

IBM Watson Analytics

Factors Affecting Employee Attrition Rate

By

Archit Jajoo



CALIFORNIA STATE UNIVERSITY
FULLERTON

MIHAYLO COLLEGE
OF BUSINESS AND ECONOMICS

1): PREDICTIVE MODEL FOR ATTRITION

Some factors that lead to attrition:

- Years with Current Manager
- Job Satisfaction
- Marital Status
- Age
- Companies worked for before



What is a predictive model for Attrition ✎ ? (Predictive strength: 86%)

Decision Rules Tree



Decision rules show that Age and 9 other inputs predict Attrition.

Target Category	Rules	Records
No	OverTime = No YearsAtCompany > 2 StockOptionLevel > 0 RelationshipSatisfaction > 3 MonthlyIncome <= 5,744 less...	73
No	OverTime = No YearsAtCompany > 2 StockOptionLevel > 0 RelationshipSatisfaction <= 3 less...	355
No	OverTime = Yes JobLevel > 1 MaritalStatus = Divorced; Married EnvironmentSatisfaction > 2 less...	128
No	OverTime = No YearsAtCompany <= 2 Age > 34 less...	109
No	OverTime = No YearsAtCompany > 2 StockOptionLevel <= 0 JobSatisfaction > 2 less...	198





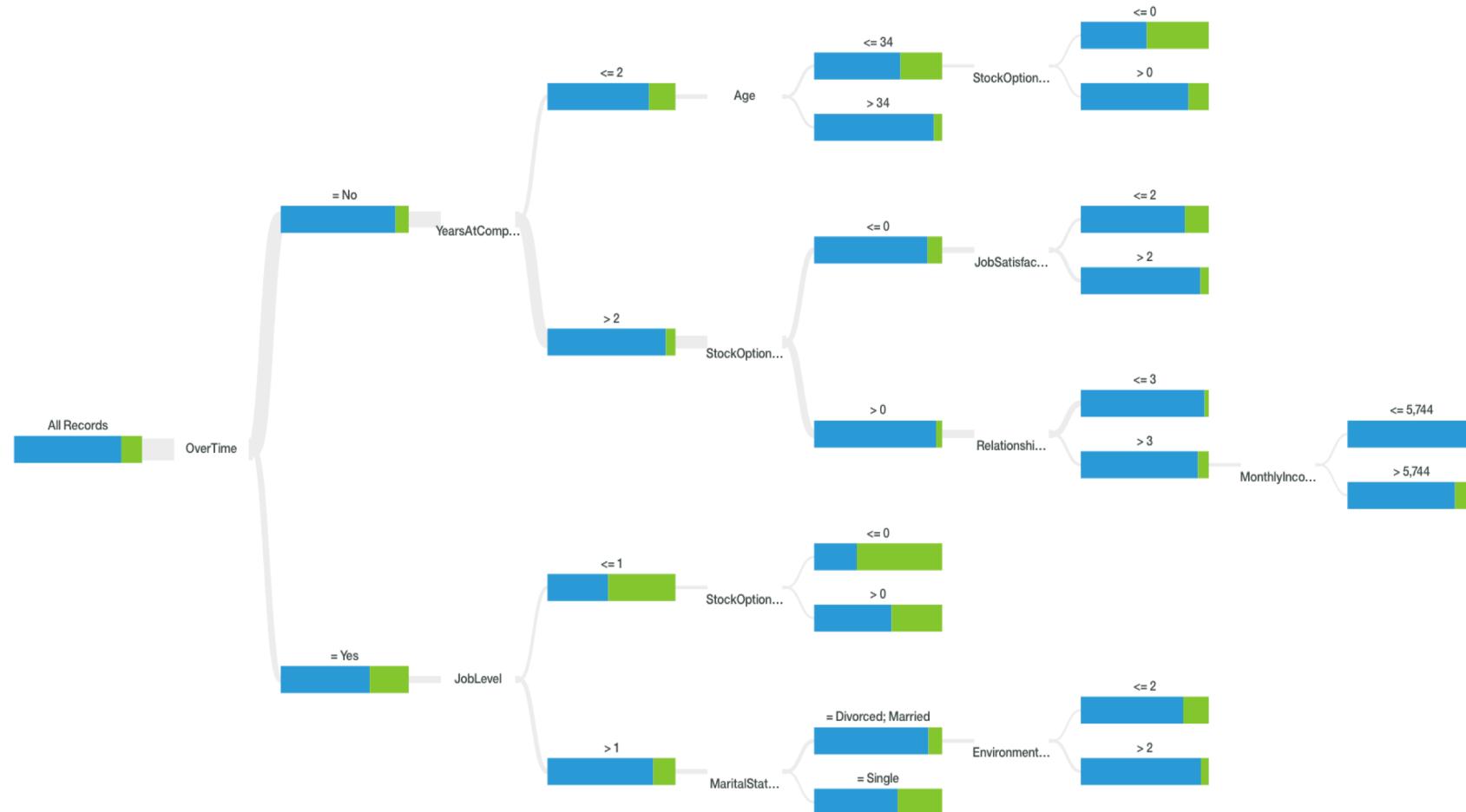
What is a predictive model for Attrition ✕ ? (Predictive strength: 86%)



