# Attrition: - Company losing its customer base

**Attrition is a process in which the workforce dwindles at a company, following a period in which several people retire or resign, and are not replaced.**

* A reduction in staff due to attrition is often called a hiring freeze and is seen as a less disruptive way to trim the workforce and reduce payroll than layoffs.
* In this Notebook, we will aim to analyze the datasets completely with each feature and find the reason behind the Attrition of Employees.
* And what are the top factors which lead to employee attrition?
* *Description of the dataset: -*
  + Employee ID: Employee number is a unique number that has been assigned to each current and former State employee and elected official in the Position and Personnel DataBase(PPDB)
  + Age: A period of employee life, measured by years from birth.
* Attrition: The departure of employees from the organization.
* Business Travel: Did the employee travel on a business trip or not?
* Department: In which department is the Employee working?
* Distance from Home: How far the Employee lives from the office location.
* Education:
* 1: “Below College”,
* 2: “College”,
* 3: “Bachelor”,
* 4: “Master”,
* 5: “Doctor”
* Education Field: In which field Employee complete his education?
* Employee Count: How many employees work in a department.
* Job Level: Also known as job grades and classifications, set the responsibilities level and expectations of roles at your organization. They may be further defined by impact, seniority, knowledge, skills, or job title, and are often associated with a pay band. The way you structure your job levels should be dictated by the needs of your unique organization and teams.
* Job Role: what is the job role of the employee
* Marital Status: Marital status of the employee.
* Monthly Income: employees’ monthly salary
* Num Companies Worked: till now how many companies has been employee worked?
* Over18
* Percent Salary hike: what is the hike % ratio of salary?
* Standard Hours: The number of hours of production time that should have been used during a working period.
* Stock Option Level: Also known as ESOs, stock options in the company’s stock granted by an employer to certain employees. Typically, they are granted to those in management or officer-level positions. Stock options give the employee the right to buy a certain amount of stock at a specific price, during a specific time. Options typically have expiration dates as well, by which the options must have been exercised, otherwise they will become worthless.
* Total Working Years: Total years employee working in any organization.
* Training Times Last year: Last year how many times employees took training sessions
* Years at Company: How many years has the employee working in the current organization?
* Years Since Last Promotion: How many years has the employee working in the current position after promotion?
* Years With Curr Manager: How many years has the employee working under the current manager
* Environment Satisfaction:
  + 1: “Low”
  + 2: “Medium”
  + 3: “High”
  + 4: “Very High”
* Job Satisfaction: Employee job satisfaction rate where…
  + 1: “Low”
  + 2: “Medium”
  + 3: “High”
  + 4: “Very High”
* Work-Life Balance:
  + 1: “Bad”
  + 2: “Good”
  + 3: “Better”
  + 4: “Best”
* Job Involvement: This is the degree to which an employee identifies with their work and actively participates in it where…
  + 1: “Low”
  + 2: “Medium”
  + 3: “High”
  + 4: Veery High”
* Performance Rating:
  + 1: “Low”
  + 2: “Good”
  + 3: “Excellent”
  + 4: Outstanding”