# **C:\Users\Admin\Downloads\BR1005_500.pngPredicting Employee Attrition**

Uncover the factors that cause employees to leave the organization and explore important questions such as ‘compare average monthly income by education and attrition’ or ‘is distance from home a case for attrition’?

Build classification models to predict which employee is likely to churn and help the business to devise policies and attract back the right talent.

**Evaluation**

Evaluation will be based on:

• Feature Selection (10%)

• Feature Engineering (25%)

• Model Comparison (30%)

• Model Selection (20%)

• Presentation (15%)

**Feature Selection**

Select the right features based on importance and significance.

**Feature Engineering**

Apply feature engineering techniques to see how new features can be created to improve the model. Check for Interaction.

**Model Comparison**

Apply multiple classification algorithms and compare results.

**Model Selection**

Select the best model. Model selection to be based on Accuracy, Sensitivity & Specificity and Kappa value.

**Employee Attrition Prediction**

Log into Kaggle and download the dataset for IBM HR Analytics Employee Attrition & Performance

Data contains differnet attributes of an employee and the target variable *Atrition*. *EmployeeNumber* is the primary key. We use this dataset to predict employee churn.

Data definitions for categorical variables:

Education 1 'Below College' 2 'College' 3 'Bachelor' 4 'Master' 5 'Doctor'

EnvironmentSatisfaction 1 'Low' 2 'Medium' 3 'High' 4 'Very High'

JobInvolvement 1 'Low' 2 'Medium' 3 'High' 4 'Very High'

JobSatisfaction 1 'Low' 2 'Medium' 3 'High' 4 'Very High'

PerformanceRating 1 'Low' 2 'Good' 3 'Excellent' 4 'Outstanding'

RelationshipSatisfaction 1 'Low' 2 'Medium' 3 'High' 4 'Very High'

WorkLifeBalance 1 'Bad' 2 'Good' 3 'Better' 4 'Best'