

Project Plan: Employee Attrition Analysis

Understanding the causes of layoffs is essential for businesses looking to keep a steady and effective workforce in today's job market. I want to take this project which aims to analyse the "[Employee Attrition Classification](#)". I have taken dataset from Kaggle focusing on identifying important factors that drive employee turnover.

The driving question for this analysis is:

What factors contribute to employee attrition, and how can organizations reduce turnover?

The project's goal is to give management and HR teams information on employee turnover trends, so which will be useful for them to improve retention plans. The Employee Attrition Dataset from Kaggle, which includes 74,498 records with complete employee profiles that covers demographics info, job-related factors like years of service, monthly income, and job satisfaction, as well as extras like remote work, leadership opportunities, and employee recognition.

The dataset's primary goal is to identify factors that influence employee attrition and help build predictive models to recognize employees at risk of leaving. It serves as a valuable resource for HR analytics, machine learning, and advanced data analysis, offering a realistic and detailed perspective on employee retention. The analysis will follow by visualizations that explore relationships between various factors and employee attrition.

Key visualizations may include bar charts that illustrate attrition rates across different departments and age groups. An interactive dashboard will be built by using Plotly, that may allow HR teams to filter data by department and gain deeper insights into attrition patterns.

The primary audience for this project will be HR department and organizational leaders. The project will provide an interactive dashboard that helps HR professionals identify high-risk areas, such as departments with elevated attrition rates. Visualizations will simplify complex data, focusing on key factors like employee satisfaction and years of service.

Although the project aims to provide meaningful insights into employee attrition, it has certain limitations. The dataset may not account for all factors affecting turnover, such as personal circumstances or external influences, and this analysis relies on historical data, which may not fully predict the future trends. For this project future enhancements may involve incorporating predictive analytics to better forecast attrition.

This project is a vital part of my academic path and will help in the growth of my future IT business analyst skills. My understanding of HR analytics will grow because of this project, which also helps me create interactive dashboards and make data-driven decisions that can improve organizational processes and management of employees.