Power BI Project. Data Analytics

Instruction

Use the attached Dataset to build a comprehensive dashboard using power bi.

Project Overview:

This project highlights your ability to use data visualization and analytics tools to identify key insights and provide actionable recommendations.

HR analytics aim to provide insight into how best to manage employees and reach business goals. The objective is to monitor key HR metrics on employees and identify what factors impact attrition. Create several reports with information on following factors which will help the organization determine what action they will need to take to retain more employees.

Tools to be used:

- Power BI
- Power Query
- Dax Query

Cleaning and Analyzing using Power Query:

- Open Excel and connect to your employee data
- Use Power Query to clean and transform the data
- Apply all necessary cleaning steps, such as removing duplicates, renaming columns, and changing data types
- Load and apply the cleaned data into Power BI

Exploring and Manipulate Some Data Using DAX Query:

- With DAX Query, we can effectively manipulate and analyze the data to provide insights for visualization and identify areas for improvement for HR.

- Create Measures and columns Using DAX functions such as count, sum function for exploring some clean data for improve dashboard KPI in Power BI.

Power BI Dashboard Visualization:

- Design the dashboard layout

- Create a measure table to aggregate and display the data using Dax functions

- Use Visualizations for charts and filters for filter dashboard

- Now, Add Title HR Dashboard

- Add Month column as Slicer and add some informative KPI.

- Add Bar chart, Pie chart, Column chart, Cards, Matrix chart, Donut chart etc.

Ensure your dashboard is comprehensive enough to answer at least 15 – 20 questions as asked below.

Employee Attrition & Satisfaction Analysis

1. What is the attrition rate across different age groups?

2. Which department has the highest attrition rate?

3. How does job satisfaction correlate with attrition?

4. Is there a pattern between work-life balance and attrition?

5. Do employees who frequently travel for business have a higher attrition rate?

Compensation & Salary Analysis

6. What is the distribution of salary slabs across different job roles?

7. Is there a significant salary gap between genders in the company?

8. How does salary influence job satisfaction and attrition?

9. What is the relationship between years at the company and salary?

10. How do stock options and salary hikes affect employee retention?

Work Experience & Performance

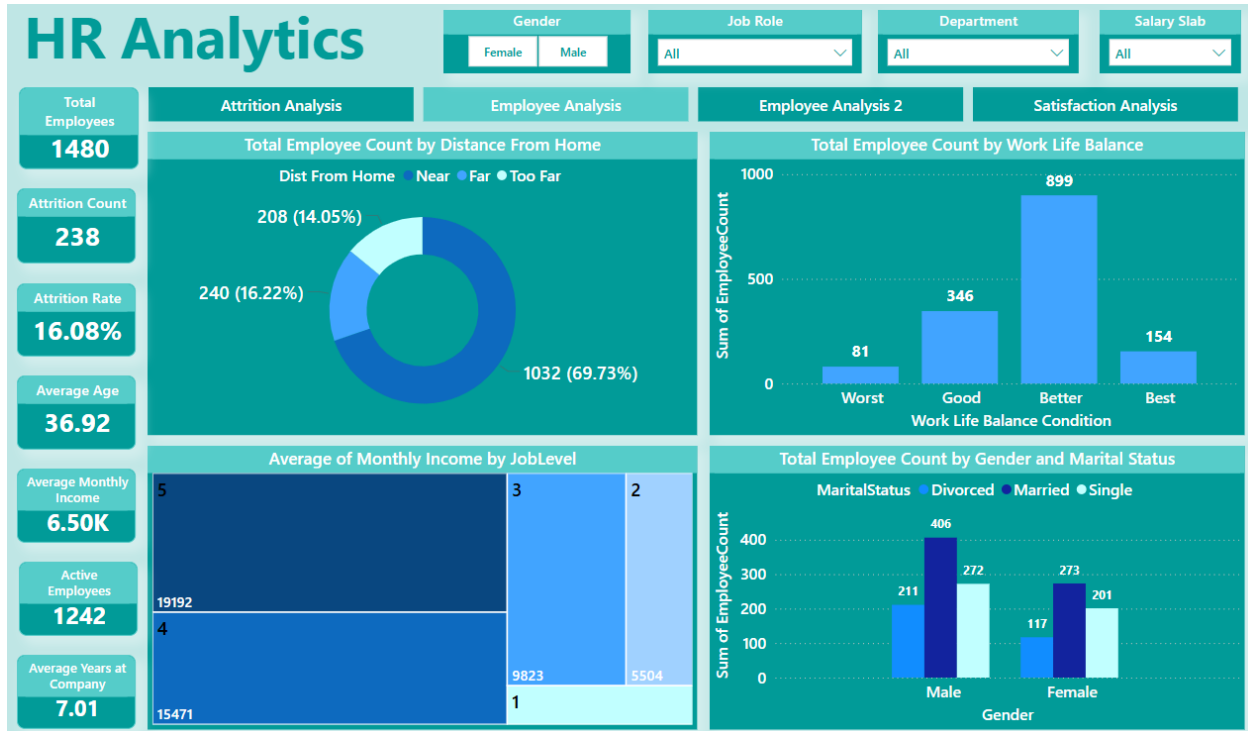11. What is the average tenure of employees across different job roles?

12. How does the number of companies an employee has worked for affect their performance rating?

13. Does overtime impact employee performance ratings?

14. Which education field has the highest number of employees in managerial positions?

15. What is the correlation between training times last year and job involvement?

Department & Role-Based Insights

16. Which job role has the highest satisfaction level?

17. Which department has the most experienced employees?

18. Which job level has the highest rate of overtime work?

19. How does relationship satisfaction vary across different departments?

20. Which business travel frequency is most common in each department?

These questions can guide you in designing KPIs, charts, and insights for your Power BI dashboard.

Dashboard inspiration. Avoid doing exactly what you see here. Good luck!!!!

Chef Macks.