Problem Statement

Background: Our company aims to optimize its HR functions by leveraging data analytics to gain insights into employee performance and attrition rates. Effective HR management is crucial for maintaining a productive workforce, reducing turnover, and ensuring overall organizational success. However, the large volume of HR data requires sophisticated analysis and visualization tools to extract meaningful insights.

Objective: The company seeks to develop a comprehensive HR analytics solution that cleans, transforms, and visualizes HR data to provide actionable insights into performance tracking and attrition rates. The goal is to enhance HR decision-making, improve employee performance, and reduce attrition through data-driven strategies.

Data: The original HR dataset comprises over 80,000 records, including various attributes related to employee performance and attrition. After thorough cleaning and preprocessing, the dataset is refined to 76,000 records.

Tools:

- **Query Editing Tool:** Microsoft Excel and Microsoft Power BI
- **Visualization Tool:** Microsoft Power BI

Requirements:

1. **Data Cleaning and Transformation:**
    - Address missing values and outliers.
    - Normalize and standardize data attributes for consistency.
    - Ensure data integrity and accuracy.
2. **Data Visualization:**
    - Develop a dynamic dashboard in Microsoft Power BI.
    - Visualize key HR metrics, including performance scores and attrition rates.
    - Incorporate interactive elements for filtering and drilling down into specific data segments.
3. **Analysis and Insights:**
    - Identify performance trends over time.
    - Analyze factors contributing to high attrition rates.
    - Generate actionable insights to inform strategic HR interventions.

Expected Outcomes:

- A cleaned and well-prepared HR dataset ready for detailed analysis.
- An interactive Power BI dashboard displaying critical HR metrics.
- Actionable insights to inform HR policies and improve employee performance and retention.