**Analysis of Crowdfunding data**

**Conclusions about Crowdfunding Campaigns:**

Following are some conclusions that we can draw about the crowdfunding campaigns based on the provided data and the required analysis completed as part of this assignment:

* Theatre is the most popular category of crowdfunding campaigns with almost 50% success ratio, and this is followed by film & video documentaries and rock music. This outcome is confirmed based on following findings:
  + Overall, the highest number of crowdfunding campaigns were launched in the category of theatre (except for Great Britain) and amount to about one-third of the total campaigns. More than half of the campaigns in this category were successful overall except in Canada where the success ratio of the theatre campaigns was about one-third. As theatre only had one sub-category of plays, the above findings apply and conclude that plays are the most popular arena of all crowdfunding campaigns.
  + Another one-third of campaigns were equally categorized between film & video and music. Within film & video, documentary is the most popular sub-category (one-third of the total category). Within music, rock is the most popular sub-category and comprises of about half of the music campaigns. Rock music attracted the second-highest number of campaigns overall after plays in the theatre category.
  + Journalism had the least number of campaigns. All 4 of them were based in the United States and were in the sub-category of audio.
  + Only 14 live campaigns were captured in the dataset out of which 9 were based in the United States. One-third of the live campaigns were in the film & video category.
  + Overall, about one-third of campaigns failed.
* An average of 100 campaigns have been launched each year from 2010 to 2019. This number has remained consistent and there has not been any significant increase in number of campaigns over the years. Most successful campaigns were launched in the month of July and most failed ones were created in the month of July, however, this trend is not constant across 2010 to 2019 and does not differ to a great degree from other months. Theatre has consistently been the most popular category of crowdfunding campaigns across all these years.
* Crowdfunding campaigns with a smaller goal amount between 5000 to less than 10,000 have the highest occurrence and a success ratio of 52%. More than half of the campaigns with goal of over 50,000 have failed. This shows that there is a higher chance of the campaign to succeed if the goal amount is set between 5000 to less than 10,000. This is concluded based on following analysis:
  + 100% of campaigns were successful with the goal ranging between 15,000 to less than 25,000 and between 30,000 to less than 35,000. However, the number of campaigns with these goal ranges are only 1.7% of the total data so this cannot be generalized.
  + 31.5% of total projects had a goal of 5,000 to less than 10,000 and more than half of them succeeded.
  + 30.5% of total projects had a goal of 50,000 or more, however, only 37% projects with this goal amount succeeded which is the least among other goal ranges.
  + The highest proportion of failed projects (more than one-half) had a goal range of either between 10,000 to 14,999 or more than 50,000.

**Limitations of the Dataset:**

Following are some limitations of this dataset:

* As this dataset comprises of data from different countries, the goal and pledge amounts are displayed in different currencies based on country of origin. As some currencies are stronger compared to others, comparing the goal and donation amounts as is does not provide a fair analysis. These amounts should be converted to one standard currency based on prevalent exchange rates to provide a rational comparison of the goal amounts.
* Out of 1000 sample data, 763 campaigns were launched in the United States. The remaining countries are not represented to a similar extent in the sample data, therefore, findings based on overall data cannot be generalized for all the other countries in the sample except for U.S.
* There are outliers in the number of backers for both successful and failed campaigns. Because of the skewed nature of the data for this variable, the average numbers do not present an accurate picture and need to be refined with more detailed statistical analysis. The median numbers for both successful and failed campaigns are much lower than the median values because of the outliers.

**Additional Analysis:**

Following are some other possible tables and/or graphs that we could create and the additional value they would provide:

* The number of campaigns in each category can be analyzed in detail based on country of origin. This will be valuable for someone who is looking to launch a crowdfunding campaign in a particular country to gain insight into which categories are most popular and most successful in that country. The data on outcome and percentage funded can be analyzed for each country to understand the dynamics of each country where an intended campaign is to be launched.
* The incidence of campaigns in each category can be analyzed in detail for each year comprehensively to identify any trends. This can provide insights into which categories have been consistently successful over the years and have become popular with the passage of time.
* The data for staff pick and spotlight can be compared to campaign outcome to figure out if staff picked campaigns and spotlight campaigns have any impact or relation with the outcome of the campaign and the amount of funding gathered as a result.
* The length of each campaign can be derived by comparing the launch and deadline date. This can be analyzed in relation to the campaign outcome as well as Percent Funded and Average Donation. The outcome can provide insights on whether there is a relation between length of the campaign and the success rate of the campaign to help design duration for future campaigns. This will also offer understanding of the average donation captured based on the length of the campaign.