

EMPLOYEE_ATTRITION REPORT

Introduction

Welcome to this comprehensive report, where we explore and analyze the details of the employee_attrition_new dataset. This report aims to provide a detailed overview and insights into the given dataset. Through this analysis and interpretation, we have uncovered valuable findings.

Using SQL queries, we have extracted and analyzed key data points from the employee_attrition_new to gain a deeper understanding of the dataset. The queries analyzed include:

1:number of empolyee

2:number of department

3:number of people who where married and divorced

4;people who travel rarelry and frequently

5:people travel with have no attriton

6.people travel with have 'yes' attriton

7: avg monthely income of employee

8:job satisfaction by gender

9.employee distance from home and attrition

10.monthely rate comparsion by job level

OBJECTIVE

The objective of this report is to conduct a comprehensive analysis of the employee_attrition_new dataset, encompassing:

1. Data Collection: Acquire a well-structured dataset from the employee_attrition_new dataset, encompassing various attributes and features of employees.
2. Data Cleaning and Preprocessing: Perform thorough data cleaning and preprocessing tasks to ensure data integrity, handle missing values, duplicate records, and outliers.
3. SQL Queries: Design and execute SQL queries to extract and analyze key data points, including

- Identify key factors contributing to employee attrition Focus on:

- number of empolyee
- number of department
- number of people who where married and divorced

- people who travel rarely and frequently
- people travel with have no attrition
- people travel with have 'yes' attrition
- avg monthly income of employee
- job satisfaction by gender
- employee distance from home and attrition
- monthly rate comparison by job level

INSIGHTS

1: number of employee:

query: select Gender ,count(Gender) from employee_attrition_new group by gender;

male:678

female:998

where female with yes attrition=113

male=86

with no attrition

male==592

female==885

2:number of department

select Gender ,count(Gender) from employee_attrition_new group by gender;

'Cardiology', '531'

'Maternity', '796'

'Neurology', '349'

3.number of people who where married and divorced :

divorced:377 ,where male=464 and female=313

married:777 ,where male== 427 and female=289

4.people who travel rarelry and frequently:

travel rarely==1184

travel frequently==320

5 .people travel with have no attriton:

'Travel_Frequently', '263'

'Travel_Rarely', '1058'

'Non-Travel', '156'

6.people travel with have ‘yes’ attriton:

'Travel_Frequently', '126'

'Travel_Rarely', '57'

'Non-Travel',16'

7: avg monthly income of employee:

'Nurse', '5538.5803'

'Therapist', '7711.0317'

'Administrative', '16647.5565'

'Admin', '17138.6875'

'Other', '5099.0431'

8.job satisfaction by gender:

select gender, avg(JobSatisfaction) as avgJobSatisfaction from employee_attrition_new group by gender;

'Female', '2.6873'

'Male', '2.7735'

9.employee distance from home and attrition:

'No', '8.9059'

'Yes', '11.5678'

this helps to understand if the distance from home could be the reason for influencing the employee attrition

10.monthly rate comparison by job level:

job level 2='14723.5924'

1=='13693.4332'

' 3== '14613.2398'

'4==14524.5984' the highest monthly rate is 2 have

CONCLUSION

"The analysis of employee attrition reveals that employees who are older, with higher education levels, and greater job satisfaction tend to have lower attrition rates. Specifically, employees in roles with higher job involvement and satisfaction, who travel less for business and have a more favorable work environment, show greater retention. Additionally, the distance from home and the department they work in also significantly influence their likelihood to leave the company. Addressing these factors through targeted retention strategies could help in reducing overall attrition rates and improving employee satisfaction."