HR Data Analysis Project Documentation

Overview:

Our HR Analysis Dashboard presents a comprehensive view of the workforce, shedding light on critical insights related to employee demographics, job roles, and tenure. With a focus on understanding attrition patterns, this analysis aims to guide strategic decisions in talent management, fostering a stable and motivated work environment.

Problem Statements:

Employee attrition is a significant challenge impacting our organization.

The departure of 237 employees is a cause for concern, particularly as it affects various demographic groups, job roles, and tenure levels.

Identifying the root causes behind these departures is essential for implementing targeted retention strategies and ensuring a resilient workforce.

Project Goal:

The primary objective of this analysis is to uncover the factors contributing to employee attrition.

 By exploring demographics such as gender, education, salary, tenure, and age, our goal is to formulate tailored retention strategies.

The ultimate aim is to enhance overall employee satisfaction, strengthen organizational stability, and proactively manage and reduce attrition risks.

Steps in Project:

- Requirement Gathering
- Raw Data Overview
- Connecting Data with Power BI
- Data Cleaning
- Data Processing
- Data Modelling
- Data Visualization/ Charts Design
- Report/ Dashboard Building
- Insights

Insights:

➢ **Demographic Overview (KPIs):**
- Total Employees: 1.47K
- Attrition: 237 (16.1%)
- Average Age: 37
- Average Salary: $6.5K
- Average Tenure: 7 years

➢ **Attrition by Gender:**
- Male: 150 departures
- Female: 87 departures

➢ **Attrition by Education:**
- Life Science: 37% of total attrition (89)
- Medical: 26% (63)
- Marketing: 14% (35)
- Technical Degree: 13.5% (32)
- HR: 2.95% (7)

➢ **Attrition by Salary Slab:**
- Majority left with a salary around $5K (163)
- Followed by those earning between $5K-$10K

➢ **Attrition by Tenure:**
  • Most left after 1 year
  • Significant departures after completing 4 years

➢ **Attrition by Age:**
  • Highest attrition among ages 26-35 (116)
  • Followed by ages 18-25 (44)

➢ **Attrition by Job Role:**
  • Lab Technicians: 62 departures
  • Sales Executives: 57 departures
  • Research Scientists: 47 departures

These insights offer a nuanced understanding of attrition patterns, enabling targeted strategies for retention. Addressing specific factors such as age, tenure, and job roles will be crucial in formulating effective solutions for employee retention.

Conclusion:

1. **Identifying Attrition Hotspots:** Analysis reveals concentrated attrition in specific demographics (age, gender), job roles (Lab Technicians, Sales Executives), and salary brackets.

2. **Tailoring Retention Strategies:** Understanding attrition patterns allows for targeted retention initiatives, addressing key factors such as salary structures, career progression, and job satisfaction.

3. **Proactive Talent Management**: Recognizing the critical attrition points, the organization can adopt proactive measures to retain talent, enhancing overall workforce stability.