

Retention Analytics for Human Capital Management

Introduction

Retaining high performance employees with critical skills is an increasingly serious issue in many business sectors. It is well documented that there are significant costs in replacing employees, the cost of turnover ratio can range as high as 80% of the employees yearly salary. As an example, if the average salary of employees in a company is \$50,000 per year the average cost of turnover can range up to \$40,000. Enormous savings can be gained by reducing the company wide rate of turnovers even a few percentage points.

WizData Systems, a leader in Business Intelligence and Operations Research consulting has implemented predictive modeling techniques to gauge the likelihood of an employee voluntarily terminating that will ultimately help the company to improve the retention of critical employees.

Data Mining

As with all operations research undertakings the first step is gaining insight into the individual organization and its respective industry. Mining and studying historical data is the primary method used to obtain this insight. The majority of the data used to build this predictive model will come from the companies preexisting HR management system, however in certain situations it may also be necessary to compile external data for an even more in depth prediction.

Examples of the data we will use from the companies HR management system include:

- Job title
- Skill Set
- Experience
- Key Performance Indicators
- Compensation and Benefits
- Job History

Some examples of external data that might be used include:

- Economic Conditions
- Job market Conditions
- Industry Wages
- Geographic Wages



The Model

Using the collected data, WizData will implement our statistical model that quantifies the relationship of each data field to the probability of retention, leading to the ability to score and measure the probability that an employee will voluntarily terminate over a given period of time. Since the quantified indicators will vary over time so will the individual staff members retention score, in turn our comprehensive monitoring system will provide a constantly up to date gauge of the company's risk. The risk analysis will reflect the ever changing staff, company, and industry trends. These analysis reports can be integrated into the company's existing dashboard to provide a clear and concise picture of the current risk scoring.

Applying Business Intelligence

Knowing the likelihood of each staff member's willingness to voluntarily terminate their employment will become the foundation of a successful employee retention program. Combining this knowledge with important strategic questions such as are the high risk individuals in critical roles, do they have skills that are difficult to replace, and are there specific areas of the company that are an above or below average risk will lead to better human resource management and less risk of losing critical talent.

About WizData Systems

WizData Systems, Inc. is a New Jersey-based analytics and Business Intelligence consulting firm. Founded in 1998, the company offers years of experience in data collection and mining. WizData Systems leverages a unique scientific approach to provide clients with robust, cuttingedge custom solutions for data extraction, statistical data analysis, risk calculation, automated scheduling, business modeling, simulation of complex environments, and more. Our staff is enthusiastic, motivated, and we maintain extensive ties to the academic community.

WizData Systems employs dedicated and highly-experienced consulting and development teams with strong professional backgrounds and advanced degrees in computer science, mathematics, business management, economics, and statistics. Our consultants are able to leverage each other's expertise to better solve complex problems and provide our clients with the highest quality services