**## 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, you will organize and analyze a database of 4,000 past projects in order to uncover any hidden trends.

**## Instructions**

Using the Excel table provided, modify and analyze the data of 4,000 past Kickstarter projects as you attempt to uncover some market trends.

\* Use conditional formatting to fill each cell in the `state` column with a different color, depending on whether the associated campaign was successful, failed, or canceled, or is currently live.

\* Create a new column O called `Percent Funded` that uses a formula to uncover how much money a campaign made to reach its initial goal.

\* Use conditional formatting to fill each cell in the `Percent Funded` column using a three-color scale. The scale should start at 0 and be a dark shade of red, transitioning to green at 100, and blue at 200.

\* Create a new column P called `Average Donation` that uses a formula to uncover how much each backer for the project paid on average.

\* Create two new columns, one called `Category` at Q and another called `Sub-Category` at R, which use formulas to split the `Category and Sub-Category` column into two parts.

\* Create a new sheet with a pivot table that will analyze your initial worksheet to count how many campaigns were successful, failed, canceled, or are currently live per **\*\*category\*\***.

\* Create a stacked column pivot chart that can be filtered by country based on the table you have created.

\* Create a new sheet with a pivot table that will analyze your initial sheet to count how many campaigns were successful, failed, or canceled, or are currently live per **\*\*sub-category\*\***.

\* Create a stacked column pivot chart that can be filtered by country and parent-category based on the table you have created.

\* The dates stored within the `deadline` and `launched\_at` columns use Unix timestamps. Fortunately for us, [there is a formula](http://spreadsheetpage.com/index.php/tip/converting\_unix\_timestamps/) that can be used to convert these timestamps to a normal date.

\* Create a new column named `Date Created Conversion` that will use [this formula](http://spreadsheetpage.com/index.php/tip/converting\_unix\_timestamps/) to convert the data contained within `launched\_at` into Excel's date format.

\* Create a new column named `Date Ended Conversion` that will use [this formula](http://spreadsheetpage.com/index.php/tip/converting\_unix\_timestamps/) to convert the data contained within `deadline` into Excel's date format.

![Outcomes Based on Launch Date](Images/LaunchDateOutcomes.PNG)

\* 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.

\* Create a report in Microsoft Word and answer the following questions.

1. Given the provided data, what are three conclusions we can draw about Kickstarter campaigns?
   1. The Kickstarter Crowdfunding campaigns have been categorized by industry. Theater (1,393), Music (700) and Technology (600) were initiated with the most frequency of the 4,000 total projects.
   2. The projects were also analyzed by count per month. In a calendar year the average number of projects per month was 334.33. There is a trend that most of the projects began in the summer months. In May there were 384 projects, 388 projects in June and 384 projects in the month of July. The summer months also had the highest success rates per project, based on calendar seasons collectively.
   3. There were several sub-categories that had 100% success with their goal to pledge amount. Rock (260), Documentary (180) and Hardware (140) all had 100% success. I would suggest potential project creators review this data set in relation to their sub-categories to get an idea of what types of projects have the best outcomes before committing to the time, effort and money on their ideas.
2. What are some limitations of this dataset?
   1. Based on the dataset, I think there are a few limitations that should be considered. One is to determine if there is a key group of high pledging pledgers. There are categories and subcategories that consistently meet their target goals without having any failures or cancellations. It would be interesting to see who the pledgers were and to determine if they are consistently investing in the similar categories and sub-categories. Another limitation is determining how successful the projects were after the donations ended in terms of generating revenue. I think that factor would be important in analyzing these projects as well.
3. What are some other possible tables and/or graphs that we could create?
   1. There are several tables and graphs that can display the Kickstarter Crowdfunding projects dataset. One would be using a “scatter plot” with a linear forecast comparing the number of backers and the amount pledged.

**## Bonus**

\* Create a new sheet with 8 columns:

\* `Goal`

\* `Number Successful`

\* `Number Failed`

\* `Number Canceled`

\* `Total Projects`

\* `Percentage Successful`

\* `Percentage Failed`

\* `Percentage Canceled`

\* In the `Goal` column, create 12 rows with the following headers:

\* Less than 1000

\* 1000 to 4999

\* 5000 to 9999

\* 10000 to 14999

\* 15000 to 19999

\* 20000 to 24999

\* 25000 to 29999

\* 30000 to 34999

\* 35000 to 39999

\* 40000 to 44999

\* 45000 to 49999

\* Greater than or equal to 50000

\* Using the `COUNTIFS()` formula, count how many successful, failed, and canceled projects were created with goals within the ranges listed above. Populate the `Number Successful`, `Number Failed`, and `Number Canceled` columns with this data.

\* Add up each of the values in the `Number Successful`, `Number Failed`, and `Number Canceled` columns to populate the `Total Projects` column. Then, using a mathematical formula, find the percentage of projects that were successful, failed, or canceled per goal range.

\* Create a line chart that graphs the relationship between a goal's amount and its chances at success, failure, or cancellation.