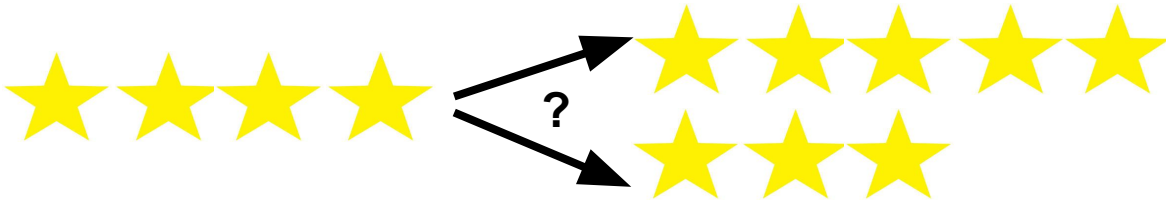
Insights Into Employee Reviews

Beneficiaries of this study: Employers

Adding staff?

Going public?

Canning the CEO?



Beneficiaries of this study: Potential Employees

Companies Used for Model:

Seattle Organizations Hiring Data Analytics Professionals

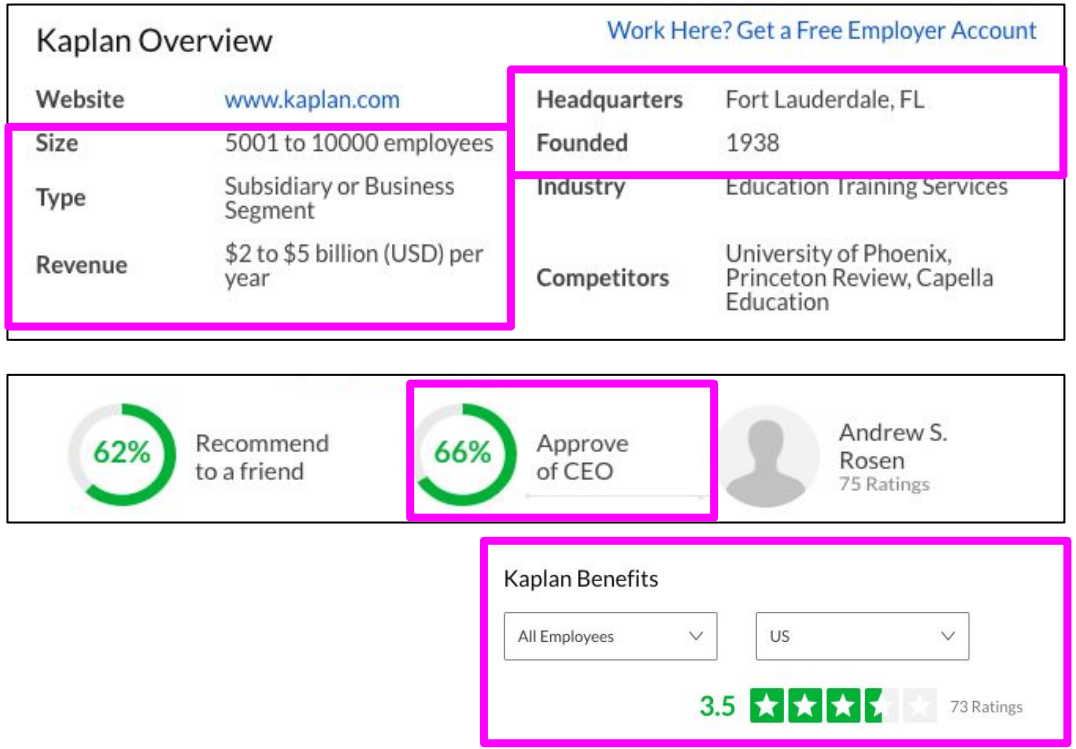
Industry Examples:

