

Crowdfunding Analysis

Jake Sherman





Objective

- Find how to optimize crowdfunding campaigns
- Use machine learning to predict successful offerings
- \$500k = success
- Precision > Recall

Data- KingsCrowd



Average = \$300k



Median = \$87k



Success Rate= 13.4%

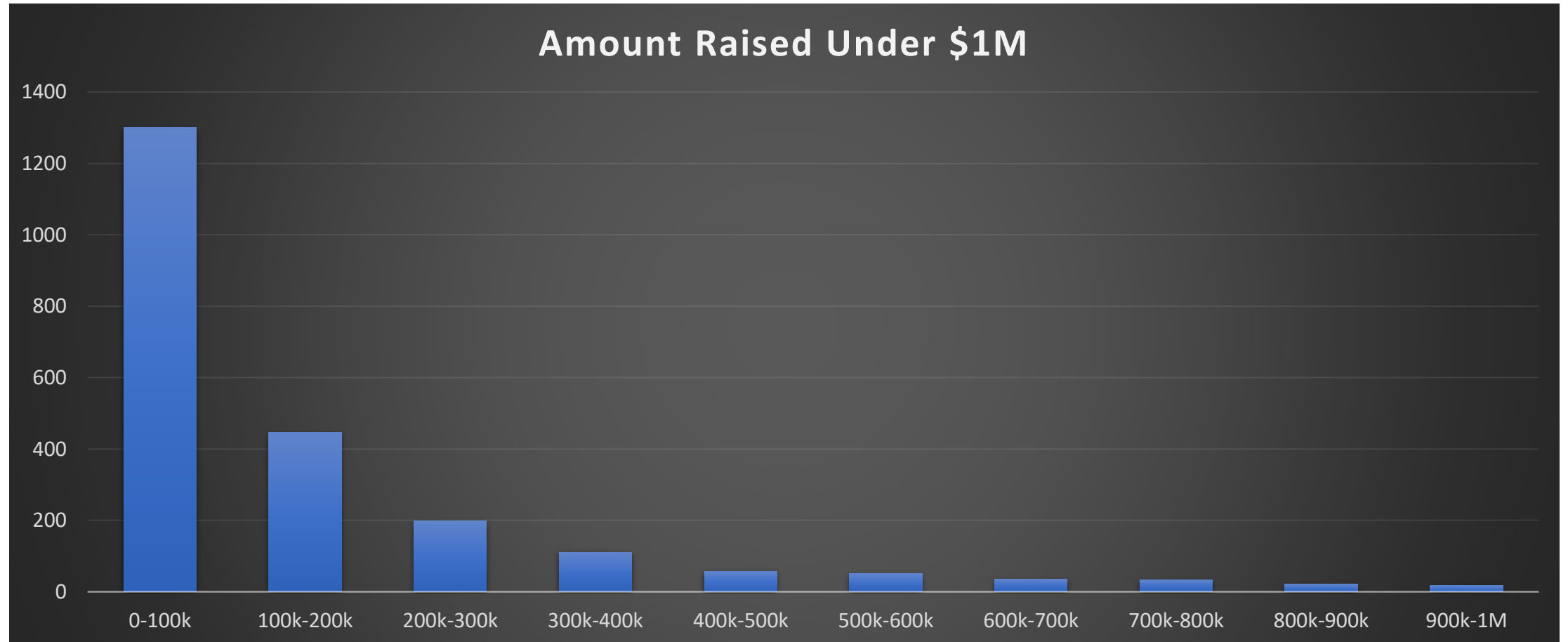


Data is right skewed:

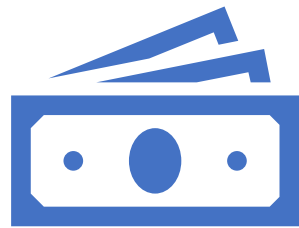
Out of 2500 companies only 22 raised \$5M while 241 raised nothing

Less than 50% chance of raising more than 100k

Over 50% of Offerings Raise Less Than 100k



EDA Optimal Stats



Min Investment: \$500

Count: 100

Mean amount raised: 532,662

Chance of Success: 19%



Industry: Real Estate and Construction

Count: 100

Mean Amount Raised: \$588,752

Chance of Success: 26%

EDA Optimal Stats

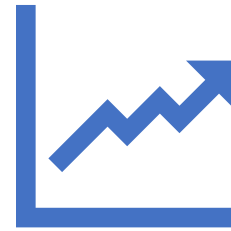


Valuation/ Cap: \$20M

Count: 82

Mean Amount Raised: \$407,260

Chance of Success: 17%



Security Type: Preferred Equity

Count: 222

Average Amount Raised: \$567,038

Chance of Success: 31%

	Pre-Revenue	Post-Revenue
Average Amount Raised	\$241,607	\$343,651
Success Rate	10%	15.7%
Count	1100	1400

- Revenue: Post Revenue companies show close to 50% success premium.

