



Teradata 2019 Data Challenge

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Summary

Our goal for this project was to examine and analyze a non-profit organization's data and business question and determine which actionable findings we would recommend. We analyzed the developmental aspect of the non profit. Focusing on the geographical locations that most of the individuals came from. The lifespan of donors and how unsolicited donors played a role. We were given the opportunity to demonstrate our data analytics and visualization skills through data philanthropy and assess how to use the data in an effective way.



1) Problem and Motivation

Our team has decided to focus on the development aspect of Hire Heroes USA business. Hire Heroes USA is a 501c3 nonprofit organization that has helped over 30,000 military members, veterans and their families find jobs, have revised almost 50,000 resumes and continue to help thousands of military personnel on a continuous basis. This is why our team chose development. This nonprofit would cease to exist without continuous volunteer support and donations. To analyze the data in regards to development we looked at three factors:

1. Geographic Location

a. Where is the highest percentage of donors?

The highest percentage of donors were from the state of Georgia with 473 donors followed by California with 437.

b. Is there any geographical location without any donors?

Currently every state in the United States has at least one donor but the smaller markets had the least donors

c. If so, are social media and fundraising efforts reaching these locations without any donors?

All of the states had at least one donor. However the states with low participation didn't have any reported data in regards to campaign efforts. Which allows the assumption that there were no campaign efforts made.

2. Lifespan of Donors

a. Do donors give continuously over the years? Or just once?

Most donors give continuously throughout the years and would donate multiple times throughout the year, while others are just one time donors or would go a year or two inbetween. For example, they may donate 2007 but not in 2008, but would follow up to donate in 2009 and 2010.

b. For the donors that give do we see an increase in donation amount over the years?

The donation amounts fluctuated as the years went by, for example in CA the where there is the highest percent of donors in 2011 they donated \$716,863.94 but the next year in 2012 they donated \$38,003.33. So in 2011 there was probably a



big donation received, most likely a grant or corporate giving program, but most of the donations are in the \$30,000 - \$80,000 range.

3. Unsolicited Donors

a. Are unsolicited donors giving more than once a year?

There are some unsolicited donors who do donate multiple years but they rarely donate consistently every year. Majority of the people who are unsolicited are one-time donors, now the amount of money donated is normally a substantial amount.

b. What is the average gift contribution from these donors?

Of the people who were unsolicited the average donations throughout the whole U.S. was \$3,519. But there were some one time donations as high as \$1.9 million.

2) Approach

The first thing our team did was to research Hire Heroes USA to gain a better understanding of the business, their mission, goals, and demographics. This allowed us to tailor our thought process to find solutions that were aligned with this company's goals. With a firm understanding of what this company does we decided that focusing on the developmental aspect of this business was the most beneficial. Analyzing where donors were located and their gifting patterns allowed our team to make recommendations that can help this company to continue help the military community and grow to help even more.

3) Datasets

We did not use any additional data sets besides the datasets provided

4) Tools and Analytics

The tools that were used were Tableau Prep and Excel, there were a lot of fields in the data so we had to first clean the data in order to know what information had to be extracted. Also referencing the data dictionary helped us know which field showed which donors got solicited and actually was contacted. So I went through and deleted all rows and columns that had blank cells to compress the data to be more visible. Then renamed all the fields that I needed and used a pivot table to organize the data to show the data needs. I decided to break the data into two



parts, one was people who were solicited and we contacted and the other spreadsheet was people who were not contacted.

5) Results

Our results for the visualizations and pivot tables were very straight forward, we were able to analyze the data to answer all needed questions and also to determine a trend in the data. The results showed that when you solicit the bigger market states you tend to get more donations throughout the year. This was critical for the non-profit because it shows them what needed to be done to stay in business and to continue to help veterans. They have some big donations from companies who they did not solicit but it was not a constant rate, it was only a few times.

The results help contribute to the success of the company because now Hire Heroes knows that geographical areas to solicit. Who their top donors are and to continue to show your appreciation to helping the cause. There was one company who donated \$1.9 million and was not solicited, they should be contacted numerous times out the year

6) Presentation:

Presentation slide deck submitted separately.

7) References

H. (2019, February 1). Hire Heroes USA. Retrieved April 20, 2019, from <https://www.hireheroesusa.org/>

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