# Excel challenges – UWA Bootcamp Data Analyst Week 1

## Introduction

Crowdfunding platforms such as Kickstarter and Indiegogo have been working with people to launch new products and generate projects and have gained popularity since the 2000s. For independent creators and entrepreneurs alike, the project must reach or exceed the initial goal. The purpose of this data analysis is to find a correlation between successful and failed campaign outcomes.

## Given the provided data, what are three conclusions that we can draw about crowdfunding campaigns?

### Pivot table 1: Which parent category had the most success?

The first key finding from the dataset is a pivot table that describes which parent category of campaigns had the most success and which has the most failures. The pivot table also showcases the number of live and canceled campaigns from the parent categories. To determine which campaigns of the parent categories failed, succeeded, are live, or canceled, a conditional formatting was created to find the outcome by the percentage funded. The percentage funded was found by dividing the goal of the campaign by the pledge from the crowdfunding platforms.

From the results of the pivot table, we can determine which of the nine parent categories had the most success and which had the most failures. Using the table below (table 1.0), theater has the most successful campaigns with 187 successful campaigns, followed by film and video with 102. Conversely for successes, the campaign category that has the most failures are also theater with 132 followed by music with 66 failed campaigns. Although the theater had the most successes and failures, we can follow up with another research question to find a more accurate representation on the success of the theater category, ‘what success rate of the theater category according to other categories?’. Another managerial question will allow for a more accurate representation of the data set. However, the purpose of this pivot table is to find which parent current category had the most successes. The category theater had the most successes and most failures which means more crowdfunding platforms are finding more successes in theater campaigns compared to other categories.

(Table 1.0)

A screenshot of a graph

Description automatically generated

Altogether, using the information and data above, the campaign theater category had the most successes and failures out of all the categories. The successes and failures of the theater campaign could be further analyzed by providing more detailed data about the campaigns and their successes. In addition to theater having the most failures and most successes, film and video had the second number of successes with 102 successful campaigns. Another important information is the second number of failures was music with 66 failed campaigns.

### Pivot table 2: What sub-category campaigns had the most successes?

The second conclusion of this research data comes from the second pivot table. In relation to the first conclusion, the sub-categories of each parent category campaigns are further analyzed to display more information about each campaign. Similarly, to the previous pivot table the sub-categories are placed by how many successes, failures, live and canceled campaigns from the dataset. To find this data, another pivot table was made to find the successes, failures, live and canceled campaigns by which sub-categories.

The results from the research statement showing what sub-category campaigns had the most successes are displayed below (table 2.0). Using this pivot table, the sub-category for which campaign had the most successes are the plays with 187 successful campaigns. On the other hand, the sub-category with the most failures are also plays with 132 failed campaigns. From the data below we can tell which of the sub-categories had the most successes and failures. Additionally, the parent category theatre has only one sub-category, ‘plays’ which have skewed the table in favor of this outcome. For further information the category could be broken down into more sub-categories rather than one. However

A screenshot of a graph

Description automatically generated(Table 2.0)

Using the data above, the total number of outcomes favored the sub-category ‘plays’ which led to the greatest number of successful campaigns and as well as failed outcomes. Additionally, it is important to note that the parent category of plays has only one sub-category which led to a higher number of outcomes.

### Pivot table 3: Number of campaign outcomes for each month

For the third and final pivot table the total number of campaign outcomes is placed by each month. To find which month had the most successful, failed, and canceled campaigns, the number of finished outcomes is placed according to each month. This was done by creating another pivot table and then finding the number of outcomes by each month.

The table below (table 3.0) displays the data given by the crowdfunding platform to determine what month had the most campaign outcomes. Of the 12 months, July yielded the greatest number of finished campaign outcomes 92 grand total outcomes and August having the least amount of finished campaign outcomes with only 73. Additionally, for further data analysis formulaic equation can be used for further insight on what percentage of month had the most successful campaigns. However, the table below only shows which of the most the months had the most successful campaigns.

A graph of different colored lines

Description automatically generated

(Table 3.0)

To conclude that data and the insights above, the month with greatest total of outcomes is July 92, whilst the least number of finished campaign outcomes was August with 73.