What is a predictive model for Attrition ? (Predictive strength: 86%)

Decision Rules Tree

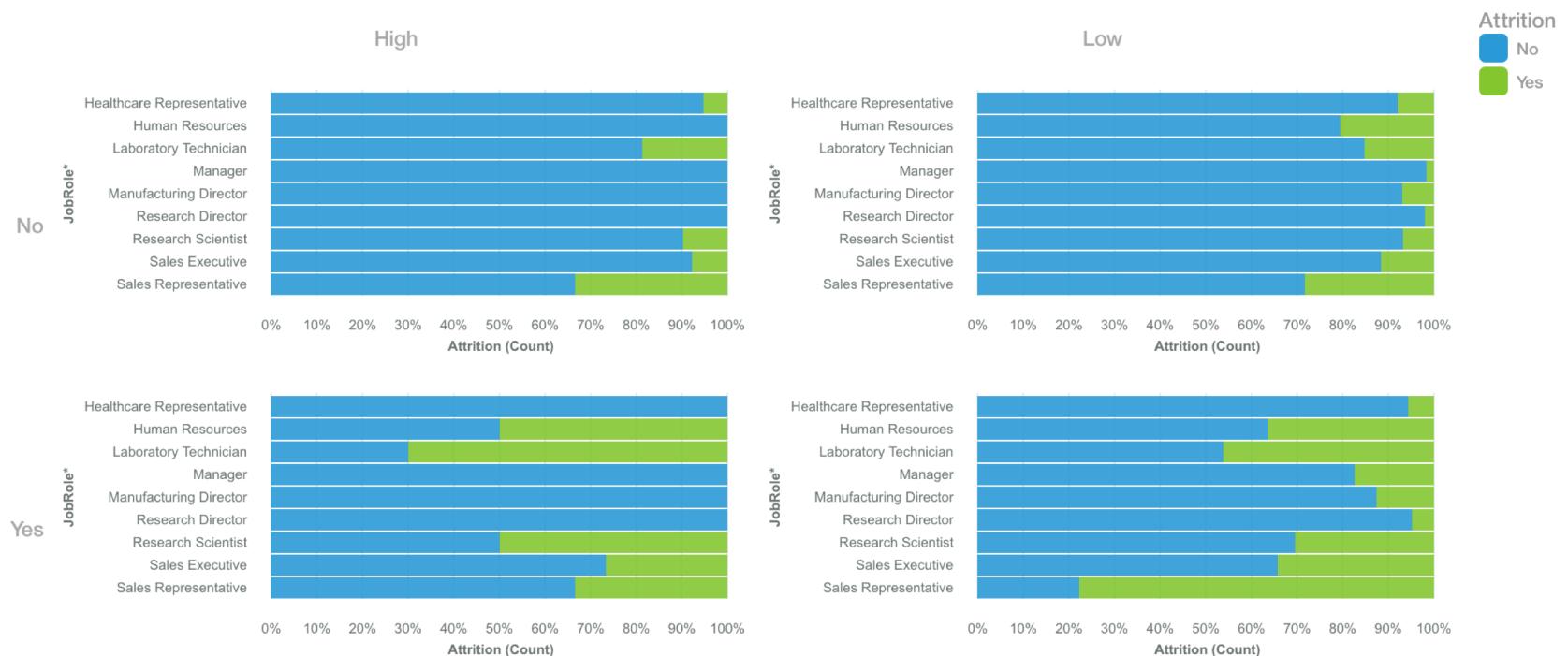
Decision rules show that Age and 9 other inputs predict Attrition.



