**Module # 1 Challenge: Kelly, Dylan**

**Written Report:**

When looking and comparing the information provided by the Crowdfunding worksheet a multitude of conclusions can be made looking at the trends found between the categories, sub-categories and dates in which backers participated in.

The first conclusion that could be made, is based off the comparison of Categories with that of the outcome of the Crowdfunder. It appears that the category of “Theater” crowd funders contributes to most crowdfunding activities, followed by “Film & Video” then “Music”. Though the results also indicate that the categories do not show a drastic difference between success and failure rate. All categories see a common trend of having a 60/40 split of success compared to failure in launching the crowdfunding. The only exception to this trend would be the Category of “Journalism” which has a 100% success rate which can be partially contributed by it being the least active crowdfunding category.

The second conclusion that can be made looking at the sub-category compared to the outcome. Which notes that the sub-category of “Plays” makes up the majority of crowdfunding activities, having a similar distribution of success vs failure to that of its category of “Theater”. Importantly though it also contains the highest likelihood of cancellation when compared with other sub-categories, such as “Audio” and “World Music” which has a high success rate though making up a low percentage of crowd funders.

Thirdly, when comparing the outcome of crowd funders with the date of operations additional market trends can be observed. Within the dates of June to July had the highest rate of successful campaigns while also having the lowest rate of failure; this indicates that this was a very productive time for crowdfunding. In contrast between the months of July and August a drastic decrease in in successful campaigns can be seen while also having a spike in the likelihood of a failure; indicating that this period was more difficult to launch a successful Crowdfunder. Additionally, when analysing the cancellation rate for crowd funders it can be seen as rather steady between months in the year, only having a spike between July and August supporting the conclusion that this was a difficult time for the success rate of crowdfunding campaigns.

Limitations within this analysis are the comparison between yearly financial trends in the larger market and backer participation rate, this would help in measuring what impact the backer participation as well as helps observes outside factors that would impact the success rate of crowdfunding campaigns. Alongside this an additional pivot tables comparing backers engagement with that of different categories and sub-categories would provide us with more information on which categories/ sub-categories would have the highest likelihood of receive higher amounts of funding; this alongside the success and failure analysis would give a greater depth of understanding to the factors that make a successful campaign. That being backer engagement based off category, dates correlation market trends impact for campaigns, and categories of high engagement.

**Statistical Analysis:**

Base off the measuring of variance for both the successful outcomes and failed outcomes compared to the backers both have high variances and standard deviation. Which means that there are large gaps in distributions of backers within both outcomes. This indicates that using a mean would be skewed/ distorted not properly representing the best form of analysis. Therefore, using the median as a measurement would be the most accurate for portraying the number of backers compared with outcome.