

# Fundraisers



Fundraisers

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# Business Problem



Consulting service for crowdsourcing platforms



22.4% successful campaigns in 2019



Non profit campaign raises an average of \$9,237

1 in 3 people donated to their favorite charity in 2015

# Data Source

## Scraping URLs

- Scraped 18 categories on GoFundMe.com

## Scraping Info for each Fundraisers

- Scraped each fundraisers from Urls obtained
- Title, Date Created, Amount Raised, Goal Amount, Donors, Shares, Followers, Tags, and Description

## Data Cleaning


- Impute missing data
- Change appropriate data types
- Convert to US currency
- Scale the dataset

# Data Scrapping


Search | For individuals | For nonprofits

gofundme


How it works | Sign in | [Start a GoFundMe](#)




Medical




Memorial




Emergency




Nonprofit




Rent & Monthly Bills




Animals




Environment




Business




Community




Competition




Creative




Event




Faith




Family




Sports



Travel



Volunteer



Wishes

art/memorial-fundraising

# Data Scraping

## Help me get this brain tumor out



Matthew Ruiz is organizing this fundraiser.

Created 2 days ago | Medical, Illness & Healing

Hola,

In August of 2019, I started experiencing what seemed to be ear infections. The middle of my left ear began to fill with liquid and my hearing slowly deteriorated. By the summer of 2020, hearing in my left ear ceased to exist and was replaced with tinnitus. Tinnitus is a high-pitched sound similar to a dog whistle. Unfortunately, this sound lives in my ear and is at max volume most days.

In the first week of September, I began to see double and experienced severe headaches. There were two of everything. I quickly lost the ability to drive and had to [Read more](#)

**\$38,896** raised of \$100,000 goal

616 donors 965 shares 626 followers



Share



Donate now



344 people just donated



Nora Darwish  
\$15 • 17 mins



Mikael Kaiser-Vu  
\$20 • 29 mins



Michael R Bancroft  
\$20 • 29 mins



Brandon Bean  
\$10 • 36 mins

[See all](#)

[See top donations](#)



# Data Pre-processing

- Missing values: Amount Raised, Followers, Donors, Shares
- Convert currency
- Change appropriate data types
- Scale the data
- Remove outliers (Goal Amount)
- Remove highly correlated variables



# Statistical modeling

We built a logistic regression to figure out the relationship between the success and goal amount.

Target variable : Success or not(binary variable)

If raised amount is greater than goal amount, we define it successful and assign it '1'

If raised amount is less than goal amount, we define it not successful and assign it '0'

Independent variables:

(1)variable of interest: Goal fundraising amount for each case

(2) control variables: Tags/ Numbers of Shares

# Interpretations

```
> summary(reducedmodel3)
```

Call:

```
glm(formula = Success ~ Tags + Goal.Amount + Shares, family = binomial,  
     data = data)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-3.0154	-0.9713	-0.6949	1.0994	6.9287

Coefficients:

	Estimate	Std. Error	z value	Pr(> z )
(Intercept)	0.3935323312	0.2857172059	1.377	0.168404
TagsAnimals & Pets	-13.9529420602	378.5926338897	-0.037	0.970601
TagsBabies, Kids & Family	-0.1418119942	0.3353719327	-0.423	0.672405
TagsBusiness & Entrepreneurs	-0.2308246211	0.3261756126	-0.708	0.479150
TagsCelebrations & Events	0.0282123567	0.3511917325	0.080	0.935972
TagsCommunity & Neighbors	0.0741160402	0.3343183188	0.222	0.824553
TagsCompetitions & Pageants	-1.1230985402	0.3526010963	-3.185	0.001447 **
TagsCreative Arts, Music & Film	-0.5088916851	0.3419737511	-1.488	0.136724
TagsDreams, Hopes & Wishes	-0.4721208046	0.3441981990	-1.372	0.170171
TagsEducation & Learning	-0.4788030572	0.3384352010	-1.415	0.157140
TagsEnvironment	-1.2380135657	0.3526784053	-3.510	0.000448 ***
TagsFunerals & Memorials	0.2796004597	0.3371170430	0.829	0.406886
TagsMedical, Illness & Healing	0.9578733081	0.3552124636	2.697	0.007005 **
TagsMissions, Faith & Church	-1.2037866908	0.3623871703	-3.322	0.000894 ***
TagsSports, Teams & Clubs	-0.6327975222	0.3473757030	-1.822	0.068508 .
TagsTravel & Adventure	-0.1201062100	0.3518840612	-0.341	0.732860
Goal.Amount	-0.0000048986	0.0000006088	-8.047	0.0000000000000000851 ***
Shares	0.0000405172	0.0000104254	3.886	0.000102 ***

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# Limitations

Identifying Independent Variables.

- To predict based on a set of independent variables

Limited Outcome Variables.

- Cannot predict continuous outcomes.

Independent Observations Required.

- Each data point be independent of all the others.

Overfitting the Model.

- Sampling bias



# Conclusion & Recommendation

01

**Small amount goals**

- Easier to reach goal and more events

02

**Medical, illness & healing**

- Hashtag helps to increase success rate

03

**Shares and followers**

- Share on social media such as facebook, instagram and twitter



# Reference

1. <https://www.gofundme.com>
2. <https://www.fundera.com/resources/crowdfunding-statistics#:~:text=t o%20500%20words.-,Team%2Ddriven%20crowdfunding%20campai gns%20raise%2038%25%20more%20than%20solo%20campaigns,of %2011%20days%20to%20prepare>
3. <https://nonprofitssource.com/online-giving-statistics/crowdfunding/>