Homework 1

# Crowdfunding Campaigns

*Given the provided data, what are three conclusions that we can draw about crowdfunding campaigns?*

1. The most prevalent types of crowdfunding campaigns are in creative media, like arts, entertainment, and media.
   1. File & video, music, theater categories are the biggest, with technology in second.
2. Campaigns in the technology category are most likely to be successfully funded, with 67% of technology campaigns having succeeded.
3. Campaigns with a moderate goal are more likely to succeed compared to smaller or larger campaigns.

*What are some limitations of this dataset?*

* There is no data available to help determine or compare the quality of a campaign, or the idea or product that the campaign is trying to sell.
* There is nothing to compare the monetary goal against, or to put the goal in context.
  + To elaborate, does a project justify the monetary goal stated? Or are some of the failed campaigns asking for too much, while promising to deliver too little, which may have led to the failure?
* There are no reasons for cancelations given.
* The data only includes wealthy North American and western European countries. The populations of the countries involved may not represent all crowdfunding backers well.
* There is no insight or data provided into the branding, marketing, or level of effort put behind the campaigns.
* It is difficult to determine if a campaign is for a well-established brand, or a startup/indie.
  + As an example, well-established game designers, musicians, etc., sometimes use crowdfunding as a supplemental funding source.

*What are some other possible tables and/or graphs that we could create, and what additional value would they provide?*

* Box and whisker plots could help determine outliers.
* Scatter plots could help show the distribution of the data and trend lines.
* Line graphs could help to compare outcomes, number of backers, and percentage of goal raised of campaigns over time. A look at trends over time like this could help determine if broader trends around crowdfunding’s popularity helped or hurt campaigns.

# Statistical Analysis

*Use your data to determine whether the mean or the median better summarizes the data.*

The median better summarizes the data compared to the mean. There are many outliers in the number of backers who donated for campaigns, which skews the value of the mean.

*Use your data to determine if there is more variability with successful or unsuccessful campaigns. Does this make sense? Why or why not?*

There is more variability with successful campaigns.

This makes sense considering large, successful crowdfunding campaigns increasing variability. If a campaign became widely popular, like for example if it went viral on the Internet or social media, it could potentially draw in a larger number of backers than usual, which would increase the variability of successful campaigns.

The same case of drawing in a large or abnormal number of backers would most likely not be present with failed campaigns.