



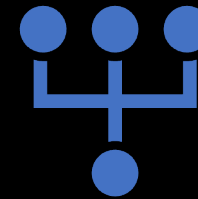
IBM Employee Attrition

By: Konnor Clark

Overview and Business Understanding

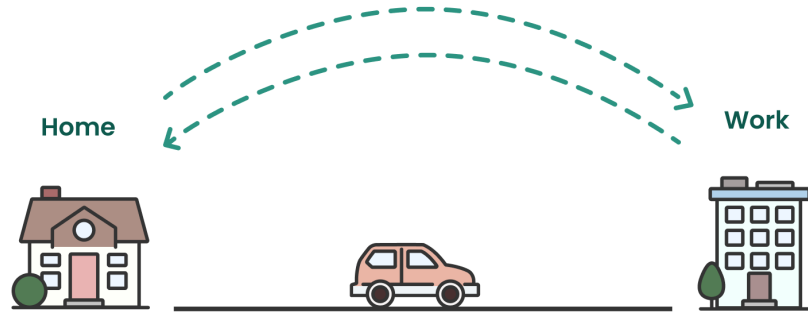


IBM AND ITS HR
DEPARTMENT SHARES
CHARACTERISTICS AND
**ATTRITION DATA OF
EMPLOYEES**



IBM WOULD LIKE TO
UNDERSTAND THE
RELATIONSHIP BETWEEN THESE
FEATURES AND **EMPLOYEE
ATTRITION.**

Distance from Home



Number of Companies Worked



Business Questions

- What features **increase** an employee's likelihood to leave IBM the most?

Business Questions

- What features **reduce** an employee's likelihood to leave IBM the most?

