Excel Homework 1

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# Background

Over $2 billion has been raised using the massively successful crowdfunding service, Kickstarter, but not every project has found success. Of the more than 300,000 projects launched on Kickstarter, only a third have made it through the funding process with a positive outcome.

Getting funded on Kickstarter requires meeting or exceeding the project's initial goal, so many organizations spend months looking through past projects in an attempt to discover some trick for finding success. For this week's homework, I have organized and analyzed a database of 4,000 past projects in order to uncover any hidden trends.

# Activities Performed

* Analysis of Project state based on the funding and Donations
* Created a new called “Percent Funded” that uses a formula to uncover how much money a campaign made to reach its initial goal.
* Created a new column called “Average Donation” that uses a formula to uncover how much each backer for the project paid on average.
* Analysis of Project state based on the category and sub category
* Created two new columns, one called “Category” and another called “Sub-Category”
* Created a new sheet with a pivot table that will analyze initial worksheet to count how many campaigns were successful, failed, canceled, or are currently live per **category**.
* Created a stacked column pivot chart that can be filtered by country based on the table you have created.
* Created a new sheet with a pivot table that will analyze initial sheet to count how many campaigns were successful, failed, or canceled, or are currently live per **sub-category**.
* Created a stacked column pivot chart that can be filtered by country and parent-category based on the table you have created.
* Analysis of Project state based on the Launch date of the project
* Created a new column named Date Created Conversion
* Create a new column named Date Ended Conversion
* Create a new sheet with a pivot table with a column of state, rows of Date Created Conversion, values based on the count of state, and filters based on parent category and Years.
* Now create a pivot chart line graph that visualizes this new table.
* Analysis of the outcome based on the Goal
* Analyzed the projects based on the amount of Goal they needed to be achieved. The projects were grouped in 12 different Goal ranges in steps from $0 to $1000 and then increasing in the steps of $5000 starting from $5000 to $50000.
* A count of how many successful, failed, and canceled projects were created with goals within the ranges listed above.
* The percentage of projects that were successful, failed, or canceled per goal range was calculated.
* Created a line chart that graphs the relationship between a goal's amount and its chances at success, failure, or cancellation.

# Homework repository Link

# Conclusions

Based on the data provided we can draw following conclusions.

1. For a project to be successful it must have funding 100% or more than its goal.
   * We can conclude this by observing the Kickstarter Table by filtering on the “State” column. It is observed that all the Successful projects have 100% or more Percent Funded.
   * Majority of the Failed or Canceled projects are less funded than their Goal.
   * If we filter on the Percent Funded and select all the projects which are funded >=90% then we can see total 242 projects. Out of these 242 projects 236 are successful and 6 are either canceled or Live. We can also see that all the canceled projects are started late i.e somewhere in 2016. So the reason for their nonsuccess could be something other than funding.
2. The Categories “Music”, Theater” and “Film&Video” are found to be the top three categories of successful projects. There are certain sub-categories which are majority successful and certain categories which are majority unsuccessful. This could be an indication of the popularity of certain sub-category.
   * There are certain sub-categories in which all of the projects are failed e.g. animation, drama, faith, jazz.
   * There are certain sub-categories in which all of the projects are successful e.g. classical music, electronic music, documentary, metal, pop, rock, shorts, television, indie rock
3. The plot based on the launch date verses state suggests that the success drops as the project launched date is increased. That indicates that the likeliness of the project success decreases as the project start is delayed. This trend is clearly visible when we see the “Music” category.
4. It is observed from the Outcome based on Goal that the success rate is inversely proportional to the Goal. That is, the projects with low Goal the percentage of successful projects is higher and as the amount of Goal increases the percentage of successful projects decreases.

# Limitations

What are some limitations of this dataset?

* + There is two-thirds of the data from US and hence the conclusions are more appropriate to US than to the rest of the world.
  + There are more data samples from the categories “Music”, Theater” and “Film&Video” and coincidentally these are the categories for which more successful projects are found. Equal samples from the other categories could provide a fair comparison of the data to draw conclusions.

# Other possible tables/graphs

1. What are some other possible tables and/or graphs that we could create?
   * Percentage of successful, canceled, failed projects based on categories. Identify the top 3 categories which have highest percentage of successful, canceled and failed projects.
   * Percentage of successful, canceled, failed projects based on sub categories.