Project -3

Project Overview: HR Gender Diversity and Inclusion Analytics

Objective
This project is dedicated to developing a Power BI Dashboard aimed at a comprehensive understanding of employee attrition within an organization. By delving into the myriad factors contributing to turnover, this initiative seeks to arm HR professionals with the data-driven insights necessary to formulate and implement effective retention strategies, ultimately aiming to bolster retention rates and reinforce the organizational workforce.

Dataset Insights
Utilizing a rich dataset from the IBM HR Analytics Employee Attrition & Performance available on Kaggle, this project examines a variety of variables including employee demographics, job characteristics, performance metrics, and attrition outcomes. The depth and breadth of the dataset enable a multifaceted analysis of the factors influencing employee turnover, providing a solid foundation for deriving actionable insights.

Analytical Methodology
Initial Steps
Objective Definition: Establishing clear goals to uncover patterns and drivers of employee attrition.
Data Acquisition and Preliminary Analysis: Securing the dataset from Kaggle, followed by an exploratory analysis to understand the distribution and relationship of key variables impacting attrition.

Metric Formulation
KPI Development: Leveraging Power BI Desktop along with Data Analysis Expressions (DAX) to craft essential Key Performance Indicators, including attrition rates by various demographics, turnover trends by department, and more.

Dashboard Development
Interactive Visualization: Creating a dynamic dashboard in Power BI Desktop, featuring a suite of visualizations, filters, and slicers. This dashboard serves as a

tool for HR and management to interactively explore and digest the nuances of employee attrition patterns.

Dataset Acquisition: Obtain the dataset via the provided link in the Dataset section.

Accessing the Dashboard: Clone or download this project repository to your local system. Then, open the HR-attrition-dashboard.pbix file with Power BI Desktop to engage with the dashboard's full capabilities.

Analytical Inquiries

The dashboard facilitates deep dives into various aspects of attrition, answering critical questions such as:

What is the overall attrition rate and its variation across gender demographics?
Which age demographic is most affected by attrition?
How does attrition distribution look across different organizational departments?
Identification of job roles witnessing the highest rates of turnover.
Exploration of the relationship between tenure at the company and likelihood of attrition.
Analysis of the impact of monthly salary levels on attrition rates.
Examination of overtime requirements in relation to attrition trends.
Assessment of performance ratings' effect on attrition probabilities.
Investigating the influence of work-life balance satisfaction on employee retention.

Conclusion

The HR Attrition Analysis Dashboard project encapsulates the essence of leveraging advanced analytics to foster a more engaged and stable workforce. Through meticulous analysis and interactive data visualization, it provides HR practitioners with the insights needed to address attrition proactively, paving the way for a more resilient and inclusive corporate culture.

Screenshots of the Project 3