Revenue Generating Companies Have Better Performing Offerings

	No Social Impact	Social Impact
Average Amount Raised	\$280,717	\$365,775
Success Rate	11.9%	18.4%
Count	1984	450

- Social Impact: Companies with a socially conscious mission demonstrated improved success rates over 50%.

Positive Social Impact Enhances Retail Appeal

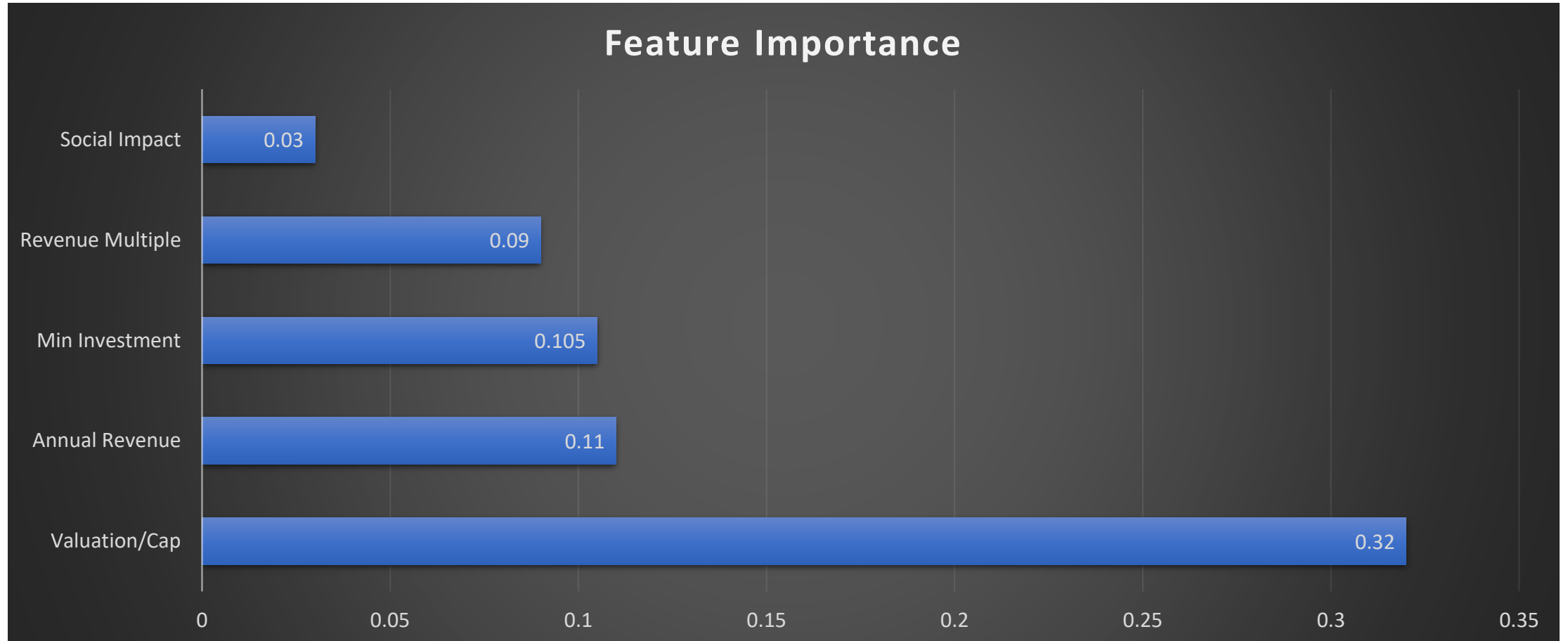
Modeling Results

Goal is to optimize
Precision

Attempted Decision
Trees, KNN, and
Random Forest
Models

Random Forrest
Yielded the best
results: 68.9% Testing
Precision

Valuation/Cap is the Largest Predictor of Success



Investment Recommendations



Focus on Companies in the real estate and construction industry



Structure offerings with a \$500 investment minimum for preferred equity



Favor revenue generating companies over pre-revenue



Companies with a positive social impact increase chance of success

Conclusion

- After analyzing 2,500 offerings and 15 data points, we were able to build a model that can predict a successful raise 68.9% of the time.
- Companies further along in their life cycle have a better chance of success.
- Company financials remain an important factor for retail investors.
- Positive social impact companies have greater retail appeal.

Next Steps

- Gather more data points to analyze such as marketing budget and founder experience.
- Once precision is closer to 90%, we can raise money from VC funds to cover Reg A offering expenses.

Thank You

- [Github.com/jsherman918](https://github.com/jsherman918)