Excel Challenge

Abstract

To organise and analyse a crowdfunding database of 1000 sample projects.

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1. Conclusions on Crowdfunding Campaigns

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

From the data provided, it can be seen that around 57% of campaigns have been successful while 36% have failed. Coincidentally, this percentage seem to match with that of the US which seem to have hosted a majority of these campaigns (763/1000).

Analysing the data further by Category, Sub-Category and Launch Dates, the following conclusions can be made:

1.1. Conclusion 1 based on the Pivot Table using Category:

The crowdfunding campaigns from the given data can be broadly categorised to be under one of the following 9 categories:

i. film & video
ii. food
iii. games
iv. journalism
v. music
vi. photography
vii. publishing
viii. technology
ix. theatre

While all campaigns under Journalism (all hosted in the US) are successful, only 44% of those under Games have been successful. This is by percentage of success.

However, the data shows that the category Theater has highly benefitted from Crowdfunding as 344 campaigns (187 successful) have used the platform for fundraising.

1.2. Conclusion 2 based on the Pivot Table using Sub-Category:

The Categories discussed earlier are further broken down into 24 subcategories. Based on the Pivot table using Sub-Category, it can be seen that the subcategories Plays, Rock and Documentary take the first three places, both in terms of the number of campaigns launched and the success rate.

It can also be inferred from the analysis that the entertainment industry holds an edge over the other Categories and seem to use the crowdfunding platforms effectively.

1.3. Conclusion 3 based on the Pivot Table using Launch Date:

The analysis using the Launch Date shows that though the campaigns start off well with a greater success rate in January, then there is a dip until spring.

The campaigns launched between April to July are more successful as compared to the ones launched later with the peaks in June/July. The ones launched in December haven't done well with success rate at its lowest during this period.

This has been the trend over the last 10 years with a few exceptions.

2. Limitations on the given dataset

What are some limitations of this dataset?

The following data if available, would help campaigners plan to their success: (Johnson, 2022) & (Todorov, 2022)

1. A campaign if successful, when was the goal reached? If this data is available, it will give an idea of how early/late the successful campaigns reached their goal under each category which can be used by new campaigners to plan accordingly.
2. Demographics of Backers: Demographics data such as age, gender, marital status, economic status etc can help campaigners to target potential backers effectively.
3. Rewards: Are the campaigners giving rewards to the backers if successful? Are success rates based on rewards?
4. Marketing: What materials are the campaigners using? Video clips endorsing the products, pamphlets, advertisements in social media etc. and how often do they reach out to the potential backers?
5. Social media: From which platform was the backer redirected for this donation? example Facebook, Twitter etc.
6. Does a backer donate more than once?

3. Other possible graphs/ tables

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

1. Percentage Funded: There are quite a number of failed projects with a funding of more than 90%. This calculation can be used effectively along with the Category to understand how such campaigns can be turned into successful ones.

2. Graphs and tables around Country. This dataset contains data for 7 countries. Improving the analyses around country will help make crowdfunding a success in other parts of the world too.

