**Module 1 Challenge Analysis**

**Crowdfunding Goal Analysis**

Three conclusions that we can draw about crowdfunding campaigns (given this data) are:

1. The most successful campaigns in the parent category fall under the theater category and the sub-category of plays.
2. The months of April to July appear to have an uptick in the number of successful campaigns.
3. There are not many campaigns that appear to be canceled. The number canceled consistently appears to be under 10 for all months displayed in the pivot-chart line graph.

Some limitations of this data are that not all countries are included. This data gives us only a sample of the campaigns in certain countries. There also could be more data surrounding why a campaign may have failed or succeeded besides solely basing that on the funding goal. There are other variables aside from funding that could have affected the outcome of these campaigns and contributed to the funding goal being met or not.

Another possible table or graph could be to use a pivot table and graph that show the number of backers that were successful or failed for the different parent categories and correlating sub-categories for these campaigns. This could provide more information in finding trends that could find the number of backers for the different campaign categories. The trend could give insight into what categories had the most backers and if the success rate was higher or lower as a result.

**Statistical Analysis**

The median better summarizes this data because there are outliers for both the successful and failed campaigns in relation to the number of backers. The mean number of backers for successful campaigns is around 851 while the median is 201. The mean is higher because the data appears to be skewed to the right because of the few campaigns with a large number of backers. The mean number of backers for failed campaigns is around 586 while the median is 114.5. The mean, again, here is higher because the failed campaign data is skewed to the right due to the large number of backers that increased the mean. Given that these data sets are both skewed to the right and are increasing both the mean values for the successful and failed campaigns, the median is the better choice to summarize this data set.

There is more variability with the successful campaigns. The spread of values for the number of backers is larger for the successful campaigns compared to the failed campaigns. This makes sense that the successful campaigns have slightly more variability than the failed campaigns due to the larger spread in values. The successful campaigns also have a higher variance and standard deviation compared to the failed campaigns.