**Crowdfunding Goal Analysis**

From the provided data, we are able to see that the higher the crowdfunding goal is, the more likely it is to fail whereas smaller crowdfunding goal is, the more likely it is to succeed. From this we are able to draw a conclusion that the larger the crowdfunding campaign is, the more difficult it will be to fund the project.

We can conclude from the crowdfunding campaigns that most people are interested in funding areas in entertainment such as Theater, Music, and Film & Video. These areas tend to be highly profitable when successful, thus it makes sense that people would want to invest in such areas. Given the data, we are able to see that there was a lot of crowdfunding campaigns for Theater, specifically Plays, as the data shows that from the Parent Category and the Sub-Category, Theater-Plays had the most successful campaigns, the most failed campaigns, as well as the most cancellations. We can conclude from this data, that there may be a consistently loyal base of supporters for Theater projects compared to other sectors.

On average over the years between 2010 and 2020, we see more successful crowdfunding campaigns in summer (June to July) and fewer failed campaigns. This could be because the weather is nicer during these times of the year so people feel more comfortable funding events as they know people will be out and about during the months of June to July to enjoy these events.

A limitation of this dataset is that we do not know the method of crowdfunding used. Perhaps knowing the method will provide more info as to why some campaigns were more successful than others and if multiple methods were used, which method yielded the most success.

Another limitation is that the data that is provided is between 2010 and 2020. However, there are only two campaigns in early months of 2020 compared to a more complete dataset for the other years. We may exclude this year to provide more accurate data or use a data set from 2009 to 2019 instead.

We can create other graphs to provide value to the data analysis. A pie chart can show us that Theater or Plays make up a large part of successful and failed campaigns compared to the whole of the Category or Sub-category. However it is most useful in data with a small count such as the Live Outcome count where we can easily see which Category and Sub-category has the most live campaigns. Overall, pie charts are useful in helping us visualize the whole of each outcome.

A bar chart of the average per month of successful, failed, or canceled campaigns over 10 years will

Some other tables that would be useful to create a table where the currency is converted to a standard unit of currency, then include the goal, pledge, the average donation amount, outcome of the crowdfunding project, and filter by sub-category to see if there is a relationship between the outcome and goal by the type of crowdfunding project. Were some crowdfunding campaigns more successful because backers donated more? Were some campaigns unsuccessful because the goal was set too high for the type of project? What is the average crowdfunding goal by subcategory type? This table to could be used to better understand the data and provide insightful predictions.

**Statistical Analysis**

The median better represents the data because the data is skewed where the frequency of backers for successful and failed campaigns remains on the smaller side with a few campaigns having backers in the thousands. Thus, the median better summarizes the data.

There is more variability with successful campaigns as the standard deviation and variance of the number of backers for successful campaigns is 1267.37 and 1606216.59 respectively compared to unsuccessful campaigns where the standard deviation and variance is 961.31 and 924113.455 respectively. Since the standard deviation and variance is larger for successful campaigns, there is more variability in these successful campaigns. This makes sense because the campaigns that ended up failing attracted less backers than the campaigns that ended up succeeding. The campaigns that failed may have failed due to not having enough backers. Thus, there is a higher frequency of a small amount of backers for failed campaigns and therefore the variance is smaller compared to successful campaigns. Successful campaigns may have been successful because a small amount of backers each contributed a lot to the project or because there is are a lot of backers for the project, thus contributing to more variance.