Team 1:

Hsiao Yu Hsu, Hsin Yu Pan, Mengwei Li, Xuan Mai Nguyen, Zinnia Arshad

WebAnalytics Final Project- Fundraising

Business Problem

Fundraisers is an organisation which aims to help this world become a better place by helping different crowdfunding platforms (websites) improve their layout, design and reach. Our goal is to come up with marketing strategies which will help maximise the success rate of each cause so that everyone who is in need can benefit from posting on these websites. This is an important step as according to Statista, crowdfunding raises $17.2 billion on a yearly basis in North America alone and this phenomenon has grown 33.7% in 2019 which totalled to 6,455,080 campaigns around the world. Each of these campaigns have raised an average of $9,237. Hence, it is a fastly growing field that can potentially help millions of people in need. Our aim for choosing this project is to improve the success rate of these platforms as only 22.4% of these campaigns have been successful in 2019. The plausible business benefits are: 1. Vast reach: Increase in the success rate of each campaign and more money raised in each campaign by an extended donor base. 2. Relative speed: compared to traditional means implementation of this strategy can increase their speed of reaching their goal. 3. Cost effective: Efficient use of resources in the campaign which can help reduce costs

Data scraping & Preparation

We scraped the following variables from gofundme.com: urls, title, date, tags, goal, amount raised, donors, shares, followers and description. Our process: 1. Explore: Usage of histograms and statistical summaries to get initial information 2. Modify: Data cleansing (removing outliers and missing values, removing correlated variables, converting all the currencies into USD and removing extra variables like K from the total amount) 3. Sample: Data reduction, Data partition.

Statistical Modeling

We built several logistic regressions to find our best model to see if there is a relationship between the success of campaign and fundraising goal amount and to know if a higher fundraising amount will lead to a higher successful rate. If the raised amount is greater than the goal amount, then it means this event is successful and is assigned to be '1'. If not, we assign it to be 0. The best model is the one with an independent variable of interest to be the goal amount of each fundraising case and the control variables are the Tags and Numbers of shares which we checked for multicollinearity. Moreover, the variables which have no significant impact on the model were removed. The results state that the goal amount has a negative impact on fundraising event success and the p-value is smaller than 0.05 so we can reject the null hypothesis that there is no significant relationship between these two. Then, we divided the fundraising amount into different layers with a sequential increase of 10,000 and found that it will be more effective if you set your goal under 10,000. If the fundraising amount is higher than 200,000, the possibility of success drops dramatically. There are 4 limitations for logistic regression: it attempts to predict outcomes based on a set of independent variables, it cannot predict continuous outcomes, it requires each data point to be independent of all other data points and it will overfit the model.

Conclusions & Recommendations

In conclusion, if a non profit company would like to raise funds for their mission and inspire peer to peer fundraising among supporters, they should focus on small amount goals. We have found out that compared to large amounts, small amounts are more likely to succeed. Also, sharing the campaign to social media such as Twitter, Facebook and Instagram is another method that can help to achieve the goal. Last but not least, the tag of medical and healing will attract more people to donate hence they should use this tag more often. A few other marketing strategies can be that each cause should use a captivating picture and the description should be concise and to the point. The usage of a video has been found to have made the campaign more successful historically.

References

1. Fundraising for the people and causes you care about. (n.d.). Retrieved December 03, 2020, from https://www.gofundme.com/

2. Crowdfunding Statistics (2020): Market Size and Growth. (n.d.). Retrieved December 03, 2020, from https://www.fundera.com/resources/crowdfunding-statistics

3. Crowdfunding Statistics For Nonprofits. (n.d.). Retrieved December 03, 2020, from https://nonprofitssource.com/online-giving-statistics/crowdfunding/