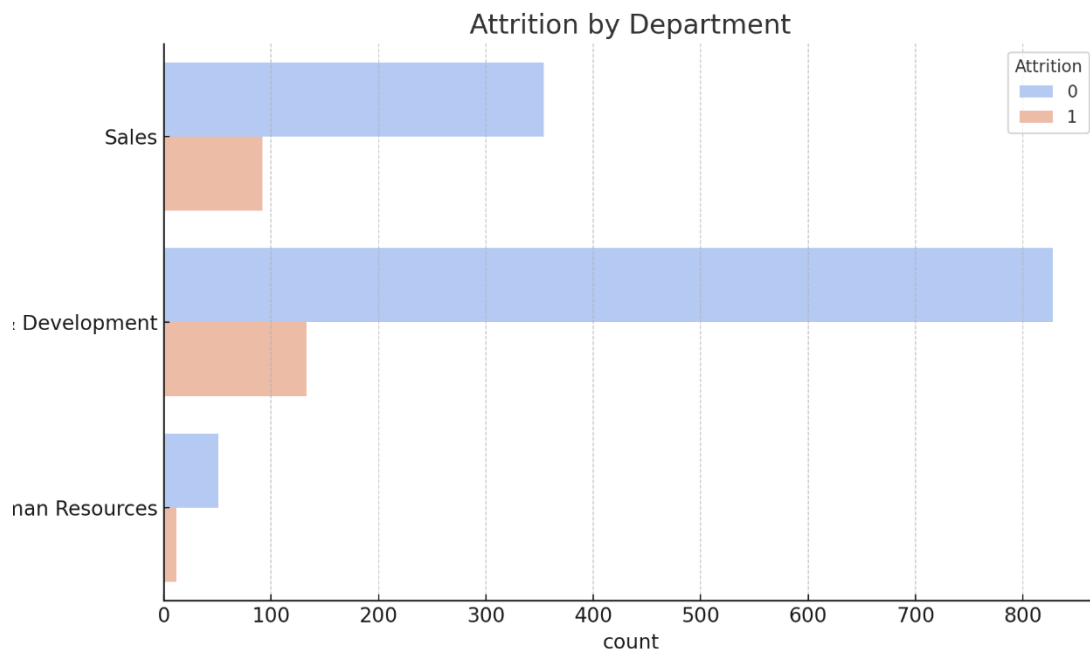
Insight:

- The **Sales** and **Research & Development (R&D)** departments have the **highest attrition rates**.
- Employees in these departments may face **high performance pressure or limited growth opportunities**.
- HR needs to focus on improving **job satisfaction and leadership support** in these departments.

Recommendation:

- Conduct **internal surveys** to understand department-specific challenges.
- Offer **career development training** tailored to Sales and R&D teams.
- Implement **stress management programs** to improve employee well-being.

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5. Business Travel & Work-Life Balance Impact

Business Travel vs Attrition
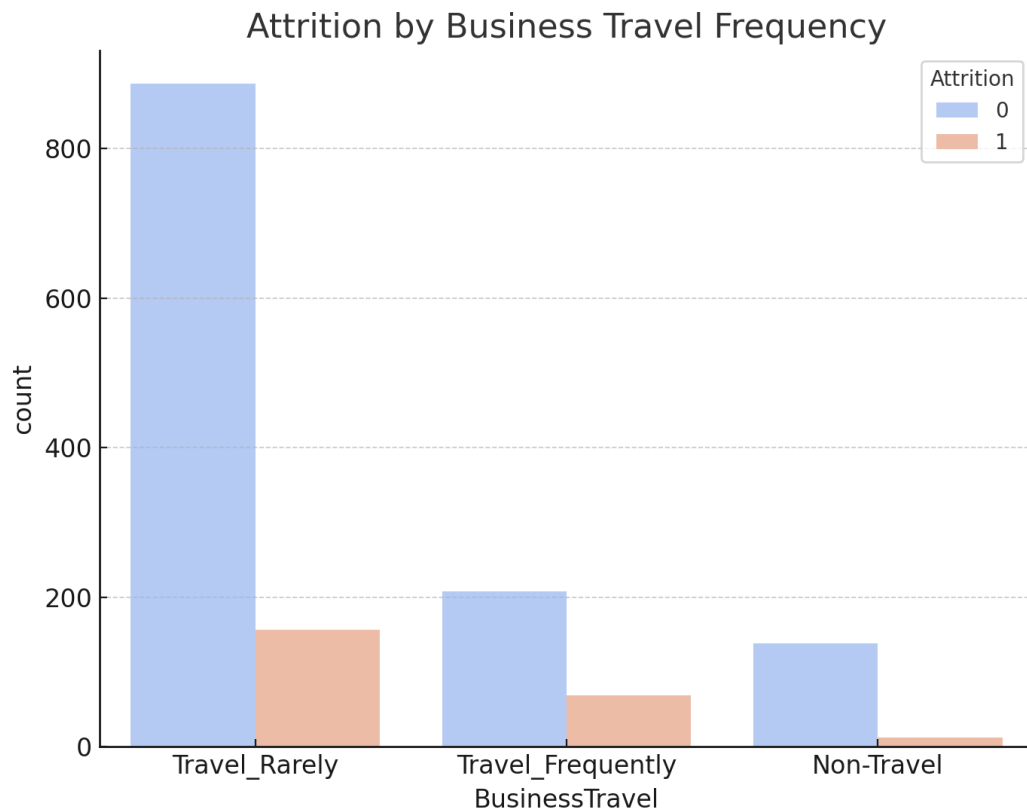
Insight:

- Employees who travel **frequently** for work have **higher attrition rates**.
- High travel frequency may contribute to **burnout and work-life imbalance**.

