The Goodgrant Foundation

February 1st, 2016

Mr. Alpha Chiang:

Thank you for your attention on this letter. I am a college student in China who also love math and computer science too. I known that your foundation is looking forward to giving some investment to the universities in the U.S. while you want the investment can be more valuable and repayable. My team made some work to help you to solve this problem. So I am writing to you for describe our work, I really hope our work can let your investment more remarkable.

We built a math model based on the data which the IPEDS(The Integrated Postsecondary Education Data System) provided to the public and including the data about the schools and the students.

According to some data such as SAT scores, ACT scores and the salary level the graduates got, we made a formula to calculate the entire scores of the schools and aggregate them to 5 clusters which also means 5 levels just like the QR Ranking Stars.

The first class including 1184 schools such as Duke University, Rice University and Princeton University. This class can share 31% of the investment.

There are 788 schools in the second class such as Blue Mountain College. The class can share 25% of the investment.

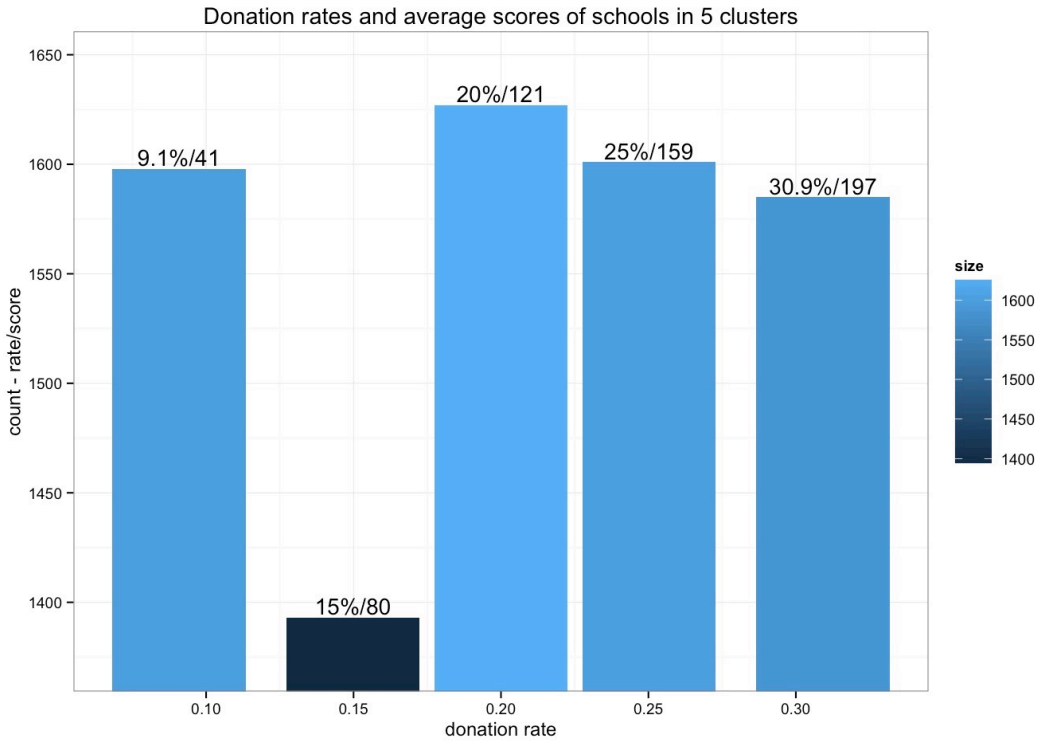
Here is a table show the detail of the result of our work.

ID OF THE CLASS	RATE	COUNT	EXAMPLES
1	31%	1184	Duke University Rice University
2	25%	788	Blue Mountain College Lakes Region Community College
3	20%	152	Apex School of Theology
4	15%	478	Ecclesia College
5	9%	334	Selma University

There is an interesting feature in our model which could be describe as ***Mode is better, but not more***. In the weight calculating formula, we analyzed the average salaries that the schools provided or we predicted to find the mode (the most more one) of salary and use the count of schools with the same salary to calculate the weights.

The way to calculate the weight is we thought the better way to find the balance between the level of the salary and the better way to distribute the investment.

The result of our model can be shown by the picture following.



The thing above is the result we worked out. We truly hope that you can take a further look on our model and hope it can help you to figure out more complex problems.

Yours sincerely,

Will Wen Gunn