

Crowdfunding Analysis

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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%

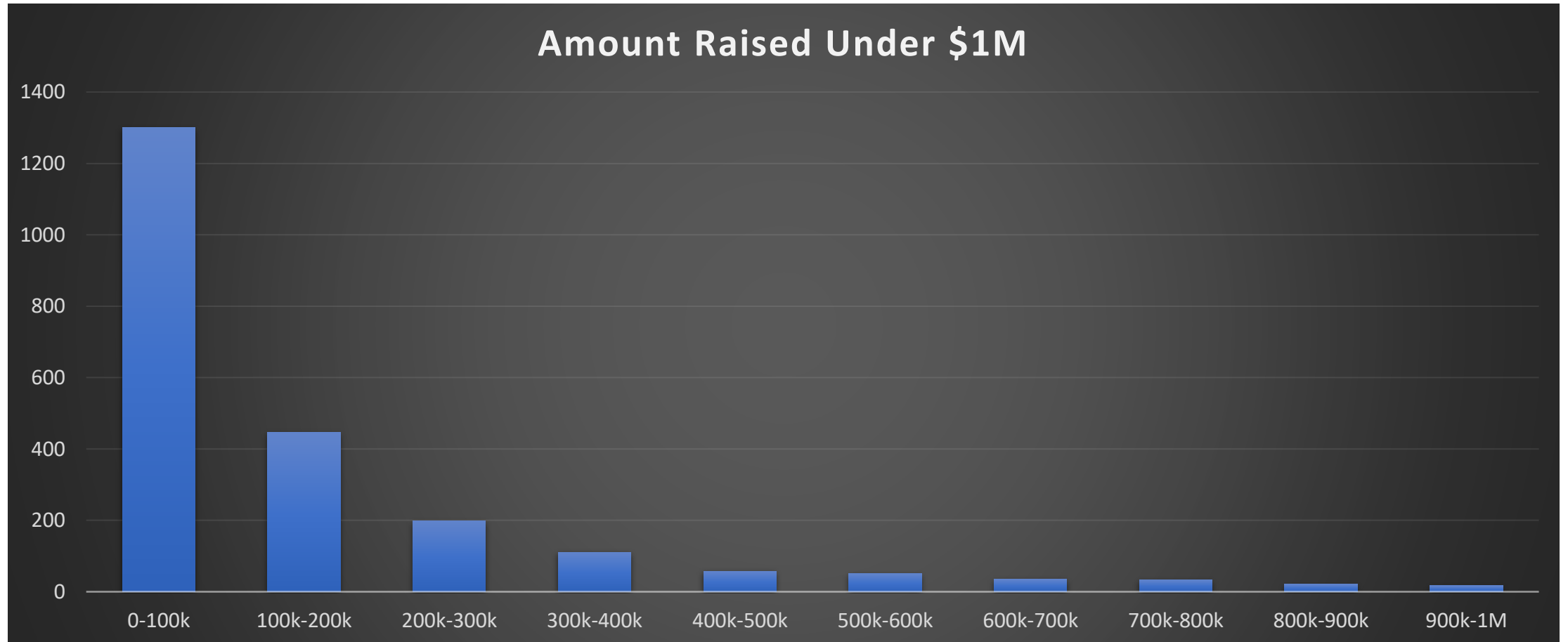


Data is right skewed:

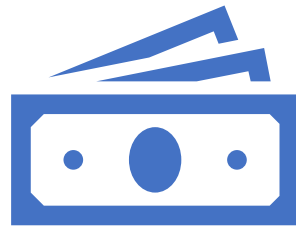
Out of 2500 companies only 22 raised \$5M while 241 raised nothing

Less than 50% chance of raising more than 100k

Amount Raised by \$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

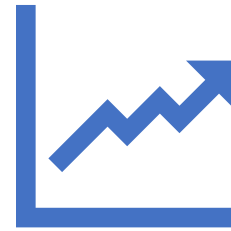


Valuation/ Cap: \$20M

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.

EDA Optimal Stats

	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 positive ESG mission demonstrated significantly higher success rates and average returns.

