Business Requirement Document (BRD)

Project: HR Database Analysis

# Introduction:

The purpose of this project is to analyze the HR database and derive meaningful insights by creating a comprehensive HR Dashboard. The dashboard will provide valuable information regarding the number of employees, attrition rates, employee demographics, department-wise attrition, education-wise attrition, and job satisfaction by job role. These insights will assist in monitoring HR metrics and making data-driven decisions to improve employee retention, satisfaction, and overall organizational performance.

# Objectives:

## The main objectives of the HR Database Analysis project are as follows:

* Track and analyze the number of employees in the organization.
* Calculate and monitor total attrition and attrition rate.
* Determine the number of active employees after accounting for attrition.
* Calculate the average age of employees.
* Visualize department-wise attrition in a pie diagram.
* Categorize employees by age band.
* Analyze education-wise attrition using a bar graph.
* Evaluate job satisfaction by job role.
* Scope:
* The HR Database Analysis project will focus on the following areas:
* HR database containing employee information such as employee ID, age, job role, education, department, and attrition status.
* Data visualization tools (e.g., Power BI, Tableau) for creating the HR Dashboard.
* Statistical calculations and visualizations to represent the HR metrics effectively.
* Functional Requirements:

# The HR Dashboard will include the following functionalities:

## 4.1 KPI - Number of Employees:

1. Display the total number of employees in the organization.
2. Provide an overview of the employee count, which can be used to track workforce growth.

## 4.2 KPI - Total Attrition:

1. Calculate and display the total number of employees who have left the organization.
2. Track attrition trends to identify patterns and potential areas of concern.

## 4.3 KPI - Attrition Rate:

1. Calculate and display the attrition rate, which is the percentage of employees who have left the organization compared to the total number of employees.
2. Monitor the attrition rate to assess employee retention strategies and their effectiveness.

## 4.4 KPI - Active Employees:

1. Calculate and display the number of active employees after accounting for attrition.
2. Provide insights into the current workforce strength and potential gaps in staffing.

## 4.5 KPI - Average Age:

1. Calculate and display the average age of employees.
2. Understand the age demographics of the workforce and monitor changes over time.

## 4.6 Department-wise Attrition - Pie Diagram:

1. Visualize the attrition rate for each department using a pie diagram.
2. Identify departments with higher attrition rates to focus on retention efforts and address underlying issues.

## 4.7 Employee by Age Band:

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1. Categorize employees into different age bands based on predefined age ranges.
2. Analyze the distribution of employees across age bands to understand the age demographics of the organization.

## 4.8 Education-wise Attrition - Bar Graph:

1. Analyze and visualize attrition rates by different levels of education using a bar graph.
2. Identify any correlations between education levels and attrition to inform HR strategies.

## 4.9 Job Satisfaction by Job Role:

1. Evaluate job satisfaction levels across different job roles.
2. Rank job roles from highest to lowest job satisfaction to identify areas for improvement and target interventions effectively.

## Non-functional Requirements:

1. The HR Dashboard should be visually appealing, user-friendly, and intuitive.
2. It should be responsive and compatible with different devices and screen sizes.
3. The dashboard should be regularly updated to reflect the latest data from the HR database.
4. Proper data security measures should be implemented to ensure the confidentiality of employee information.
5. Assumptions and Constraints:
6. The HR database contains accurate and up-to-date employee information.
7. The necessary data for analysis, including attrition status, age, job