



Employee Attrition and Performance Analytics Dashboard

James Ehiabhi

TechSolutions; Employee Attrition Dashboard

James Ehiabhi



Business Introduction

TechSolutions is a leading technology company specializing in software development, IT consulting, and innovative technology solutions. With over 1000 employees worldwide, TechSolutions prides itself on its cutting-edge technology, diverse talent pool, and commitment to employee growth and satisfaction. **However, in recent years, the company has faced challenges with employee retention**, which has impacted productivity and increased hiring and training costs.

James Ehiabhi

Business Problem

Employee attrition has become a significant concern for TechSolutions, with an increasing number of employees leaving the company within the first few years. The Human Resources (HR) department has observed a rising trend in voluntary departures, raising alarms about potential underlying issues affecting employee satisfaction and engagement. Understanding the factors contributing to attrition and developing strategies to improve employee retention has become a top priority for the company.

James Ehiabhi

Project Objectives

Create a Dashboard with the following features:

Attrition Rate:

- **Definition:** The percentage of employees who have left the company over a specific period.
- **Calculation:** $(\text{Number of employees who left} / \text{Total number of employees}) * 100$.
- **Display:** A single value indicating the overall attrition rate.

Average Attrition Tenure:

- **Definition:** The average duration employees stay with the company before leaving.
- **Calculation:** $\text{Total tenure of all employees who left} / \text{Number of employees who left}$.
- **Display:** A single value indicating the average tenure of employees who left.

James Ehiabhi

Project Objectives

Attrition by Education Field:

Purpose: Determine if there are significant differences in attrition rates among employees with different educational backgrounds.

Attrition by Travel Frequency

Purpose: To understand the impact of business travel frequency on employee retention.

Attrition by Gender

Purpose: To analyze gender-specific retention issues.



Attrition by Job Satisfaction

Purpose: To assess the correlation between job satisfaction levels and attrition rates.

Attrition by Age Group

Purpose: To reveal age-related factors influencing employee departure.

COLORS:

Black: #131517

Light Black: #1F2027

Yellow: #F9C566

Red: #F45C5B

Green: #80DBC5

James Ehiabhi

Data Dictionary

Age: The age of the employee.

Attrition: Indicates whether the employee has left the company (Yes/No).

BusinessTravel: Frequency of business travel (Non-Travel, Travel_Rarely, Travel_Frequently).

DailyRate: The daily rate of the employee.

Department: The department where the employee works (Sales, Research & Development, Human Resources).

DistanceFromHome: Distance of the employee's home from the company.
Education: Education level of the employee (1-5).

EducationField: Field of education (Life Sciences, Medical, Marketing, Technical Degree, Human Resources, Other).

EmployeeCount: Number of employees (always 1 in this dataset, used for consistency).

EmployeeNumber: A unique identifier for the employee.
EnvironmentSatisfaction: Employee's satisfaction with the environment (1-4).

James Ehiabhi

Gender: Gender of the employee (Male/Female).

HourlyRate: The hourly rate of the employee.

JobInvolvement: Level of involvement in the job (1-4). **JobLevel:** Level of the job (1-5).

JobRole: The role of the employee within the company (e.g., Sales Executive, Research Scientist).

JobSatisfaction: Job satisfaction level (1-4).

MaritalStatus: Marital status of the employee (Single, Married, Divorced).

MonthlyIncome: Monthly income of the employee.

MonthlyRate: Monthly rate of the employee.

NumCompaniesWorked: Number of companies the employee has worked for. **Over18:** Whether the employee is over 18 years old (Yes).

OverTime: Whether the employee works overtime (Yes/No).

PercentSalaryHike: Percentage increase in salary.

PerformanceRating: Performance rating of the employee (1-4).

James Ehiabhi

RelationshipSatisfaction: Relationship satisfaction level (1-4).

StandardHours: Standard working hours (always 8 in this dataset, used for consistency).

StockOptionLevel: Stock option level of the employee (0-3).

TotalWorkingYears: Total number of years the employee has worked.

TrainingTimesLastYear: Number of times the employee received training in the last year.

WorkLifeBalance: Work-life balance level (1-4).

YearsAtCompany: Number of years the employee has been with the company.

YearsInCurrentRole: Number of years the employee has been in the current role.

YearsSinceLastPromotion: Number of years since the employee's last promotion.

YearsWithCurrManager: Number of years the employee has been with the current manager.



James Ehiabhi
Data Scientist | ML & AI Expert

✉ kingjamesuwe@gmail.com
GitHub: [JamesEhiabhi](#)
in [James Ehiabhi](#)