Power BI Data Analytics Projects Documentation

Dataset - https://bit.ly/3TmtJnf

Help an organization to improve employee performance and retention rate by creating an HR Analytics Dashboard.

Problem Statements

1. Find the total attrition rate.
2. Find the educational background of attrited employees.
3. Find the travel habits of attrited employees.
4. Find the relation between age and gender of attrited employees.
5. Find which department consists the most number of attrited employees.
6. Find the job satisfaction levels for different job roles.
7. Find how overtime affected attrited employees.
8. Find how marital status affected attrited employees.

Data Cleaning:

1. Remove column EmpID, Over18, and StandardHours
2. Select all columns then right-click and select the function Remove Duplicates.
3. In column BusinessTravel replace the cell containing TravelRarely with Travel_Rarely.
4. Select all columns then goto 'Transform' and click the function Detect Data Types.

Data Modeling:

1. I created a new AttritionCount column by selecting Add Column tab then selecting Conditional Column function to find the total number of attrited employees.
2. I created a new measure AttritionRate to count the percentage of attrited employees using the formula: Sum('HR-Employee-Attrition'[AttritionCount]) / Count('HR-Employee-Attrition'[EmployeeNumber])

Data Visualization:

1. I created a Card to display the total number of employees.
2. I created a Card to display the total attrition count.
3. I created a Card to display the attrition rate.
4. I created a Card to display the average age of attrited employees.
5. I created a Card to display the average salary of attrited employees.

6. I created a Card to display the average years of service at the company by the employees.
7. I created a Pie Chart to display the education of attrited employees.
8. I created a Pie Chart to display the travel habits of attrited employees.
9. I created a Pie Chart to display the departments of attrited employees.
10. I created a Stacked Area Chart to display the age of attrited employees from both genders.
11. I created a Stacked Bar Chart to display the job satisfaction of attrited employees for different job roles.
12. I created a slicer for the Marital status of employees.
13. I created a slicer for the Overtime status of employees.

Data Analysis:

1. The dataset contains data for 1470 employees.
2. Total 237 employees have left the company and the total attrition rate is 16%.
3. Majority of the attrited employees travelled frequently.
4. The sales and human resource department have the highest number of attrited employees.
5. Majority of the attrited employees were between the age 25 to 35.
6. The laboratory technician, sales executive, and research scientist had the most number of poor job satisfaction rating.

Kaggel dataset api -> kaggle datasets download -d saadharoon27/coffee-bean-sales-raw-dataset

Documentation - Documentation - HR Data Analysis -> This file contains all data cleaning steps taken in this project.

Coffee Beans Data Analysis -> This file contains the Dashboard and clean data.

Coffee Beans Raw Data -> This file contains the original and unclean data data.