Education & Schools

Internet & Tech

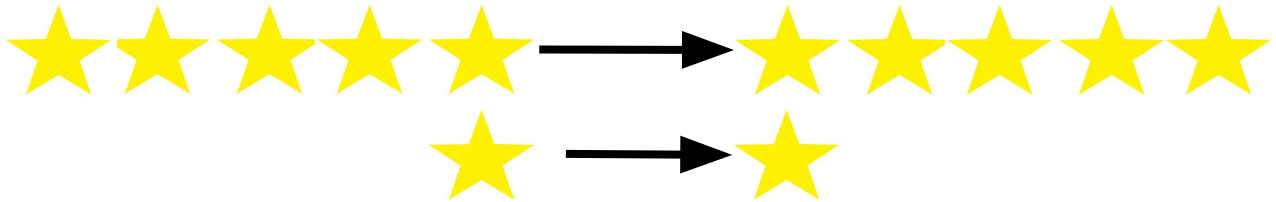
Health Care & Hospitals

Information Used for Model:



Top Contributor to Company Reviews: CEO

CEO **Company**



Other Top Contributors to Company Reviews: Year Founded and Company Benefits

Founded 1916

BOEING

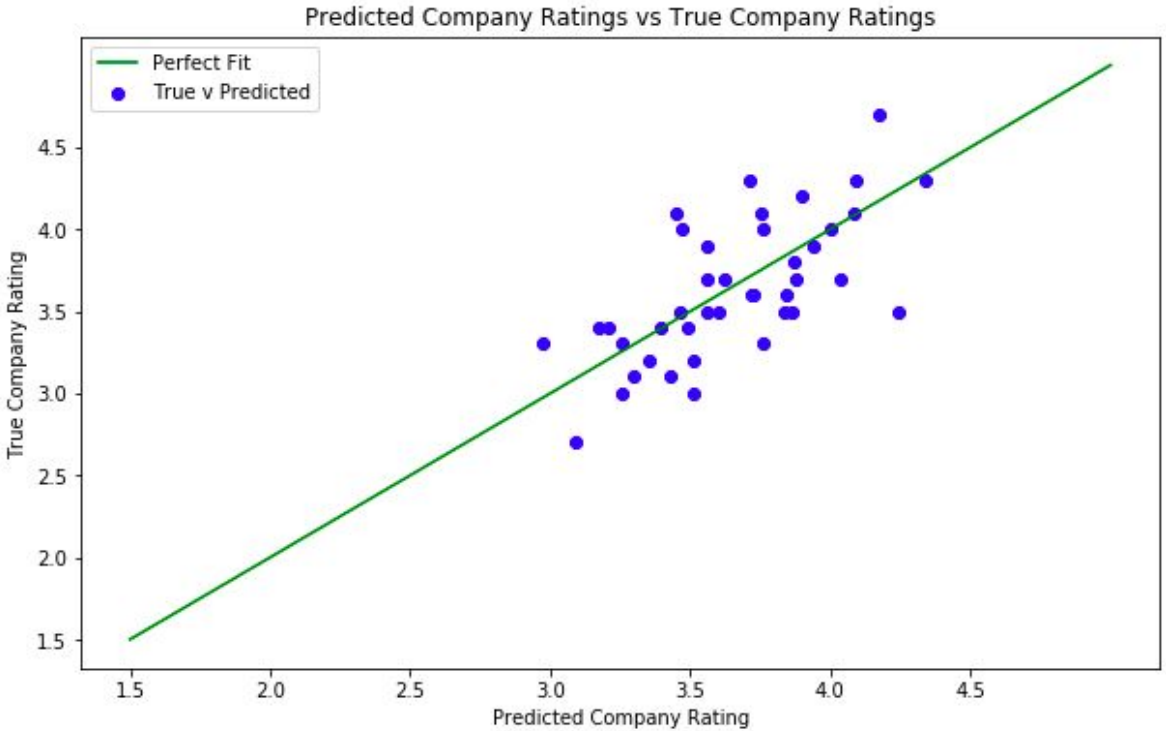
Founded 2005

Zillow®

Year Founded	Company
Recently	★★★★★
Old	★

Benefits Rating	Company
★★★★★	★★★★★
★	★

Model accounts for 18% of Variation in Company Ratings



On average, the model is 0.25 stars from the true rating

Example of Model Prediction:

Model Prediction:

CEO Rating: 66%
Benefits Rating: 3.5 Stars
Year Founded: 1938

Prediction: 3.3 Stars
Baseline Prediction: 3.8 Stars
(simple average of ratings)

Summary

Good Review Factors According to Model:

