

Employee Engagement & Burnout Analytics Dashboard Report

1. Introduction

This report presents a comprehensive analysis of Employee Engagement and Burnout using an interactive Streamlit dashboard. The objective of the dashboard is to monitor employee satisfaction, identify burnout risks, and provide data-driven insights for proactive workforce management.

2. Project Objective

The primary goal of this project is to analyze employee engagement levels, attrition trends, overtime impact, and burnout risk indicators. The dashboard helps HR and leadership teams make informed decisions to improve employee experience and reduce attrition.

3. Data Preparation & Key Metrics

The dataset includes employee attributes such as Department, Job Role, Job Satisfaction, Environment Satisfaction, Work-Life Balance, Overtime, and Attrition.

Key derived metrics include:

- Attrition Flag: Converts Attrition (Yes/No) into numeric format (1/0).
- Overtime Flag: Converts Overtime (Yes/No) into numeric format (1/0).
- Engagement Health Index: Calculated as the average of Job Satisfaction, Environment Satisfaction, and Work-Life Balance scores.

4. Dashboard Features

The dashboard includes the following sections:

- KPI Section: Displays total employees, average engagement index, overtime percentage, attrition rate, and high burnout risk percentage.
- Engagement Health Index Visualization: Bar chart showing distribution of engagement levels across employees.
- Burnout-Prone Groups Analysis: Job-role based comparison of overtime rate, engagement index, and attrition rate.
- Interaction Analysis: Examines relationship between overtime and work-life balance using box plots and satisfaction trends.
- Preventive Burnout Risk Identification: Identifies high-risk employees based on overtime, low work-life balance, and low engagement index.

5. Key Insights

- Employees working overtime tend to report lower work-life balance.
- Lower engagement index is strongly associated with higher attrition.
- Certain job roles show higher burnout indicators and require targeted intervention.
- High burnout risk employees are identified proactively for preventive action.

6. Business Impact

This dashboard enables organizations to shift from reactive attrition management to proactive burnout prevention. By identifying engagement gaps early, HR teams can design targeted wellness programs, optimize workloads, and improve employee retention.

7. Conclusion

The Employee Engagement & Burnout Analytics Dashboard provides a structured, data-driven approach to understanding workforce health. Through interactive visualization and KPI tracking, it supports strategic decision-making for sustainable employee growth and organizational success.