Job **Level**



Total **Working Years**

Years in **Current Role**

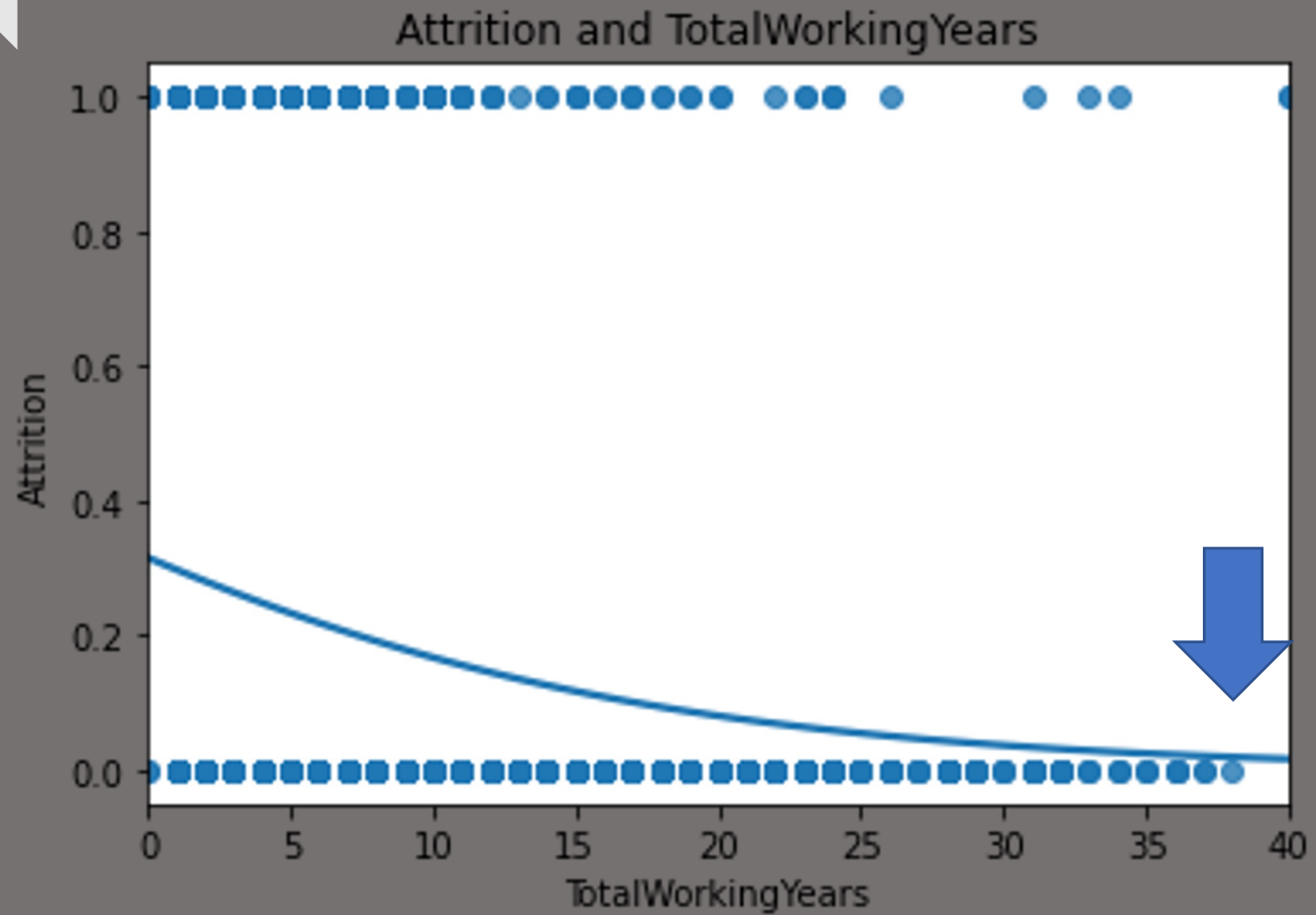


Data Understanding and Analysis

- Of the 35 total features, 5 of the most relevant:

