**Investment Strategy Proposal**

FROM: Team 52063

Mathematics - University of Illinois at Urbana-Champaign

TO: Mr. Alpha Chiang, Goodgrant Foundation

Dear Mr. Alpha Chiang,

In order to achieve the maximum return-on-investment (ROI) and the optimal investment strategy, our group divided the problem into two parts, 1) implementing the AHP and TOPSIS based multiple-metric model to rank the performance of universities by calculating the relative efficient usage of resources; 2) optimizing donation amount and time duration for TOP 51 universities by Multiple-Linear Regression.

Our group believes that the result of investment strategy is reliable because we firstly used a simple triple-matric model which arbitrarily picked top three important variable and then we built a DEA model to approach the problem with a completely different manner - the importance weights of each variable is calculated each time within the model to reduce the bias of each variable. Even though the approaches are different, the result is surprisingly similarly, A T Still University of Health Sciences ranked No.1 in both ranking system.

Please refer to our attachment Table 4 in the last page for our summary of investment strategy.

However, the concept of return-on-investment (ROI) for philanthropic educational investments requires further improvement in the future. For our model, we used the calculated efficiencies divided by total donation as the measurement of ROI. But the problem left to debate is, what are the necessary input variables included in the model to have a comprehensive strategy?

It is reasonable to come to the conclusion that the income of students after graduation places an important part when measure student’s performance. As a result, the earnings of graduates are consistent with the final strategy; most high-rank universities are law schools, medicals school and nursing schools and it is not surprising that the graduates from those schools have the highest salaries. However, the time is allowed our group will include more variables as the measurement of universities’ research abilities since salaries are not the only standard for school performance. Variables we will consider further are faculty compensation and faculty with a PhD degree.

In conclusion, our group suggests that, even though the current models can generate the investment strategy based on the optimal ROI, more analysis based on the demand of universities can be included in the future philanthropic educational investments within the United States as well.

Sincerely,

Team 52063