# EMPLOYEE DETAILS DASHBOARD

Power BI Final Project Report

Abstract

This Power BI project delivers an in-depth and professional analysis of organizational workforce data through the Employee Details Dashboard. The dashboard consolidates key human resource metrics including employee distribution, experience in the current domain, education level, payment tiers, bonus allocation, bench status, and attrition behaviour across cities and gender categories. By converting raw employee data into interactive and visually intuitive insights, the project enables HR teams and decision-makers to identify workforce trends, compensation patterns, and retention risks. This study demonstrates the effective application of business intelligence and data visualization techniques in supporting strategic human resource management and data-driven organizational planning.
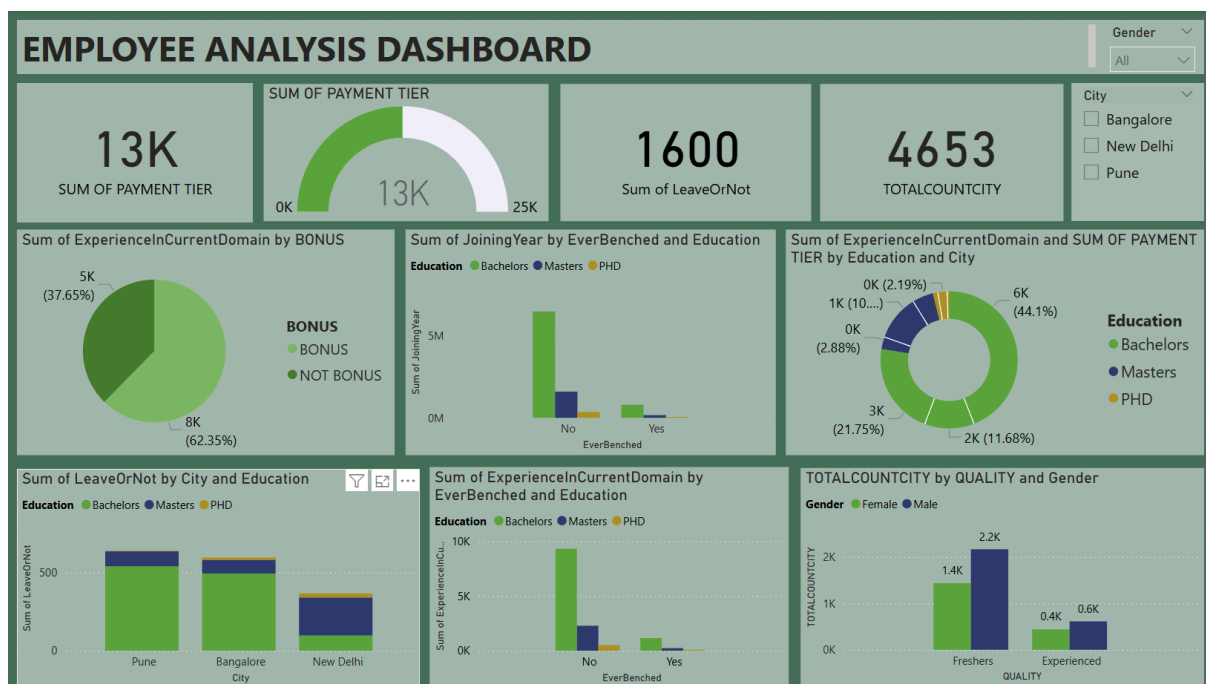
1. Introduction

Human Resource analytics plays a vital role in understanding workforce patterns, improving employee retention, and optimizing organizational performance. This project focuses on analyzing employee data using Power BI to identify trends related to experience, education, bonuses, payment tiers, and employee attrition. The dashboard enables HR professionals and management to explore insights interactively and make informed strategic decisions.

2. Objectives of the Project

The key objectives of this project are:

- To analyze employee distribution across cities and gender

- To study employee experience and quality levels (Freshers vs Experienced)

- To evaluate bonus distribution and payment tier patterns

- To analyze employee attrition (Leave or Not) by city and education

- To build an interactive Power BI dashboard for HR analytics

3. Dataset Description

The dataset used in this project contains structured employee information collected for workforce analysis.

3.1 Dataset Attributes

COLUMN NAME	DESCRIPTION
Employee ID	Unique identifier for each employee
Gender	Gender of the employee (Male, Female)
City	Work location (Bangalore, Pune, New Delhi)
Education	Highest education level (Bachelors, Masters, PhD)
Experience In Current Domain	Years of experience in the current domain
Payment Tier	Salary payment tier
Bonus	Bonus eligibility (Bonus / Not Bonus)
Leave or Not	Employee attrition indicator (Yes / No)
Ever Benched	Whether the employee was ever benched (Yes / No)
Joining Year	Year of joining
Quality	Employee category (Freshers / Experienced)

4. Tools and Technologies Used

- **Power BI Desktop** – Data modeling, visualization, and dashboard development

- **CSV Dataset** – Employee data source

- **DAX (Data Analysis Expressions)** – Measures and calculated fields

5. Data Preparation and Modeling

The following data preparation steps were performed:

- Removal of duplicate and inconsistent records

- Data type standardization for numerical and categorical columns

- Creation of calculated measures such as:

  - Total Employee Count

  - Sum of Payment Tier

  - Sum of Experience in Current Domain

  - Total Attrition Count

A single-table data model was used to ensure simplicity and efficient performance.

6. Dashboard Overview

The **Employee Details Dashboard** consists of multiple interactive visual components designed for HR analytics.

6.1 Key Performance Indicators (KPIs)

- **Total Employee Count** – Overall workforce size

- **Total Attrition Count (Leave or Not)** – Employees who left the organization

- **Total Payment Tier** – Aggregated salary tier indicator

6.2 Interactive Slicers

- **City Filter** – Bangalore, Pune, New Delhi

- **Gender Filter** – Male, Female

6.3 Visual Analysis Components

- **Experience by Bonus** – Pie chart showing experience distribution between bonus and non-bonus employees

- **Payment Tier by Education and City** – Donut chart analyzing compensation patterns

- **Attrition by City and Education** – Stacked bar chart showing employee exits

- **Joining Year by Ever Benched and Education** – Bar chart analyzing bench impact

- **Employee Count by Quality and Gender** – Column chart comparing Freshers and Experienced employees

7. Key Insights

- Employees with higher **experience levels** are more likely to receive bonuses.

- **Payment tiers** vary significantly based on education level and city.

- Attrition is higher among specific **cities and education categories**, highlighting retention challenges.

- Employees who were **ever benched** show distinct joining and experience patterns.

- Experienced employees form a major portion of the workforce compared to freshers.

8. Conclusion

The **Employee Details Dashboard** successfully converts employee data into meaningful insights using Power BI. The analysis supports HR teams in understanding workforce structure, compensation trends, and attrition behavior. This project demonstrates strong skills in data modeling, visualization design, and analytical storytelling, making it suitable for real-world HR analytics applications.

9. Future Scope

- Integration of predictive attrition models

- Inclusion of performance ratings and promotion data

- Department-wise and role-based analysis

- Real-time HR system data integration

10. References

- Microsoft Power BI Official Documentation

- Human Resource Analytics Research Papers

- Business Intelligence and Data Visualization Concepts