**Introduction:**

Employee attrition is a critical metric for organizations, as it directly impacts operational efficiency, costs, and overall organizational health. High turnover rates can indicate underlying issues such as dissatisfaction, poor management, or inadequate work conditions, while low attrition can suggest high employee engagement and effective retention strategies. This report presents an in-depth analysis of attrition data within **Adviti Pvt Ltd,** aiming to uncover key factors influencing employee departure and identify trends that can inform strategic decision-making in human resources (HR).

The analysis utilizes historical employee data, covering various demographics, job roles, and employment tenures, to assess patterns of attrition. By understanding the reasons behind employee turnover, this report seeks to provide actionable insights that can help improve retention strategies, optimize talent management, and foster a more stable and engaged workforce.

The findings from this analysis will guide HR efforts to minimize unnecessary attrition, enhance employee satisfaction, and ultimately contribute to the organization’s long-term success.

**Objective:**

The objective of this report is to analyse the patterns and factors influencing employee attrition at **Adviti Pvt Ltd** . By examining key variables such as tenure, department, job role, performance ratings, and demographics, the analysis aims to identify the main drivers of turnover. This report will provide actionable insights to help HR develop targeted retention strategies, improve employee satisfaction, and reduce voluntary attrition, ultimately supporting the organization’s goal of maintaining a skilled and engaged workforce.

**Data Cleaning and Preparation:**

**The initial dataset provided by the HR department has several missing values which could potentially affect the analysis. Hence, those were cleaned and prepared for analysis.**

**1.Position column: To Maintain the consistency and for easier analysis, new column named Position\_updated was created. Position\_updated for #creator to Content Creator , DataAnalyst to DataAnalyst, Account Exe to Account Executive.**

|  |  |  |
| --- | --- | --- |
| # employee\_id | Position | Position\_updated |
| E00679 | Creator | Content Creator |
| E00733 | Creator | Content Creator |
| E00750 | Creator | Content Creator |

**2.Gender Column: The Male and female gender was denoted by ‘M’ and ‘F’. Hence,Full form was updated for both Gender.**

|  |  |  |
| --- | --- | --- |
| # employee\_id | Gender | Gender\_updated |
| E00030 | F | Female |
| E00001 | M | Male |

**3.Department Column: The department column has a blank space and was updated by relevant department name.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # employee\_id | Position | Department | # employee\_id | Position | Department |
| E00001 | CEO |  | E00001 | CEO | Management |

**Data Analysis:**



**1.Based on Age:**

**To simplify the Analysis and the age were grouped into 4 category where inters and 1 year of service category were ignored.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **# age\_group** | **total\_emp\_count** | **attrition\_yes** | **attrition\_no** | **attrition\_yes%** | **attrition\_no%** |
| **21-30** | **102** | **42** | **60** | **41** | **59** |
| **31-40** | **121** | **56** | **65** | **46** | **54** |
| **41-55** | **200** | **107** | **93** | **54** | **47** |

**Observation: The attrition% was higher for age\_group between 41-55.**

**2.**