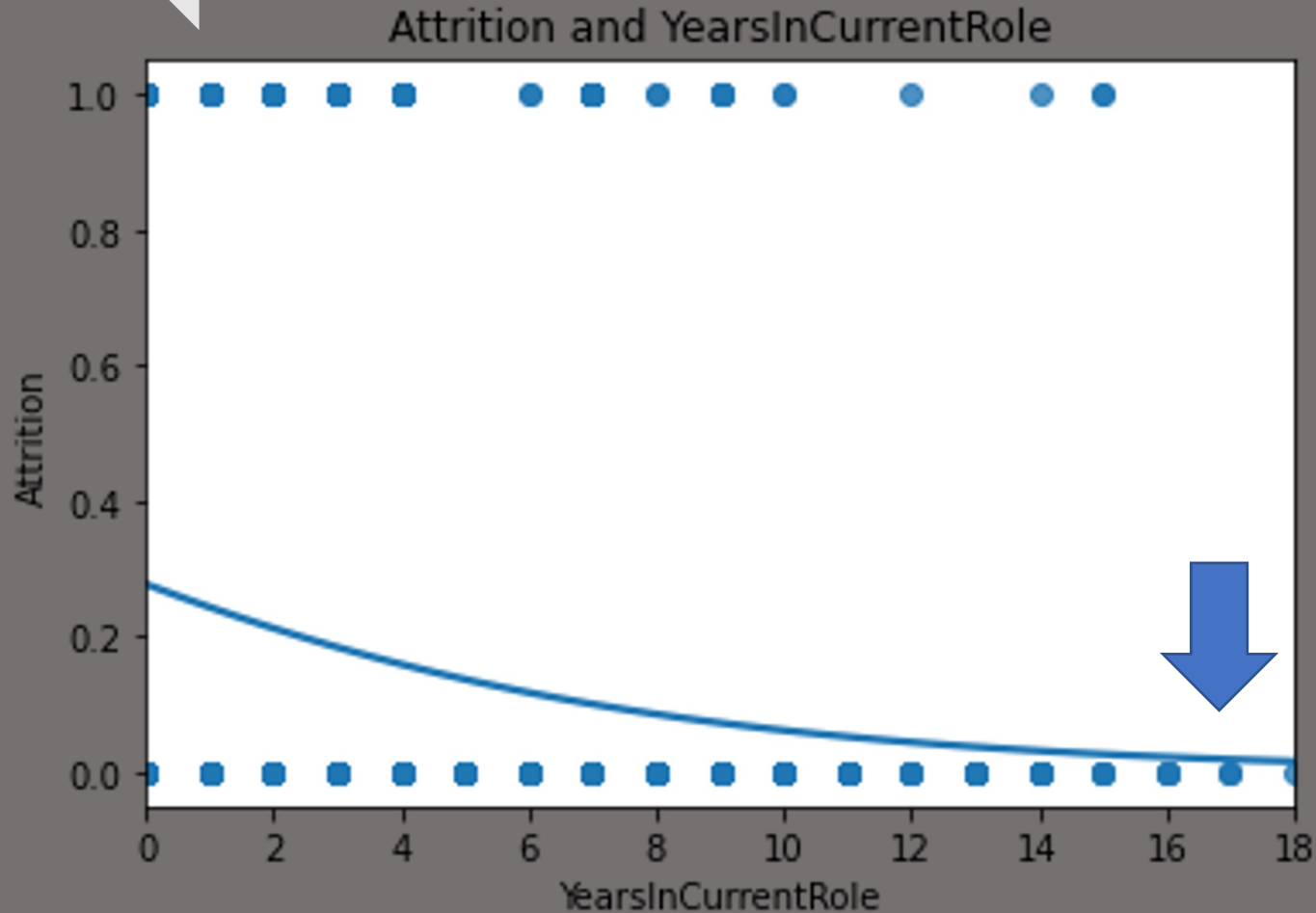
- **Total Working Years**
- **Years in Current Role**
- **Job Level**
- **Number of Companies Worked**
- **Distance from Home**

