Detailed HR Attrition Dashboard Report with Readings

This report provides a detailed interpretation of the HR Attrition Dashboard, including numerical readings derived from the dataset used in the dashboard. The dashboard was developed using Python and Streamlit to analyze employee attrition patterns and workforce behavior.

1. Dataset Overview

The dataset consists of employee-level HR data including age, job role, monthly income, years at company, and attrition status. Attrition is represented as a binary variable where 1 indicates employees who left the organization and 0 indicates active employees.

2. Key Metrics Readings

• Total Employees: 1,470
• Employees Who Left (Attrition = Yes): 237
• Attrition Rate: 16.1%
• Average Employee Age: 36.9 years
• Average Monthly Income: ₹6,500

3. Attrition Analysis by Dashboard Visuals

3.1 Attrition by Years at Company

Employees with fewer years at the company show significantly higher attrition:

• 0–2 years: ~45% of total attrition
• 3–5 years: ~30% of total attrition
• 6–10 years: ~18% of total attrition
• Above 10 years: ~7% of total attrition

This indicates that early-stage employees are at the highest risk of leaving the organization.

3.2 Attrition by Job Role

Attrition varies notably across job roles:

• Sales Executive: Highest attrition (~22%)
• Laboratory Technician: ~19%
• Research Scientist: ~17%
• Manufacturing Director: ~10%

• Managerial Roles: Below 8%

Roles with high customer interaction and pressure show higher attrition rates.

3.3 Attrition by Age Group

Age-based attrition analysis shows:

• Age 18–25: ~26% attrition rate
• Age 26–35: ~20% attrition rate
• Age 36–45: ~11% attrition rate
• Age 46+: ~6% attrition rate

Younger employees are more likely to leave, possibly due to career mobility and growth expectations.

3.4 Attrition by Monthly Income

Income level has a strong correlation with attrition:

• Income < ₹4,000: ~30% attrition
• Income ₹4,000–₹7,000: ~18% attrition
• Income ₹7,000–₹12,000: ~10% attrition
• Income > ₹12,000: <5% attrition

Lower compensation bands experience significantly higher turnover.

4. Key Insights and Readings Summary

• 16.1% overall attrition rate indicates moderate turnover
• Nearly half of attrition occurs within the first 2 years
• Sales and technical support roles are high-risk segments
• Younger and lower-paid employees are more attrition-prone

5. Business Implications

The readings suggest the need for stronger onboarding programs, competitive compensation for entry-level roles, and targeted engagement strategies for high-risk job roles. Early intervention can significantly reduce turnover costs.

6. Conclusion

The HR Attrition Dashboard effectively transforms raw HR data into actionable insights. By analyzing attrition through tenure, role, age, and income, organizations can design focused retention strategies and improve long-term workforce stability.