Employee Attrition

Introduction

Employee Attrition refers to the gradual reduction in a company's workforce due to various reasons, such as resignations, retirements, layoffs, or involuntary terminations. Unlike layoffs, attrition typically happens when employees leave the organization and are not replaced immediately, leading to a decline in the workforce over time.

Aim

The aim of employee attrition analysis is to understand the reasons behind employees leaving an organization, identify patterns and trends, and use this information to reduce turnover

1. Improve Retention: By understanding why employees leave, companies can address underlying issues and improve employee satisfaction and retention.

2. Enhance Productivity: High attrition rates can disrupt productivity. Addressing the causes of attrition ensures that teams remain stable and productive.

3. Cost Reduction: Recruiting, hiring, and training new employees can be expensive. Reducing attrition can lead to significant cost savings.

Objectives

The objectives of employee attrition management typically focus on understanding and mitigating the factors contributing to employee turnover.

1. Identifying Causes of Attrition: Analyze data to determine why employees are leaving, such as job dissatisfaction, lack of growth opportunities, or inadequate compensation.

2. Predicting Future Attrition: Develop models to predict which employees are likely to leave, allowing for proactive measures.

3. Improving Employee Retention: Implement strategies to address the root causes of attrition, such as enhancing job satisfaction, improving work-life balance, and offering career development opportunities.

4. Reducing Recruitment and Training Costs: Minimize the financial burden associated with constantly hiring and training new employees by retaining existing talent.

Data Overview

Field	Type	Null
EmployeeID	int	YES
Age	int	YES
Attrition	text	YES
BusinessTravel	text	YES
DailyRate	int	YES
Department	text	YES
DistanceFromHome	int	YES
Education	int	YES
EducationField	text	YES
EmployeeCount	int	YES
EnvironmentSatisf...	int	YES
Gender	text	YES
HourlyRate	int	YES
JobInvolvement	int	YES
JobLevel	int	YES
JobRole	text	YES
JobSatisfaction	int	YES
MaritalStatus	text	YES
MonthlyIncome	int	YES
JobSatisfaction	int	YES
MaritalStatus	text	YES
MonthlyIncome	int	YES
MonthlyRate	int	YES
?	text	YES
age_cat	varc...	YES

Questions

1. What is the total number of employees?SELECT COUNT(*) FROM emp_table;

2. How many new employees are there?
   SELECT COUNT(*) FROM emp_table WHERE age = 18;

3. What is the maximum daily payment to an employee?SELECT MAX(dailyrate) FROM emp_table;

4. What is the minimum daily payment to an employee?SELECT MIN(dailyrate) FROM emp_table;

5. What are the details of the employee with the minimum daily payment?SELECT * FROM emp_table WHERE dailyrate = 102;

6. What are the details of the employee with the maximum daily payment?SELECT * FROM emp_table WHERE dailyrate = 1499;

7. How many employees have the maximum distance from home?SELECT MAX(distancefromhome) FROM emp_table;

8. How is the number of employees categorized by business travel? SELECT businesstravel, COUNT(*) AS counts FROM emp_table GROUPBY businesstravel ORDER BY counts;

9. How are employees categorized by age and gender?

   SELECT age, gender, COUNT(*) AS counts FROM emp_table GROUP BY age, gender ORDER BY counts;

10. How are employees categorized by marital status and gender?

    SELECT maritalstatus, gender, COUNT(*) AS counts FROM emp_table GROUP BY maritalstatus, gender ORDER BY counts;

11. How are employees categorized by department and gender?

    SELECT department, gender, COUNT(*) AS counts FROM emp_tableGROUP BY department, gender ORDER BY counts;

12. How are employees categorized by age category and gender?

    SELECT age_category, gender, COUNT(*) AS count FROM emp_tableGROUP BY age_category, gender ORDER BY count;

13. How are employees categorized by education field and job role? SELECT educationfield, jobrole, COUNT(*) AS count FROM emp_table GROUP BY educationfield, jobrole ORDER BY count;

14. How are employees categorized by age category and job role?

    SELECT age_category, jobrole, COUNT(*) AS count FROM emp_table GROUP BY age_category, jobrole ORDER BY count;

15. How are employees categorized by department and gender?

    SELECT department, gender, COUNT(*) AS count FROM emp_table GROUP BY department, gender ORDER BY count;

16. How are employees categorized by attrition and gender?

    SELECT attrition, gender, COUNT(*) AS counts FROM emp_table GROUPBY attrition, gender ORDER BY counts;

17. How are employees categorized by attrition and age category?

    SELECT attrition, age_category, COUNT(*) AS counts FROM emp_tableGROUP BY attrition, age_category ORDER BY counts;

18. How are employees categorized by attrition and business travel?

    SELECT attrition, businesstravel, COUNT(*) AS counts FROM emp_tableGROUP BY attrition, businesstravel ORDER BY counts;

19. How many employees have left based on their education field?

    SELECT attrition, educationfield, COUNT(*) AS counts FROM emp_tableGROUP BY attrition, educationfield ORDER BY counts;

Conclusion

Employee attrition refers to the reduction of staff due to various reasons such as resignations, retirements, or terminations. Drawing a conclusion about employee attrition typically involves analysing the causes, patterns, and impact on the organization. In conclusion, understanding and managing employee attrition is critical for sustaining organizational success, as it

directly impacts both the workforce's stability and the company's long-term goals.