Data Understanding and Analysis



- Line shows:
 - **Increase** in Total Working Years
 - **Decrease** in Attrition

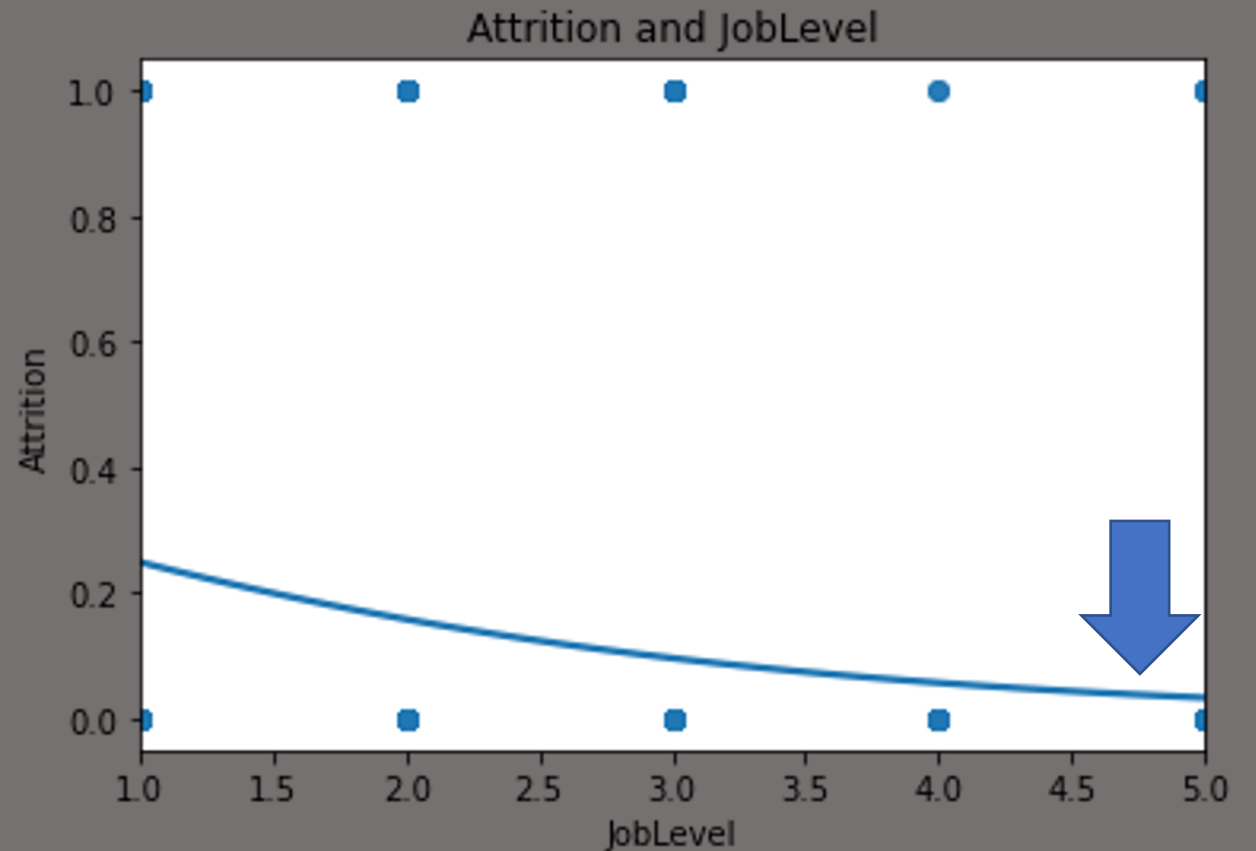
Data Understanding and Analysis



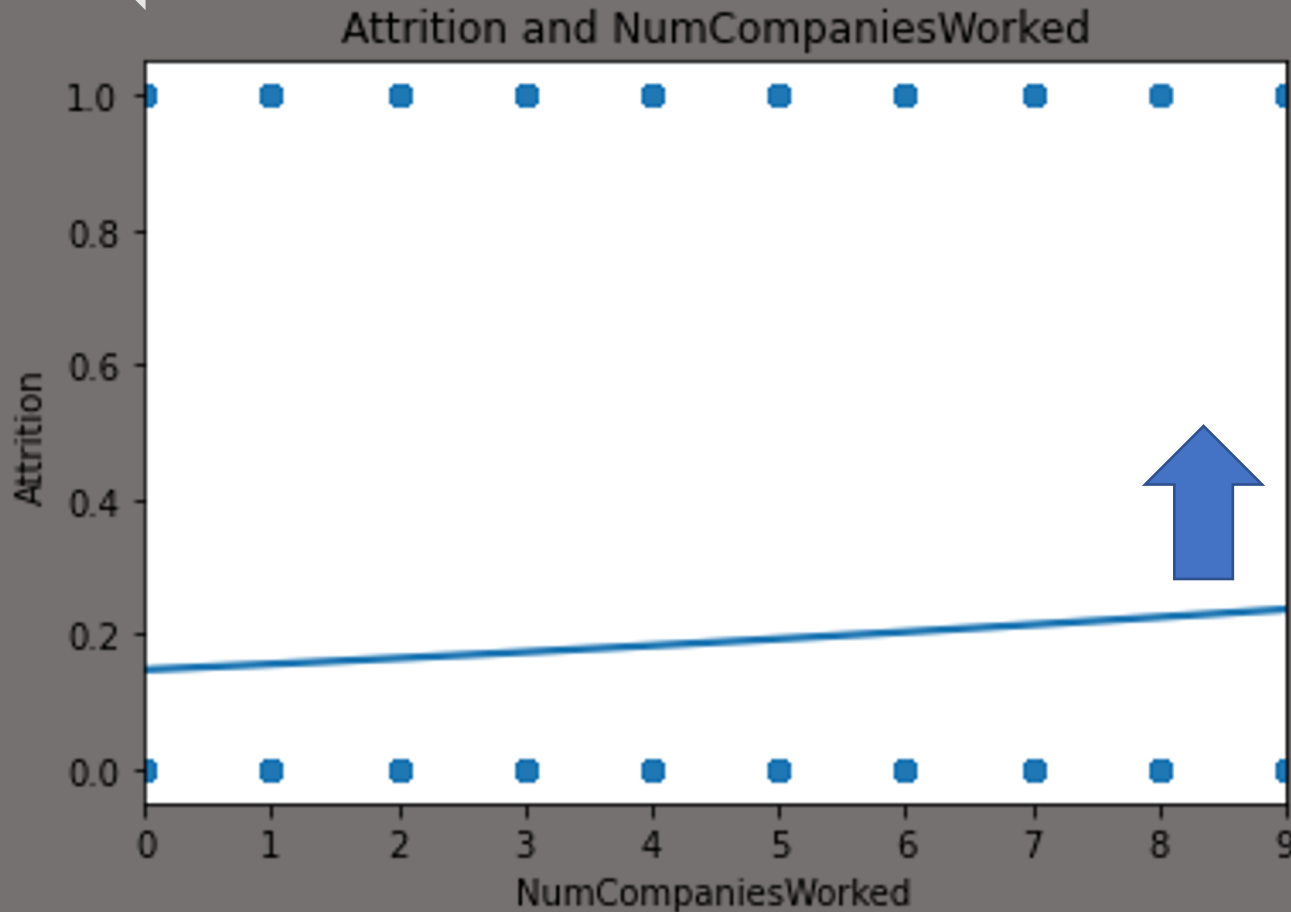
- Line shows:
 - **Increase** in Years in Current Role
 - **Decrease** in Attrition