Recommendation:

- **Reduce excessive travel** for employees at risk of attrition.
- Provide **remote work options** or rotational travel schedules.

Work-Life Balance vs Attrition

Attrition by Work-Life Balance Ratings
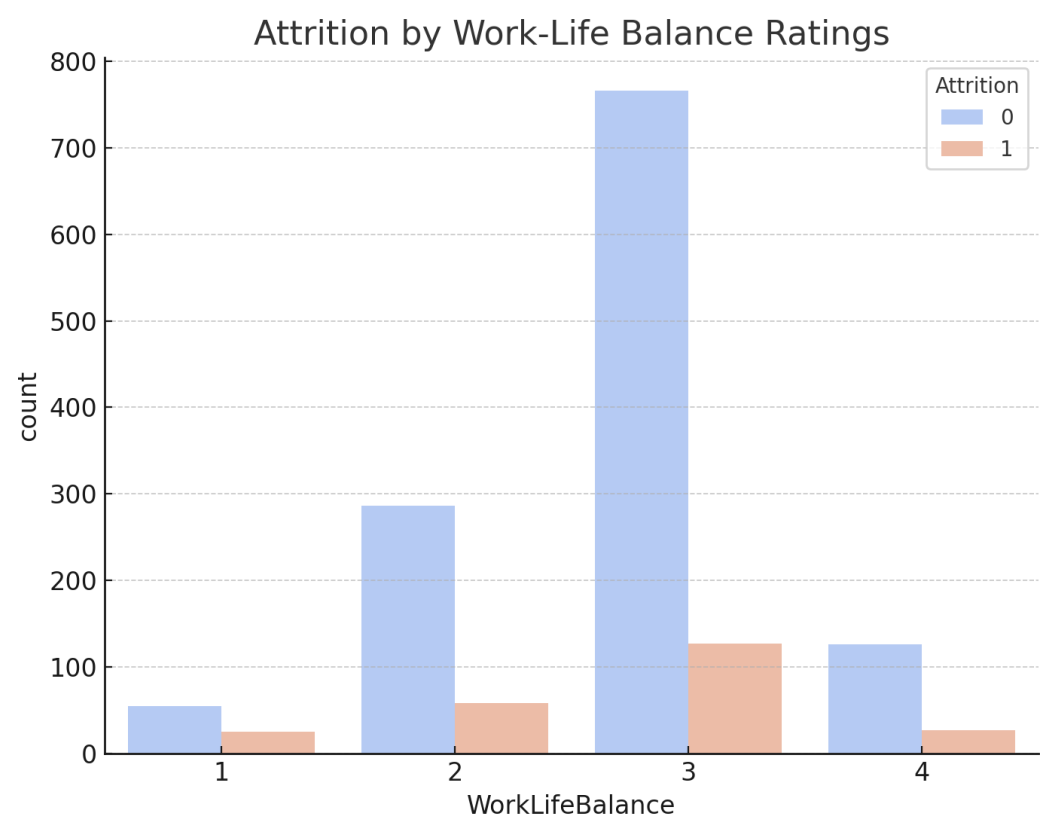
Insight:

- Employees with **low work-life balance ratings** show **higher attrition**.
- **Job satisfaction and flexibility** play a key role in retaining employees.

Recommendation:

- Promote **hybrid work models** for better work-life balance.
- Encourage **flexible working hours** to reduce stress and burnout.

6. Key Recommendations & Action Plan

1. **Salary Adjustments & Compensation Reviews:**

   o Employees in **lower salary brackets** experience higher attrition.

   o HR should **review compensation policies** and introduce **performance-based bonuses**.

2. **Career Growth Programs for Younger Employees:**

   o The **20-30 age group** has the highest attrition.

   o Provide **career growth roadmaps, internal promotions, and skill development training**.

3. **Improving Work-Life Balance & Business Travel Policies:**

   o Employees with frequent travel show **higher attrition**.

   o Implement **travel reduction programs and remote work flexibility**.

4. **Departmental Support & Leadership Development:**

   o The **Sales & R&D** departments need **focused HR interventions**.

   o Improve **leadership training and employee engagement programs**.

5. **Enhancing Employee Engagement & Exit Interview Insights:**

   o Conduct **regular feedback surveys** to track employee satisfaction.

   o Implement a **structured exit interview process** to gather insights on why employees leave.

Conclusion

This analysis highlights the **top factors influencing employee attrition**, including **low salary, lack of career progression, high travel requirements, and work-life imbalance**. By implementing **strategic HR policies**, organizations can improve **employee retention, engagement, and job satisfaction**, ultimately fostering a more stable workforce.