1. Project Overview

This project focuses on building an interactive HR Analytics Dashboard using Power BI. The main objective was to analyze employee attendance and performance data to provide HR managers with actionable insights for making data-driven decisions. Power BI data modeling, DAX measures, and visualization capabilities were utilized to create a comprehensive and dynamic report.

2. Objective

To analyze employee attendance and performance data to help HR make data-driven decisions.

3. Dataset Description

The dataset used for this project contains employee attendance and related performance information. It includes data fields such as Employee ID, Name, Department, Designation, Attendance Days, Leave Count, and Performance Scores. The dataset was imported into Power BI from an Excel source and cleaned using Power Query before transformation and visualization.

4. Data Cleaning and Transformation

Data cleaning and transformation were carried out in Power Query. Various data preparation steps were performed, including:
- Removing duplicates and null values
- Correcting data types (date, text, number)
- Creating new calculated columns
- Filtering unnecessary fields
- Renaming columns for better readability

5. DAX Measures Used

DAX (Data Analysis Expressions) was used to create calculated measures and KPIs for deeper analysis. Some key DAX measures

implemented in this project include:
- Total Attendance = SUM(Attendance Days)
- Average Attendance = AVERAGE(Attendance Days)
- Total Leave = SUM(Leave Count)
- Performance Score = AVERAGE(Performance Rating)
- Attendance Percentage = (Attendance Days / Total Working Days) * 100

These measures enabled the calculation of important metrics and allowed for flexible filtering and dynamic updates in the dashboard.

6. Visualizations and Dashboard Features

The dashboard design included a combination of visuals that effectively conveyed insights to HR managers. The following Power BI components were used:
- Cards: To display KPIs such as Total Employees, Total Attendance, and Average Performance.
- Line Charts: To show monthly attendance trends.
- Tables: To list detailed employee information.

7. Key Insights and Findings

From the dashboard analysis, several key insights were identified:
- Certain months recorded a drop in attendance, likely due to holidays or seasonal trends.
- Some employees had consistent absenteeism, which could be addressed by HR intervention.
- Overall performance improved slightly during the last quarter of the year.

8. Conclusion

This HR Analytics Dashboard demonstrates how Power BI can be leveraged to visualize and analyze workforce data effectively. By using

Power Query for data transformation, DAX for calculations, and a variety of visualizations, the dashboard provides HR teams with valuable insights into attendance, performance, and employee engagement. Such analytics can help in developing policies that improve productivity and employee satisfaction.