- Good CEO
- Good Benefits
- Newer Companies

Appendix

```
y=df_mvp['Reviews_clean']
Xf=df_mvp[['Benefit_Rating_clean', 'Founded_clean', 'CEO_Reviews_clean']]

# # Split the data into training and test sets
Xf_train, Xf_test, yf_train, yf_test = train_test_split(Xf, y, test_size=0.3,random_state = 5)
Xf_train
```

```
lassof.fit(Xf_train, yf_train)
lassof.score(Xf_test,yf_test)

print(lassof.score(Xf_test, yf_test))

```

```
0.4536729687730386
```

```
1-((1-.45*.45)*(134)/(131))
```

```
0.18423664122137406
```

```
mean_absolute_error(y_test, lassol.predict(X_test))
```

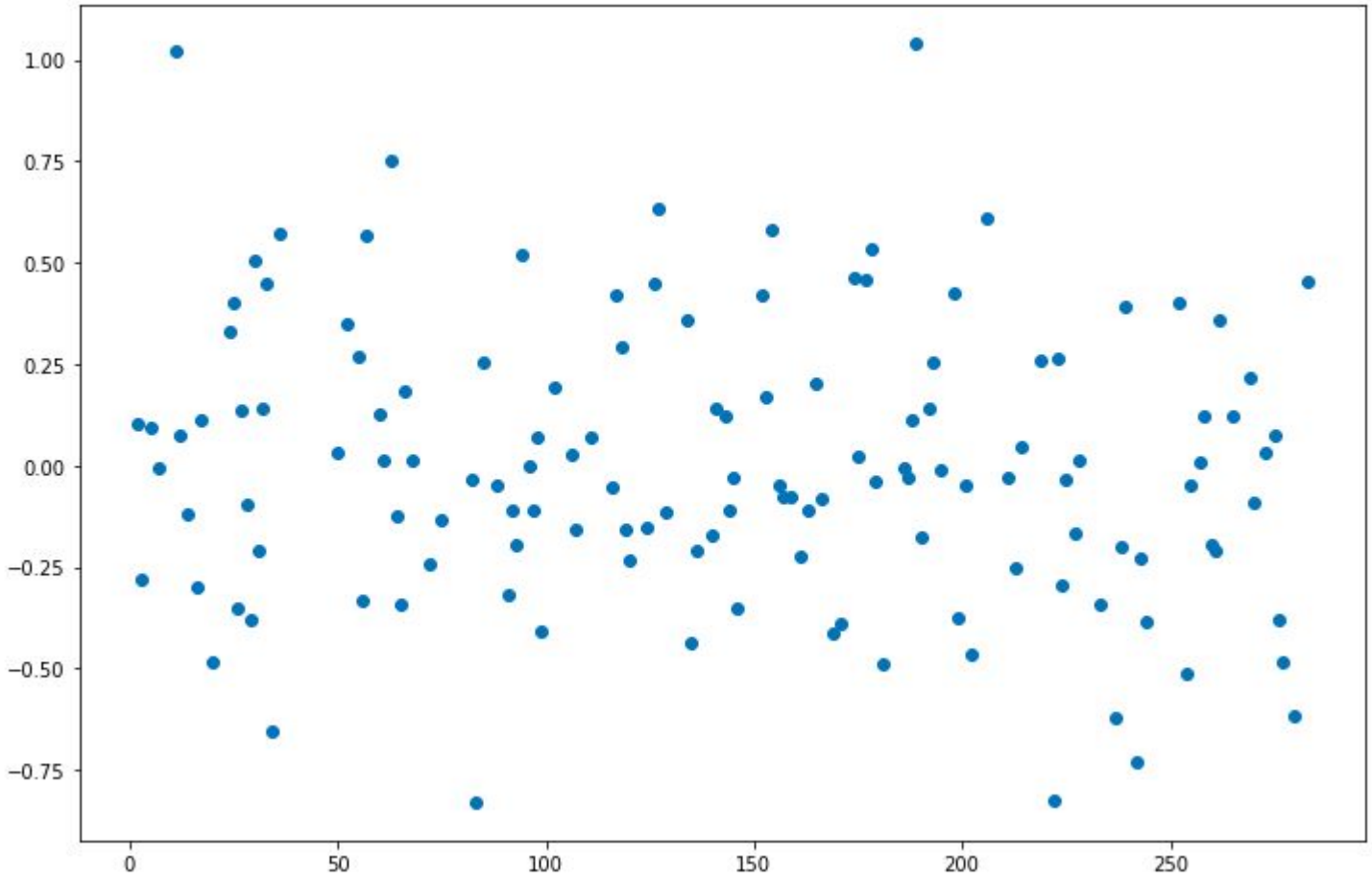
```
0.2500201163859286
```

```
np.mean(y_train)
```

```
3.7563829787234027
```

