

Work-Life Balance and Engagement Analysis Dashboard

Introduction

This report explains the steps involved in creating an Employee Work-Life Balance & Engagement Analysis Dashboard in Power BI. The dashboard provides insights into key metrics such as work-life balance, job involvement, relationship satisfaction, and overtime distribution across different job roles and departments at Acme Corporation.

Data Preparation

The first step in creating the dashboard involved preparing the data. The data was collected from the employee records of Acme Corporation, which included various attributes related to employee satisfaction, job involvement, and overtime.

Data Import

- **Data Source:** The data was stored in a CSV file format.
- **Power BI Import:** The CSV file was imported into Power BI using the 'Get Data' functionality. Power BI supports various data sources, including CSV, Excel, SQL databases, and more.

Data Cleaning and Transformation

The data was cleaned hence it didn't need any transformation. It was loaded directly into the Power Bi query editor.

Data Modeling

- **Relationships:** Established relationships between different tables. Ensured the data model was star schema for optimal performance.
- **Calculated Columns and Measures:** Created necessary calculated columns and measures using DAX (Data Analysis Expressions). For example, measures to calculate averages for work-life balance, job involvement, and relationship satisfaction.

Creating Visualizations

Various visualizations were created to represent the data insights clearly and interactively:

- **Key Metrics:** Used Card visualizations to display the overall average values for work-life balance, job involvement, and relationship satisfaction.
- **Scatter Plots:** Created scatter plots to show the average work-life balance, job involvement, and relationship satisfaction by job role, categorized by department.

- **Pie Charts:** Used pie charts to visualize the distribution of employees working overtime by department and by job role.

Slicers

- Added slicers for interactive filtering, allowing users to view data based on personal info such as gender and their marital status.

Formatting and Design

- **Theme and Colors:** Applied a consistent color theme to make the dashboard visually appealing and to differentiate between different categories.
- **Layout:** Organized visualizations logically to ensure a smooth flow of information. Key metrics were placed prominently for quick insights.

Conclusion

The Employee Attrition Analysis Dashboard provides a comprehensive view of employee satisfaction and overtime trends at Acme Corporation. Key insights include:

- **Work-Life Balance:** Human resource roles tend to have a slightly higher work-life balance whereas Research and Development have lower work-life balance, compared to other roles.

- **Job Involvement and Relationship Satisfaction:** Consistently low across roles with Human Resources department showing marginally higher scores.
- **Overtime:** The Research & Development department has the highest number of employees working overtime, especially in roles such as Research Scientist and Laboratory Technician. This is followed by the Sales department, where Sales Executives lead in overtime hours. These job roles also show a significant number of attritions. Possible reasons for the high overtime include lower salaries, which may also contribute to the lower overall satisfaction scores for these roles within these departments.

These insights help identify areas for improvement, such as addressing high overtime in Research & Development to enhance employee work-life balance. The interactive nature of the dashboard allows for in-depth analysis and aids in strategic decision-making to improve employee retention and satisfaction.