**Report following Excel challenge**

1. **Given the provided data, what are three conclusions we can draw about Kickstarter campaigns?**

Of the more than 4,000 past projects analyzed, the data shows a little over half being successful. This supports our initial assumption of the many challenges faced for these projects to overcome failing. But what are these challenges? According to the data, these vary by project category, and even further subcategory, the timing to get funded, and the overall goal of the funds versus what is actually pledged.

Projects in theater, music, and film have the highest rate of success accounting for more than 75% of all the projects. Of these, music reflects a lower failure rate, and therefore, it seems to be more effective to kickstart projects in this category.

Not all music genres are proven successful either. It’s best to stick with rock or indie rock which amounts to over half of these success. Jazz and faith music are the least considered with a majority if not all failing. If, however, funding in music aren’t the project types desired, then a project in theater proves positive as an alternate selection. These are also not beneficial in all its respective genres as well showing plays to be the most successful, but musicals and spaces to be much less. There are quite a bit of failures for plays, but considering the overall success with close to 70%, it’s worth noting to fund projects in this category.

In addition to categories and genres, it is also good to consider the timing for projects to get funded. January through April shows projects with higher success and lower failures than the other months of the year. In fact, successful projects begin a sharp consistent decline between May through September.

Finally, the outcomes based on goal could be a factor in deciding how much to get funded for. Although a rather decline in in success as more money is being pledged, the data shows a trend of up to $15,000 for funding. Projects are failing to get fully funded between $15,000 to $30,000 with a higher percentage than successful projects. It is worth noting that despite this gap, goals up to $10,000 and also between $35,000 to $45,000 prove the greatest success. It’s understandable how the lower amount is achievable, but why the gap and then a higher success for the expensive projects? Could it be that this range is perceived to be a monetary area that investors feel more comfortable with funding for a higher rate of return.

1. **What are some limitations of this dataset?**

The dataset doesn’t show the rate of return in terms of profitability. After the goal of funding is achieved successfully, at what amount does the project become profitable?

1. **What are some other possible tables and/or graphs that we could create?**

A combined goal versus category table would provide for further analysis in terms of the correlation between the percentage of successful projects in outcomes based on goal for a specific type of project. This would help determine how to fund a project more accurately for different categories.

The field for average donation is calculated and populated according to the number of backers, so a graph showing its trend for different categories and goal could be created to provide further insight in how this relates to successful projects. Perhaps, certain successful projects would show a higher or lower trend in average donation amounts.

**Bonus Statistical Analysis**

1. **Use your data to determine whether the mean or the median summarizes the data more meaningfully.**

In both cases, successful projects have a higher average and median number of backers, but in comparison, the median provides a better insight than the mean because realistically half of successful projects have a much lower number of backers than the average. The median is actually a third of the mean. This is important to know for the sake of not getting discouraged with the overall project funding. If our expectation in the number of backers was set for the average instead of the median, then it would exclude more than two-thirds of all the successful projects which is not accurate nor is it promising.

1. **Use your data to determine if there is more variability with successful or unsuccessful campaigns. Does this make sense? Why or why not?**

There is more variability with successful projects simply because of the significantly higher standard deviation of the number of backers. It does make sense because successful projects attract much lower number of backers than the average (two-thirds less) as explained in the previous question and therefore makes it highly volatile because of the higher standard deviation. At 844 backers, even the standard deviation is more than 4 times than the average number of 194 backers which further proves the significance in the variability with successful campaigns. This further supports our initial assumption of the many challenges faced for these projects to overcome failing. Interestingly, the standard deviation of the number of backers for failed projects is about the same as the median number of backers for successful projects. Could there be a possible correlation between these values that provides for additional insight?