## What are some limitations of this dataset?

The limitations of this dataset include the lack of data about each campaign, and the cause of each crowdfunding platform discontinuing the project funding. The dataset had insightful data about what campaigns succeeded from the numerous crowdfunding platforms. Providing each table or graph of which campaigns had the most successes and what category of campaigns would yield a higher chance of success. Additionally, the dataset gave concise information about what category of campaigns had the highest percentage of funded and whether the success of the campaign is influenced by the pledge of the crowdfunding platforms. However, the dataset came across limitations in terms of what caused the crowdfunding platforms to have lower funding compared to other campaigns. The lack of data about each campaign can be a limitation within the data set, for several reasons.

Firstly, If the dataset had more information about each campaign and why it failed, this would allow a better understanding of what makes a successful project for crowdfunding platforms. Some external variables could have happened which led to the failure of the campaigns. Other external variables may include production of the project, the marketing of the campaigns, the lack of staff or even the idea of the project. Potentially another data set, with all the marketing efforts of the project can give a better understanding of why some campaigns failed and what made the crowdfunding platforms pledge less money.

Secondly, the dataset could provide more data about the number of staff involved in the project to determine whether the number of staff can aid with the project. To discover “the trick” to finding success from a campaign, another dataset about the staff may provide insight into the production of a successful campaign. Details about the dataset may include the number of staff members who worked on the campaign, the average cost of staff members, and the number of hours staff members spent on the project. Additional data about staff members or the number of workers who participated in the project may provide some insightful information about what it takes to have a successful campaign.

Lastly, another underlying limitation of this dataset is how well the business or organization performed after the aid from the crowdfunding platforms. After the campaign, data can be collected on what the business do after the outcomes. A dataset for successful businesses can present interesting data on the “trick” for a successful business. Additionally, this dataset can help future start-ups on the success of their campaigns after the crowdfunding campaigns.

Overall, the dataset had valuable and meaningful data and insight on the “trick” of a successful campaign. However, there are several limitations with the dataset that can provide more insightful data on the business and campaign of the start-ups. Discovering what it takes for a successful campaign or discovering “the trick” may have changed due to external variables such as marketing and number of staff. The marketing efforts of a campaign may have affected the outcome of the campaign, due to poor campaign efforts, the business failed. The number of staff could have also contributed to the outcome of the campaign. If the campaign failed or succeeded the number of workers may have impacted the outcome of the campaigns. The last limiting factor of the dataset is the added information about the aftermath of the start-ups after the crowdfunding aid.

## What are some other possible tables and/or graphs that we could create, and what additional value would they provide?

For further analysis of the dataset, several tables and graphs could have been made to offer better understanding to find “the trick” of the success of a campaign. The table and graphs presented from this analysis had importance and impact on the purpose of this research. The presentation of which parent category delivered which of the following categories had significance in the success of a campaign. From the analysis of pivot table (table 1.0), the category with the most success is the theater with 187 successful campaigns. Another meaningful data that had significant value was the sub-categories with the most success. The pivot table (table 2.0) gave importance to which of the sub-categories had more success than the rest. Analyzing the data, it was theater with 187 successful campaigns. However, there could have been several tables and graphs that could have been created to find more insightful information to discover “the trick” of successful campaigns.

The first graph could be the time it took from the start of the campaign until the converted end date. A graph that displays the time it took from the start of the campaign until the end may provide some valuable information on why some campaigns succeeded and why others did not. This graph could have given a more accurate representation of the success of the campaign in terms of time spent on the project and how long it took for the campaign to be deemed successful. More information about time spent on the project may influence the next crowdfunding campaign and consider longer dates for the campaign to run or extend the dates of the campaign. Additionally, the added benefit of a graph that displays the time it takes for a campaign to be successful is finding out how long a campaign lasted before the failed outcome. For further analysis, timely events of a campaign will give an accurate presentation of the progression and the success of the campaign.

In addition to a time event graph, a table that shows the significance value between each category by the funding from the platforms could provide more insightful data about the success of the campaigns. To find this data, a measurement of central tendency may be needed in addition to t-testing and ANOVA testing. The purpose of the table is to find the relation of each category to the percentage funded.

## Conclusion

Overall, the purpose of the research is to find “the trick” of a successful campaign and determine what other possible tables and graphs could provide additional value to the research. For this research, there were limitations found in the dataset that can shed light on what makes a successful campaign and what important data can help discover the research. For future research on the managerial question, some consideration can be given to the possible graphs and tables or potential research outcomes to get more accurate data. This research also has given three conclusions of each pivot tables, from what the table indicates and what future research can be made for future data analysis.