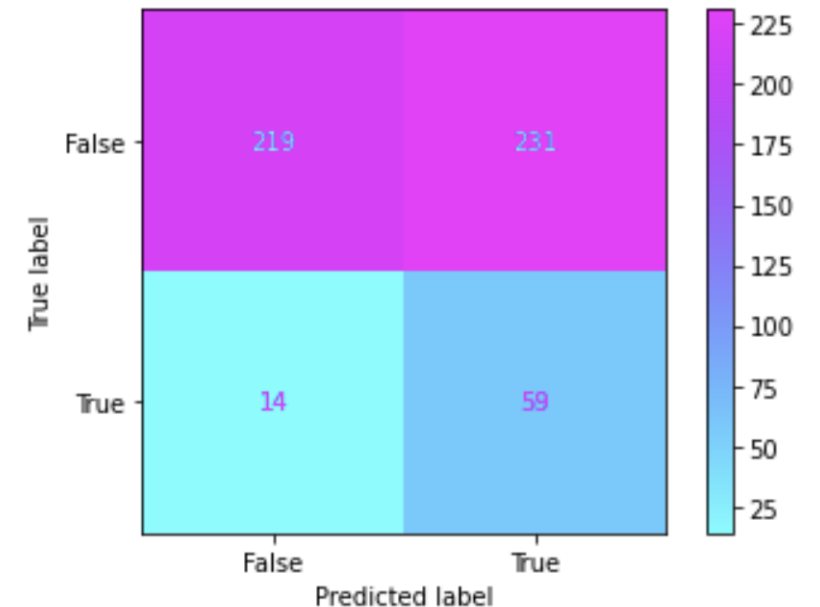
EDA Optimal Stats

Modeling Results

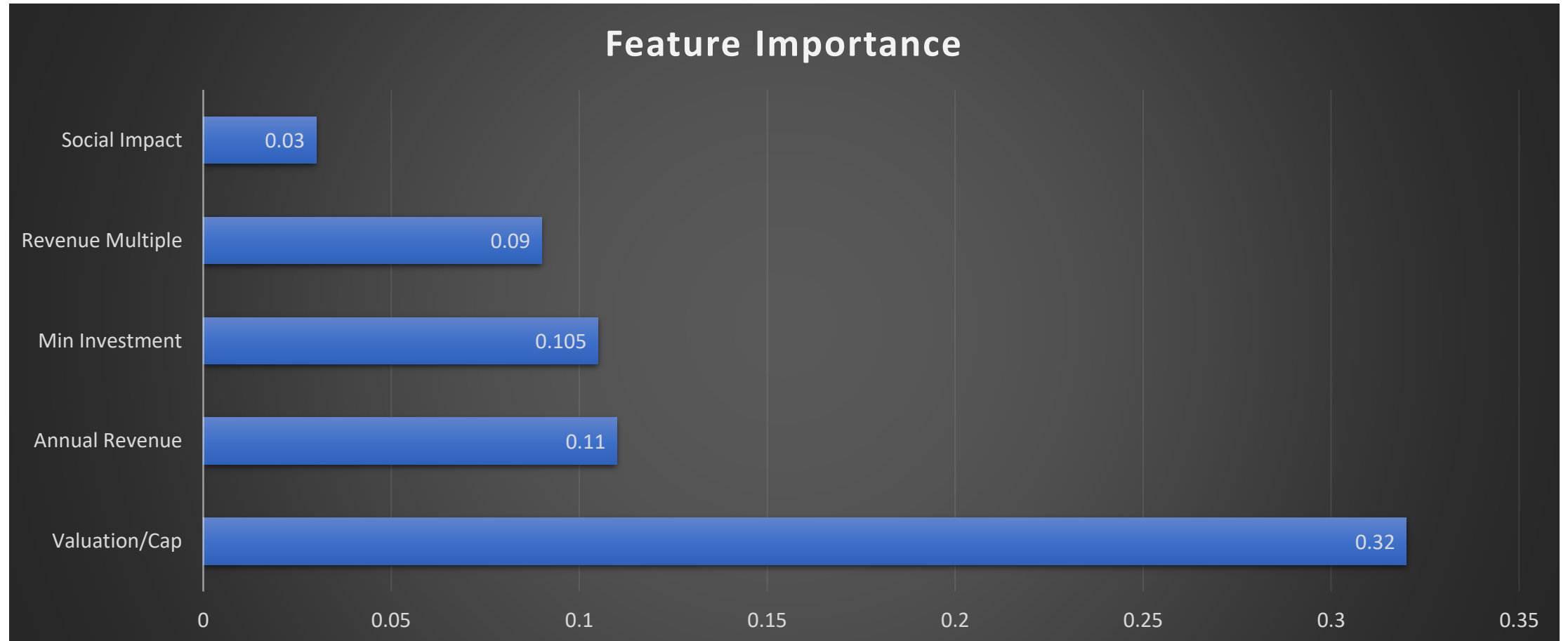
Goal is to optimize Precision

Attempted Decision Trees, KNN, and Random Forrest Models

Random Forrest Yielded the best results: 68.9% Testing Precision



Feature Importance



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)