Data Understanding and Analysis

- Line shows:
 - **Increase** Job Level
 - **Decrease** in Attrition



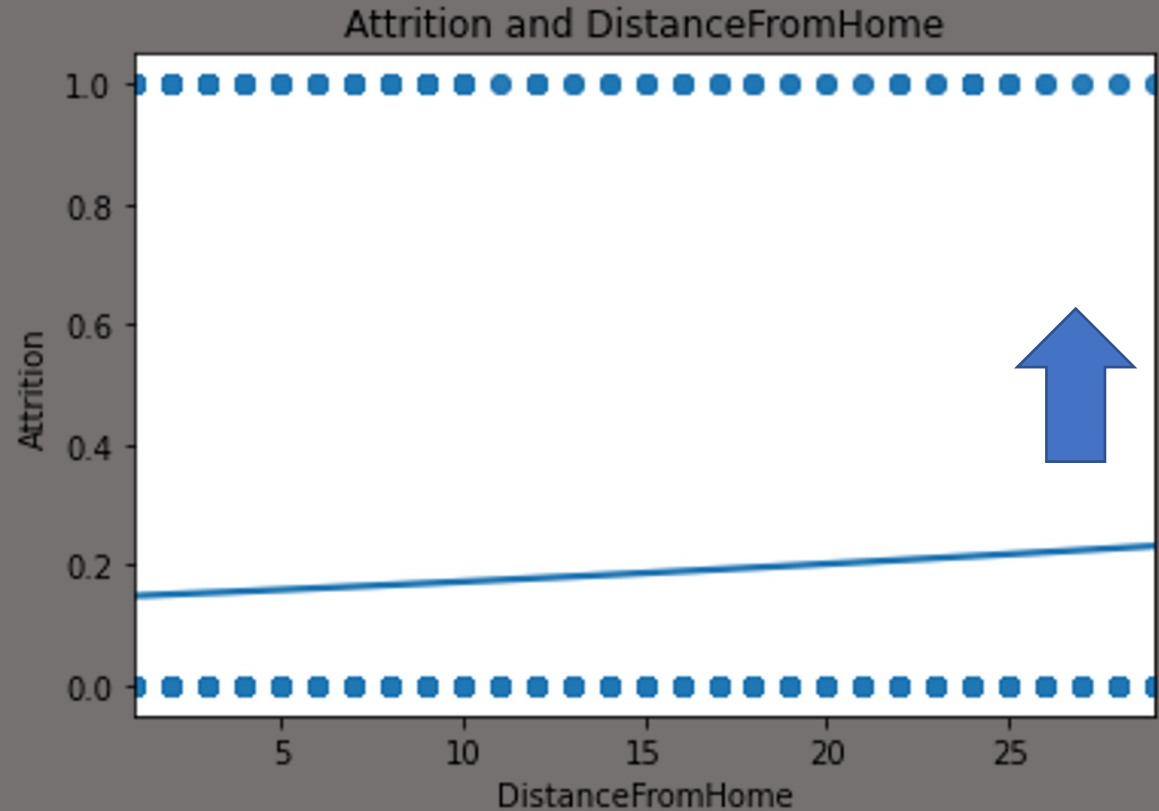
Data Understanding and Analysis



- Line shows:
 - **Increase** in Years in Number of Companies Worked
 - **Increase** in Attrition