4. Bonus Statistical Analysis

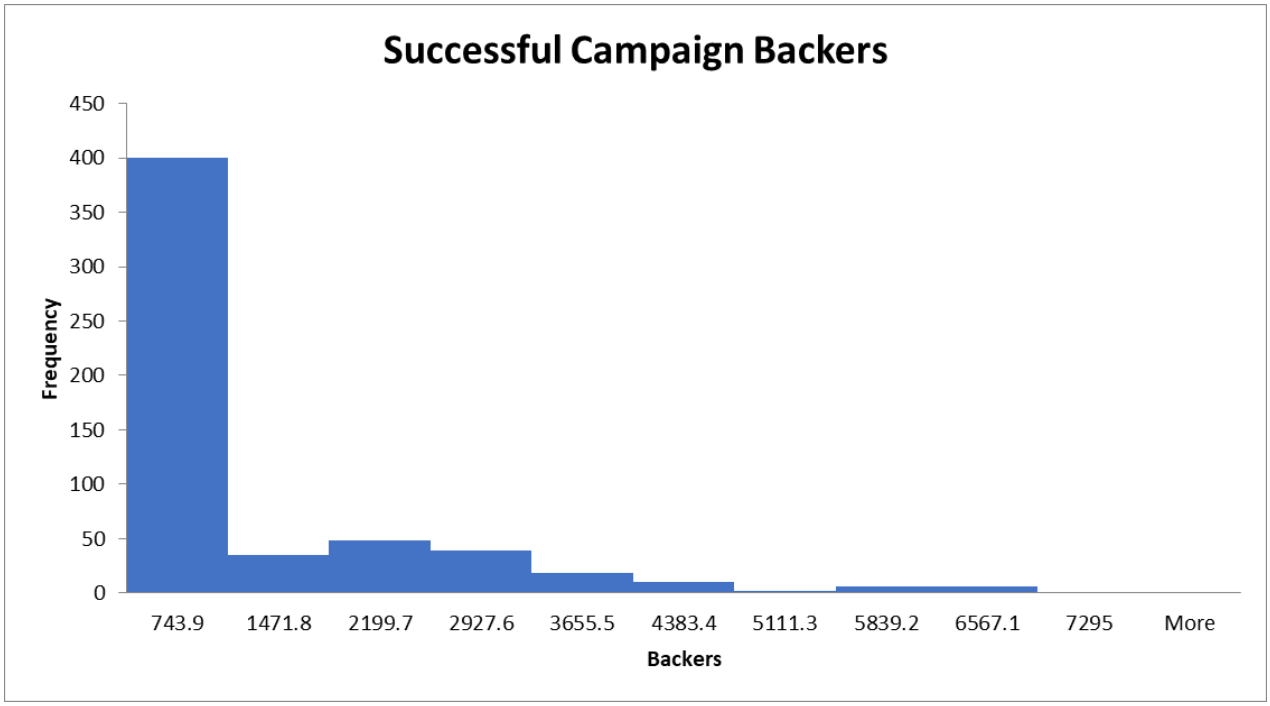
4.1. Mean or Median

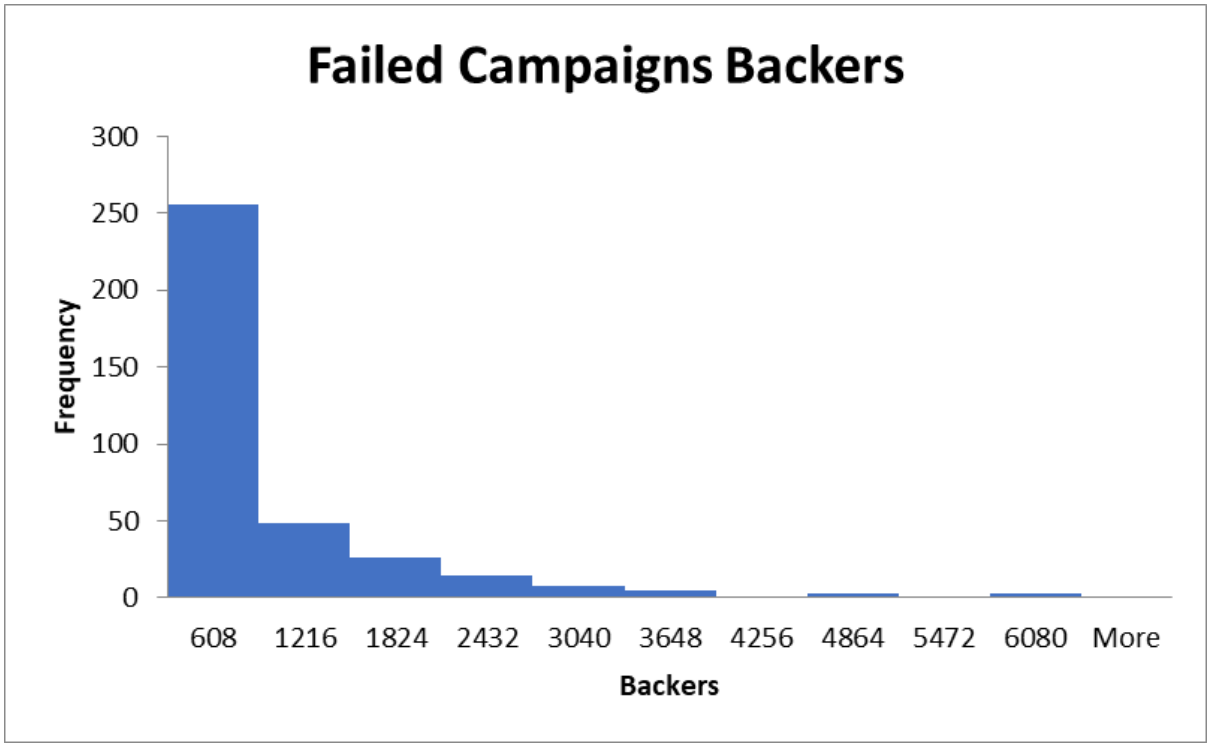
Use your data to determine whether the mean or the median better summarizes the data.

Median summarises the data better as the data is skewed towards the right for both the successful and unsuccessful campaigns.

This can be identified by creating (Herman, 2022)a histogram using the Backers data for the successful and unsuccessful campaigns.

The following are the histograms created for the given data in the excel 'CrowdfundingBook' under the tab 'Bonus Statistical Analysis' using the references (Chan, 2016) & (Herman, 2022)





4.2. Variability with successful and unsuccessful campaigns

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

The smaller the Standard Deviation, the closely clustered the data around Mean. Here for both the successful and unsuccessful campaigns, the Standard Deviation seem to be higher than the Mean and so it indicates that the data is spread widely. (Glen., Unknown)

So here, both the values indicate high variability.

	backers_successful	backers_failed
The mean number of backers	851.1469027	585.6153846
The median number of backers	201	114.5
The minimum number of backers	16	0
The maximum number of backers	7295	6080
The variance of the number of backers	1603373.732	921574.6817
The standard deviation of the number of backers	1266.243947	959.9868133

5. References

Chan, K., 2016. *Youtube.* [Online]
Available at: https://www.youtube.com/watch?v=Giewd9yH4q0
[Accessed 29 August 2022].

Glen., S., Unknown. *"Variability in Statistics: Definition, Examples" From StatisticsHowTo.com: Elementary Statistics for the rest of us!.* [Online]
Available at: https://www.statisticshowto.com/variability/
[Accessed 04 September 2022].

Herman, M., 2022. *Youtube.* [Online]
Available at: https://www.youtube.com/watch?v=-_6yM23kPHc
[Accessed 29 August 2022].

Johnson, S., 2022. *Business News Daily.* [Online]
Available at: https://www.businessnewsdaily.com/4134-what-is-crowdfunding.html
[Accessed 30 August 2022].

Todorov, G., 2022. *Thrive my Way.* [Online]
Available at: https://thrivemyway.com/crowdfunding-statistics/
[Accessed 30 August 2022].