IBM HR Analytics Employee Attrition and Performance
Dictionary for Raw Data Set

Target / Dependent Variable

1. Attrition	Whether the employee churned or not. Categories include No and Yes. Mapped to Churn dummy variable (0 = No, 1 = Yes). Dropped in feature engineering process.

Categorical Variables

2. BusinessTravel	Frequency of business travel. Levels include Non-Travel, Travel_Rarely, and Travel_Frequently. Mapped to BusTravLevel (Business Travel Level) variable (0 = Non-Travel, 1 = Travel_Rarely, 2 = Travel_Frequently). Dropped in feature engineering process.
3. Department	Employee department, which includes Sales, Human Resources, and Research & Development. Department dummy variables of HR_Dept and Sales_Dept were created from this variable, with Research & Development as the reference category. Dropped in feature engineering process.
4. EducationField	Employee's education field, which includes Human Resources, Technical Degree, Marketing, Life Sciences, Medical, and Other. Education dummy variables of HR_Major, Tech_Major, Market_Major, Med_Major, and Other_Major were created from this variable, with Life Sciences as the reference category. Dropped in feature engineering process.
5. Gender	Gender of employee. Categories include Male and Female. Mapped to Gender_Dum (Gender dummy) variable (0 = Male, 1 = Female). Dropped in feature engineering process.
6. JobRole	Employee's job title. Job dummy variables of Sales_Rep, Lab_Tech, HR, Research_Sci, Manuf_Dir, HC_Rep, Mgr, and Research_Dir were created from this variable, with Sales Executive as the reference category. Dropped in feature engineering process.
7. MaritalStatus	Employee's marital status, which includes Single, Married, and Divorced. Marital status dummy variables of Divorced and Single were created from this variable, with Married as the reference category. Dropped in feature engineering process.
8. Over18	Whether the employee is age 18 or over. All 1,470 employees in this data set are marked as 'Yes.' Dropped in feature engineering process.
9. OverTime	Whether the employee had overtime or not. Categories include No and Yes. Mapped to Overtime_Dum (Overtime dummy) variable (0 = No, 1 = Yes). Dropped in feature engineering process.

Numerical Variables

10. Age	Age of employee.
11. DailyRate	Amount earned each day by employee, in U.S. dollars.
12. DistanceFromHome	Commuting distance for employee, in miles.
13. Education	Education level (1 = Below College, 2 = College, 3 = Bachelor, 4 = Master, 5 = Doctor).
14. EmployeeCount	Number of employees represented in each row. Each and every row has a value of 1. Dropped from the data frame.
15. EmployeeNumber	Employee ID number. Dropped from the data frame.
16. EnvironmentSatisfaction	Satisfaction with work environment (1 = Low, 2 = Medium, 3 = High, 4 = Very High).
17. HourlyRate	Amount earned each hour by employee, in U.S. dollars.
18. JobInvolvement	Level of job involvement (1 = Low, 2 = Medium, 3 = High, 4 = Very High).
19. JobLevel	Job level, which includes levels of 1 (lowest), 2, 3, 4, and 5 (highest).
20. JobSatisfaction	Satisfaction with job (1 = Low, 2 = Medium, 3 = High, 4 = Very High).

21. MonthlyIncome	Amount earned each month by employee, in U.S. dollars.
22. MonthlyRate	Amount earned each month by employee (before taxes and benefits?), in U.S. dollars.
23. NumCompaniesWorked	Number of companies worked previously by employee.
24. PercentSalaryHike	Salary hike, as a percentage.
25. PerformanceRating	Employee performance rating (1 = Low, 2 = Good, 3 = Excellent, 4 = Outstanding).
26. RelationshipSatisfaction	Satisfaction towards relationship with manager (1 = Low, 2 = Medium, 3 = High, 4 = Very High).
27. StandardHours	Standard number of hours. Each and every row has a value of 80. Dropped from the data frame.
28. StockOptionLevel	Stock option level, which includes levels of 0 (lowest), 1, 2, and 3 (highest).
29. TotalWorkingYears	Total number of years worked by employee.
30. TrainingTimesLastYear	Number of times employee was trained last year.
31. WorkLifeBalance	Work-life balance rating by employee (1 = Bad, 2 = Good, 3 = Better, 4 = Best).
32. YearsAtCompany	Total number of years employee remained at company.
33. YearsInCurrentRole	Total number of years employee remained in current job.
34. YearsSinceLastPromotion	Number of years since employee was last promoted.
35. YearsWithCurrManager	Number of years employee worked for current manager.