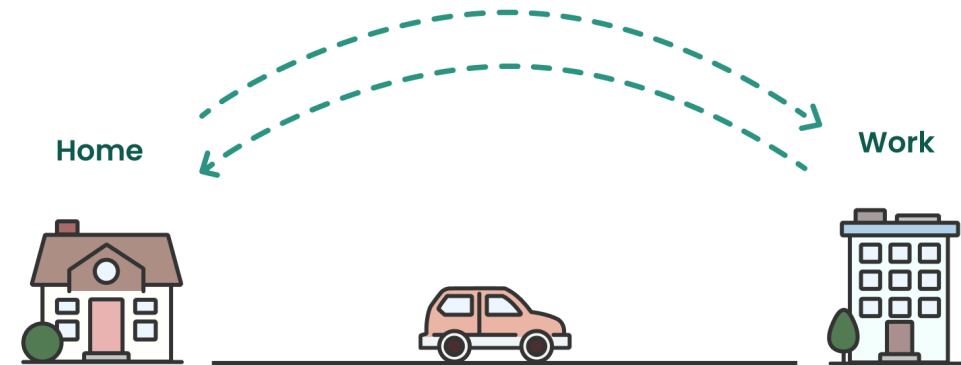
Data Understanding and Analysis

- Line shows:
 - **Increase** Distance from Home
 - **Increase** in Attrition



Recommendations

- **Incentivize** employees who have worked a high number of companies to **stay at IBM**.
- **Incentivize** employees to **move closer** to their place of work, perhaps through **relocation packages**.



Recommendations

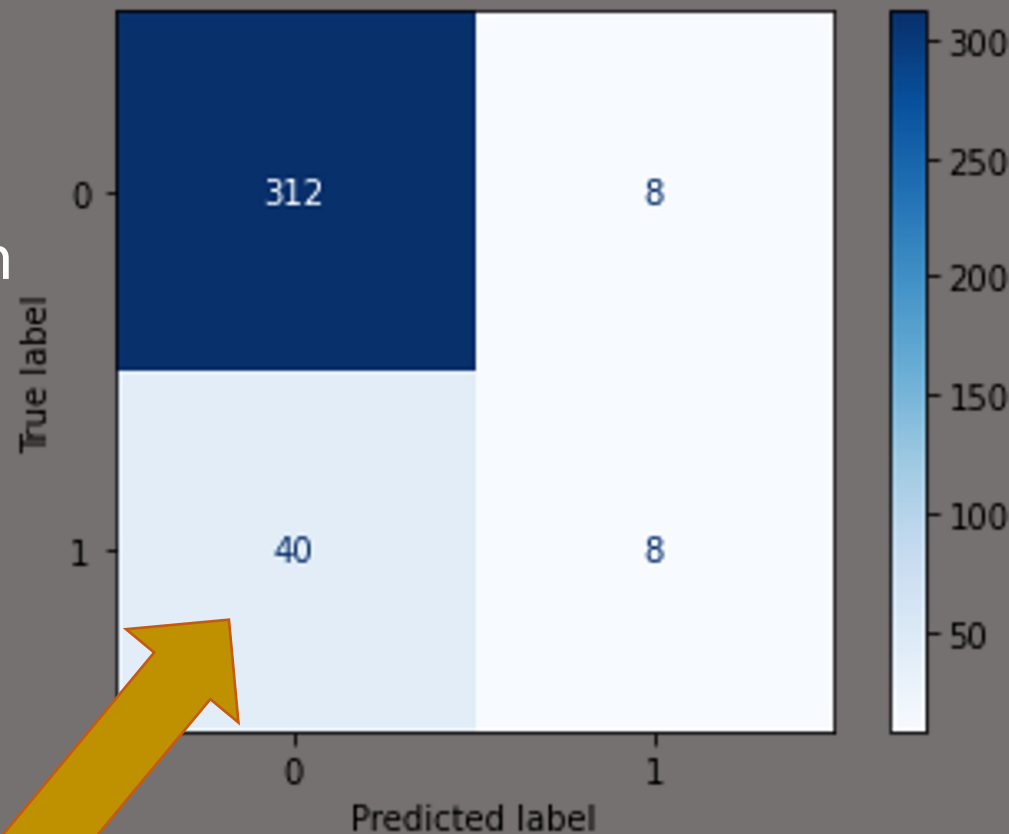
- Incentivize **longevity** with the company, perhaps through **stock** or other **perk** options
- Maintain pathways of **upward mobility** for employees.



Model Accuracy

Predicted: No
Attrition
Actual: No attrition
(True Negative)

Predicted: No
Attrition
Actual: Attrition
(False Negative)



Predicted: Attrition
Actual: No attrition
(False Positive)

Predicted: Attrition
Actual: Attrition
(True Positive)

Next Steps

- Features overall did not show high correlation with attrition.
- Looking at different data and asking different questions in IBM's surveys may produce more fruitful results.

Thank you

- I would be happy to answer any questions
- You may find my contact information below:
- <https://www.linkedin.com/in/konnorclark/>