

# DECISION TREES

## CASE

### ACTIVE LEARNING

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## PREDICTING EMPLOYEE ATTRITION

### BACKGROUND

#### Business Problem

How HR can help to prevent loss of good people to organization?

The key to success in any organization is attracting and retaining top talent.

Employee churn can be defined as a leak or departure of an intellectual asset from a company or organization. Alternatively, in simple words, you can say, when employees leave the organization is known as churn. Another definition can be when a member of a population leaves a population, is known as churn.

In Research, it was found that employee churn will be affected by age, tenure, pay, job satisfaction, salary, working conditions, growth potential and employee's perceptions of fairness. Some other variables such as age, gender, ethnicity, education, and marital status, were essential factors in the prediction of employee churn. In some cases such as the employee with niche skills are harder to replace.

It affects the ongoing work and productivity of existing employees.

Acquiring new employees as a replacement has its costs such as hiring costs and training costs. Also, the new employee will take time to learn

skills at the similar level of technical or business expertise knowledge of an older employee. Organizations tackle this problem by applying machine learning techniques to predict employee churn, which helps them in taking necessary actions.

You are an HR analyst at GoodHire company, and one of my tasks is to determine which factors keep employees at my company and which prompt others to leave.

You need to know what factors I can change to prevent the loss of good people.

What data we have?

Data has various data points on our employees, but you are most interested in whether they're still with my company or whether they've gone to work somewhere else.

And you want to understand how this relates to workforce attrition.

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

Environment Satisfaction: 1 'Low' , 2 'Medium' , 3 'High' , 4 'Very High'

Job Involvement: 1 'Low' , 2 'Medium' , 3 'High' , 4 'Very High'

Job Satisfaction: 1 'Low' , 2 'Medium' , 3 'High' , 4 'Very High'

Performance Rating: 1 'Low' , 2 'Good' , 3 'Excellent' , 4 'Outstanding'

Relationship Satisfaction: 1 'Low' , 2 'Medium' , 3 'High' , 4 'Very High'

Work Life Balance: 1 'Bad' , 2 'Good' , 3 'Better' , 4 'Best'