

Employee Attrition Data

Prepare a model for the HR department to predict the Attrition and give the insights from the data about the important factors associated with the attrition so that HR can take the corrective or previntive measures to stop or control the attrition.

The variables description are below.

Variable	Description
Age	age of employee (continuous variable)
Attrition	describe status of attrition (dichotomous variable, values – Yes, No)
BusinessTravel	Describe official travelling of employees (categorical variable having 3 Labels Non-Travel, Travel Frequently, Travel Rarely)
DailyRate	Daily rate of employee (continuous variable)
Department	Department of employee (categorical variable having 3 labels - Human Resources, Research & Development, Sales)
DistanceFromHome	distance of office from home in km (continuous variable)
Education	Education of employee in rating (categorical variables ,ordinal data, 5 Ratings 1, 2, 3, 4, 5)
EducationField	Education Stream of employee (categorical variable having 6 labels-Human Resources, Life Sciences, Marketing, Medical, Other, Technical Degree)
EmployeeCount	Count of employee (Continuous variable and only 1 value present like a Constant)
EmployeeNumber	Employee identification number an ID variable
EnvironmentSatisfaction	Job Environment Stratification of employee (rating scale data 1, 2, 3, 4 categorical variable nominal/ordinal data)
Gender	Describe gender of employee Categorical variable (2 labels Female, Male)
HourlyRate	describe hourly rate of employee (Continuous variable)
JobInvolvement	Engagement in the jog (Rating data having 4 ratings 1,2,3,4 categorical variable)
JobLevel	Level of job in organization structure (Rating data having 5 ratings 1, 2,3,4,5 categorical variable)
JobRole	Healthcare Representative,Human Resources,Laboratory Technician,Manager,Manufacturing Director,Research Director,Research Scientist,Sales Executive,Sales Representative
JobSatisfaction	Stratification of employee within job (rating scale data 1, 2, 3, 4 categorical variable nominal/ordinal data)
MaritalStatus	Marital Status(Categorical Variable having 3 labels - Divorced,Married,Single)
MonthlyIncome	monthly income of employee(Continuous variable)
MonthlyRate	Monthly rate of employee(Continuous variable)

NumCompaniesWorked	Number of company employee worked for(Count data having 0,1,2,3,4,5,6,7,8,9, continuous variable)
Over18	Status of adult employee(categorical variable having 1 category - Y)
OverTime	OverTime status(categorical variable having 2 category - Yes, No)
PercentSalaryHike	Salary hike %age (continuous variable Percentage figures)
PerformanceRating	Performance rating (Rating data ,Categorical nominal/ordinal data- 3,4)
RelationshipSatisfaction	Shows status of Relationship with Managers(Rating data 4 labels ,Categorical nominal/ordinal data-1,2,3,4)
StandardHours	Standard working hours (Numerical data , 80 hours for everybody, almost constant data)
StockOptionLevel	stock option(Rating data 4 labels ,Categorical nominal/ordinal data-1,2,3,4)
TotalWorkingYears	Total year of experience(Continuous variable)
TrainingTimesLastYear	Training Time(Continuous variable)
WorkLifeBalance	WorkLifeBalance : rating 1,2,3,4
YearsAtCompany	Years in current company(Continuous variable)
YearsInCurrentRole	Years in current Role(Continuous variable)
YearsSinceLastPromotion	Years Since last Promotion(Continuous variable)
YearsWithCurrManager	Years in current Managerial role(Continuous variable)