# Excel Challenge - Laura Gabrielson

## Conclusions

Theater (largely plays and musicals) composes a large portion of Kickstarter campaigns – roughly 1/3 of all campaigns are in this category. Filtering theaters out of the pivot charts provides a better visual comparison of how the rest of the categories perform against one another. Theater campaigns also have a pretty good success rate at 60%, making them one of the most successful categories of campaigns.

Music has the highest success rate of all campaigns here at 77%. In addition, many sub-categories of music have 100% success rates. According to this sample, Kickstarter is a really good way to raise money for a music campaigns excluding jazz, faith or world music. Campaigns in the food category have the highest failure rate at 70%.

Some sub-categories of campaigns in this sample are never successful, (e.g. food trucks, animation, video games) while others are 100% successful, ( e.g. rock, documentary, hardware). This is pretty significant and suggests that Kickstarter may not be the best place to fund some campaigns like food truck or video game endeavors while other categories may be well suited for this type of fundraising and tend to be highly successful.

## Limitations

This is only a sample of Kickstarter campaigns (< 10% of the 500K+ campaigns launched to date according to Kickstarter’s website). While a sample size of 4,000 might seem adequate, considering the success rate of this particular sample is 53%, it is not an accurate representation of the success of all Kickstarter campaigns – presenting a major limitation.

According to research done by Statista, the success rate of fully funding a Kickstarter project is 38% as of November 2020. This is a pretty significant discrepancy and we don’t have any details explaining how this sample was created and what criteria was used for campaigns to be included in this data set. We don’t know if this includes all campaigns in these categories for a specific time period and these categories happen to be more successful than others or if these campaigns were included based on some other, unknown criteria that is skewing overall success.

This sample doesn’t accurately represent the success of Kickstarter campaigns as a whole and any conclusions drawn about successful campaigns from this analysis need to take that into consideration. It may or may not represent the overall success of campaigns in the specific categories included, this cannot be determined from the information available.

When looking at what contributes to a Kickstarter campaign’s success, it is useful to evaluate and compare these against unsuccessful campaigns. Another limitation here is the lack of information on canceled campaigns, specifically why they were canceled. In this analysis a canceled campaign is not successful even if it reached its goal and, depending on how success is measured, these may be misrepresented. Many of the canceled campaigns raised a significant amount of money and several even exceeded their goals which by some measures would make them successful – at least at funding the campaign. If we are trying to determine successful campaign funding and not successful business ventures, then canceled projects may need to be re-evaluated for this purpose.

## Other Tables/Graphs

To evaluate the impact of time on a successful vs unsuccessful campaigns, it might be helpful to create a pivot line chart graph that shows state by number of days active. You would need to create another column to calculate days active subtracting the date created from the date ended. This could help determine how time contributes to success, what the ideal period of time is for a campaign and/or at what point additional time won’t increase the chances of a successful campaign. According to Kickstarter, the ideal time for a successful campaign is 30 days or less and anything thereafter is rarely successful. Considering this sample has a higher success rate than usual, it would be interesting to see if this holds true. Also, a stacked line pivot chart that shows campaigns by category, state and number of days active would be helpful to determine if the length of time needed for a successful campaign varies by category.

An example of a table that would be helpful is to look at is the percent funded of each state by category. This would be particularly helpful in looking at successful campaigns, what the average funding level is for each category and how this differs across categories. This would show if the categories with high success rates tend to be overfunded or if they are coming in right at goal. It would also be interesting to look at the canceled campaigns and see what the average funding is by category and if the campaigns that were canceled but reached or exceeded their funding goals are reflected in a specific category.

# Bonus Statistical Analysis

In this example the median summarizes the data more meaningfully because the distribution of backers is highly skewed. For successful campaigns, a minimum of 1, maximum of 26,457, median of 62 and mean of 194 indicate while there are a couple of successful campaigns with a very large number of backers, there are far more with smaller numbers of contributors. There are a couple of outliers with 20K+ backers that are skewing the distribution, making the median a better indicator of central tendency. Looking at the mean (194) might lead to the conclusion that you need nearly 200 people to contribute to a campaign in order for it to be successful, but the median indicates that half of Kickstarter campaigns are successful with less than 62 backers. The same is true for unsuccessful campaigns but to a lesser degree.

There is more variability in successful campaign backers. This makes sense because unsuccessful campaigns have significantly fewer backers - the range, median, mean and variance are all smaller in unsuccessful campaigns.

# Resources

<https://www.statista.com/statistics/235405/kickstarter-project-funding-success-rate/#:~:text=This%20statistic%20shows%20the%20share,gone%20into%20successfully%20launched%20projects>.

<https://www.kickstarter.com/about>