2.) EFFECT OF JOB PERFORMANCE

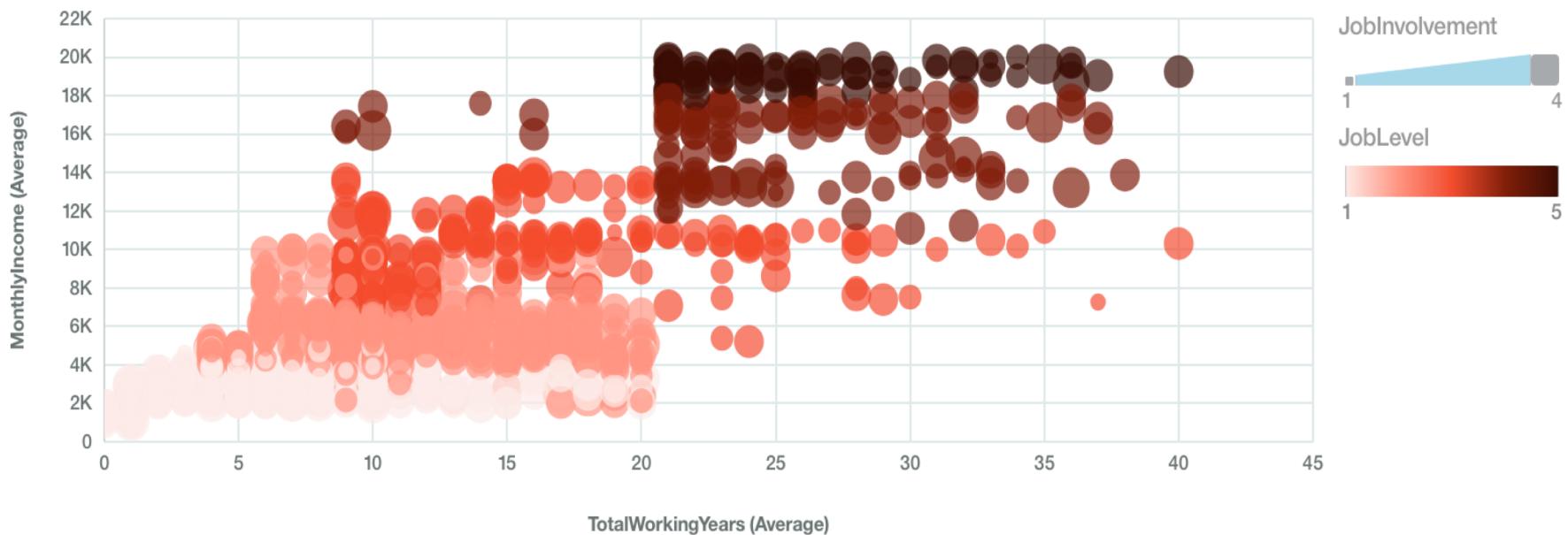
How does the number of Attrition compare by JobRole* and Attrition ?

Filtered by OverTime: No, Yes and PerformanceRating: High, Low



3.) HIGH-VALUE EMPLOYEES

- Job levels run parallel with monthly income
- Work experience < 20 years - between \$1000 and \$12000.
- Work experience > 20 years - \$12,000



THANK YOU!

