

Dat2 Final Project

Part 1: Lightning Talk

Zane Harris
March 2016

Flight Risk

Problem

Current efforts to decrease voluntary attrition are highly influenced by human bias and could be better informed by data. Managers across the company are not informed on potential flight risk and therefore cannot be proactive in retaining top performers. Ideally, a flight risk probability assigned to existing employees would be implemented for FY17, using 36 months of historical data and will help managers decide how to optimally utilize their limited resources so that top performers are more likely to stay and underperformers experience their natural attrition.

Hypothesis

Employees will be more likely to voluntarily maintain employment when they receive incremental salary increases, receive rewards/recognition, and have promotional and lateral movement opportunities. Additionally, there will be a limit to the effects of (and possibly negative relationship to) rewards/recognition and movement opportunities when they are not accompanied by significant pay increases within certain amounts of time.

Data

Lateral Movement
Promotions
Rewards / Recognition
Compensation data
Function / role
Grade Level
Education Level
Age, gender, diversity
Training / Learning & Develop.
Performance (Sales only)
Geolocation
NPS (Proxy Engagement Score)
Disciplinary actions
Hierarchical
Tenure

Predictive Talent Sourcing

Problem

As a company we would like improve our advertising spend in FY17 by allocating more/less budget to specific sources that attract candidates. We would also like to target specific individuals using these sources in a way that optimizes quality of hire. However, to do this we need to define what a current high quality hire employee looks like today, presenting it's own challenge as we no longer use a forced distribution performance system.

Hypothesis

High performing individuals will have statistically significant differences from low performing individuals in their source of hire, highest level of education, and previous experience. Specifically, higher educated individual who are sourced by employee referral will display a higher QOH.

* Quality of Hire (QOH) will need to be defined. Receipt of rewards / recognition, tenure, time to proficiency (ROI calculation), performance improvement plan status, and attainment % (for sales employees) will be used holistically to create a target variable (outcome).

Data

- Sales Attainment % (average annualized, previous cycle)
- Performance improvement plan data (disciplinary)
- Dell Champion Award (reward and recognition for top 20%)
- Time to proficiency by role (ROI)
- Employee demographics
- Resume data including education and experience*
- Source of hire

*Data quality issues

Leadership Principle Impact Study



Problem

Our company's leadership and cultural principles define our approach to management, but have not been tested against important factors like attrition and performance to verify their significance.

Hypothesis

Leaders who do significantly well on the inspiring leader portion of our annual employee engagement survey are less likely to have high attrition and more likely to have high performing employees than their counterparts.

Data

- Historical attrition / tenure
- Performance / Attain.
- Disciplinary
- Annual employee engagement scores
- YOY changes and org wide ranges for engagement scores
- Recognition: bonus, performance, awards, DCA
- Any available performance ratings up to FY13