

## IBM HR Analytics Employee Attrition & Performance

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This is a fictional data set created by IBM data scientists. Uncover the factors that lead to employee attrition and predict attrition of your valuable employees.

So what is Attrition and what determines it?

**Attrition:** It is basically the turnover rate of employees inside an organization. In the realm of human resources, attrition is defined as both the voluntary and involuntary reduction of a company's workforce through deaths, employee retirements, transfers, resignations and terminations.

**This can happen for many reasons:**

- Employees looking for better opportunities.
- A negative working environment.
- Bad management
- Sickness of an employee (or even death)
- Excessive working hours

Employees are the backbone of the organization. Organization's performance is heavily based on the quality of the employees. Challenges that an organization has to face due employee attrition are:

- Expensive in terms of both money and time to train new employees.
- Loss of experienced employees
- Impact in productivity
- Impact profit

This dataset contains: 1470 observations (rows) and 35 features (variables). Variable "Attrition" is the label in our dataset and we would like to build a Machine Learning Model to predict the attrition of employee i.e., employee leaving the organization!

**HINT:**

Major challenges in this project would be the diversity of data and highly imbalanced label.