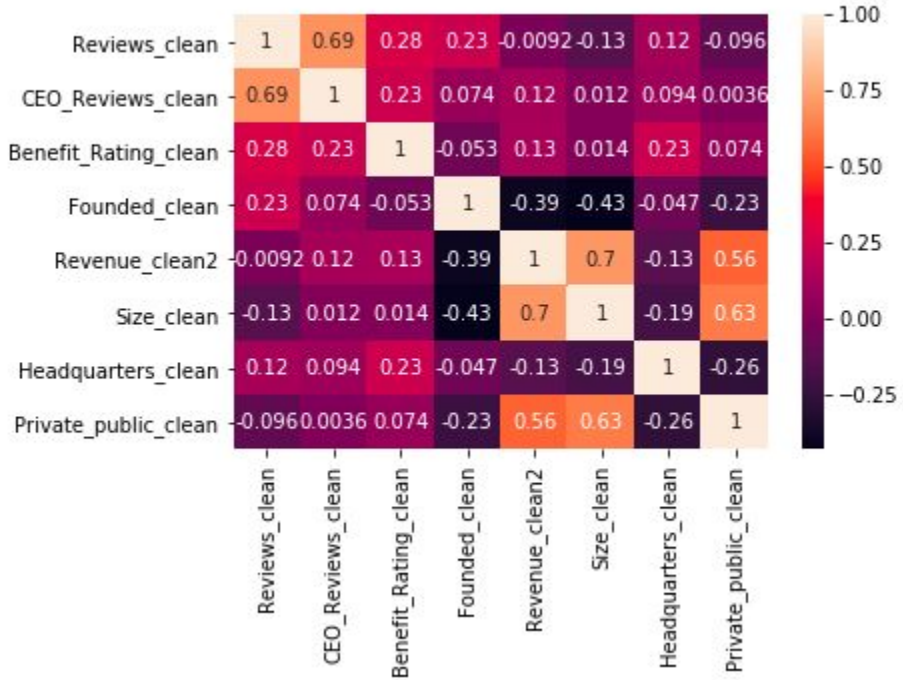
```
mean_absolute_error(y_test, ybaseline)
```

```
0.36909704203424953
```

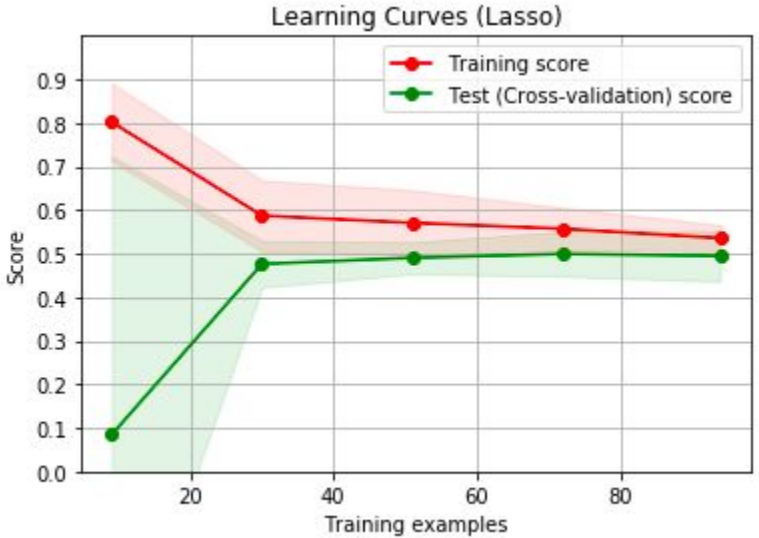

1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
0
50
100
150
200
250

Heat Map on Raw Data

```
1  seaborn.heatmap(df_mvp.corr(), annot=True);
```



Necessary Data Samples



135 companies