

# Rules of Attrition

Examining what drives employees to leave jobs  
and what encourages them to stay

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# Attrition in America

27% of employees voluntarily left a position in 2018.

Replacement cost: 50-250% of an employee's annual salary





## Human Resources Data

~1500 entries, 35 features

- HR info (level, pay, performance, years at IBM)
- Personal (age, gender, distance from work)
- Categorical (job title, dept, work travel frequency)

# \$15,700,000

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Estimated cost of attrition

# General Findings

Turnover ~16%

Standard tendency toward more turnover in entry level jobs



A top-down view of a person's hand typing on a laptop keyboard. The hand is wearing a black watch and a ring. To the left of the laptop is a spiral-bound calendar for September 2015, with a black pen resting on it. A pair of white headphones is plugged into the laptop. The entire scene is framed within a white, rounded triangular shape on a black background.

# Model conclusions

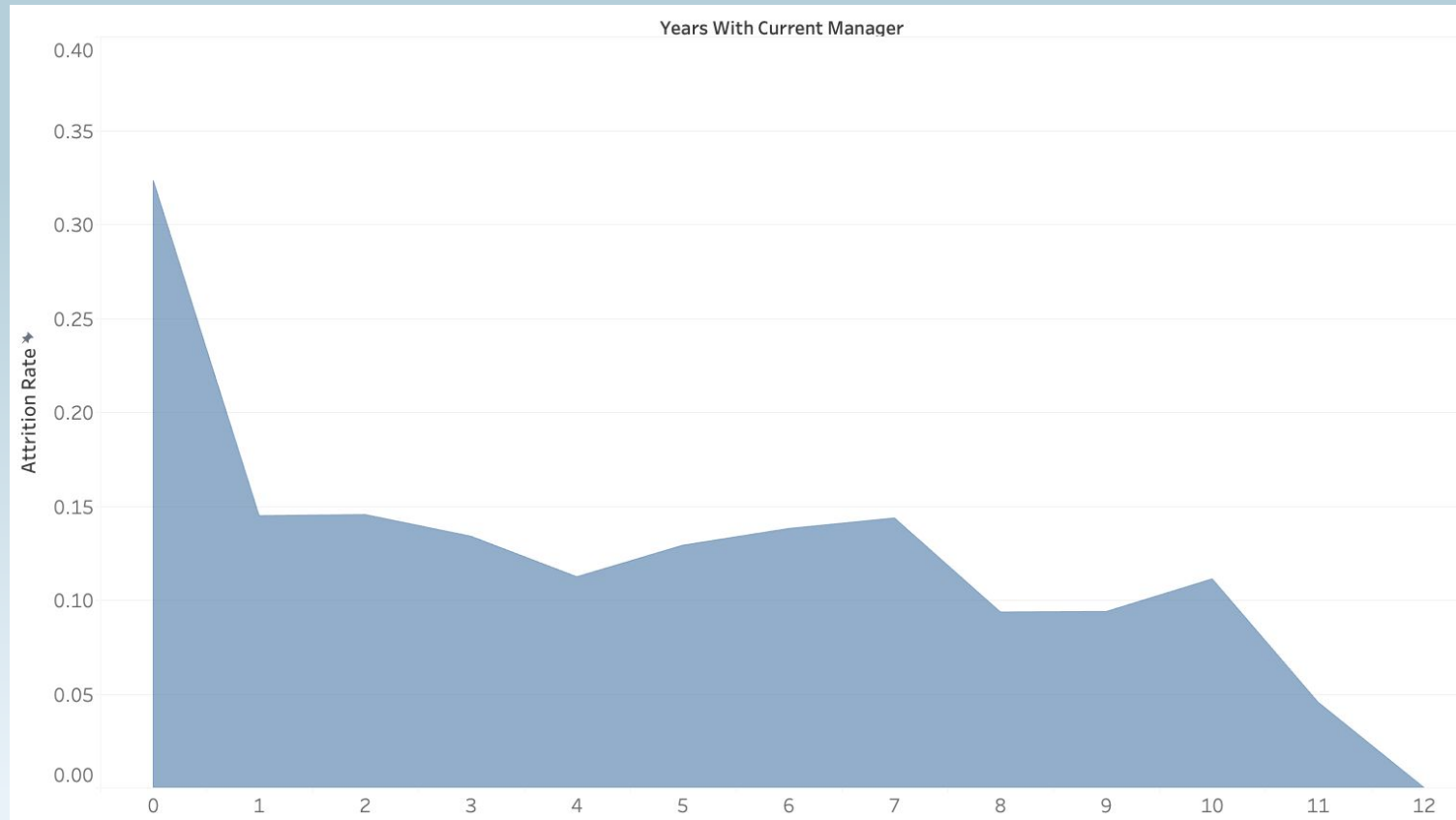
## Logistic Regression Model

### Strongest Features for Attrition:

- Overtime
- Years at Company
- Business Travel Frequency

### Strongest Features for Retention:

- Years in Current Role
- Years with Current Manager



Attrition Rate vs Years with Current Manager



# Level 3 Employees

- Unexpected tendency to attrit  
68% more likely than lvls 2, 4, 5
- 5th of 5 for Environment  
Satisfaction and Job Satisfaction
- 4th of 5 for Job Engagement
- 13.5% of total attrition (32 of 237)
- 34.3% of total attrition cost  
\$5.4M of \$15.7M





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No great manager or leader ever fell from heaven.  
It is learned, not inherited.

Tom Northup



# thank you

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questions?