

Challenge 1 – Excel

1. What is the data set? What is the purpose of the project?
  - a. The data set provides information from 1,000 crowdfunding campaigns. The purpose of this project is to analyze and organize the data, present additional statistical information, and create visuals to see if there is a predictable strategy for creating a successful crowdfunding campaign. Data analysis on this worksheet can point out differences between successful and failed campaigns that we can use to highlight helpful insights.
2. Given the provided data, what are three conclusions that we can draw about crowdfunding campaigns?
  - a. The average donation for a campaign is not as influential to success as one might expect. How *much* each backer donates is not as contributing to success as how *many* backers a campaign has. Campaign ID 33 was successful with an average donation of \$33, while Campaign ID 11 was a failure with an almost double average donation of \$112.22. So even if your backers are not contributing much money, as long as one can influence more people to back their campaign, they will have a higher chance of success.
  - b. Out of all the sub-groups, Plays have the most successes AND the most failures. This could simply be because Plays have the most total campaigns overall. It also means that the data sets specifically within Plays campaigns could give us a lot of useful information because they have a “constant” in that they all share a common sub-group. This would also mean that the sub-group of a campaign is not a major contributing factor to success since there was a variety of failures and successes within this one sub-category.
  - c. The data tells us that one of the clearest indicators for whether a campaign will be successful is the initial funding goal. Out of 1,000 campaigns, we found that 3 specific goal ranges had a 100% success rate. Is this only because those goal ranges between \$15,000-\$19,999 and \$30,000-\$34,999 are easier to obtain? Even so, it’s a helpful insight because it means if a campaign starts with this goal, they have a higher chance of success. And it’s possible that if they need more money than this goal range, they could run multiple campaigns with this goal range knowing that these ranges have a high success rate.
3. What are some limitations of this dataset?
  - a. What constitutes a “failed” campaign vs a “successful”? If a campaign were to be \$1 short of goal, would it still be considered a failure? Let’s say for example Campaign A has a goal of \$100 and it raises \$120, that would technically be a success. If Campaign B has a goal of \$10,000 and it raises \$9,750 then it would register as a failure, even though it was more *successful* than Campaign A in terms of how much money was actually raised. This spreadsheet constitutes a failure if the campaign did not reach its funding goal. There could be an argument that the word “success” subjectively could mean how much money

a campaign raised, even if they didn't quite reach their goal. Raising \$1,000 more than another campaign could be a subjective success.

4. What are some other possible tables and/or graphs that we could create, and what additional value would they provide?
  - a. A Line Chart that compared the length of time a campaign ran against the outcome would be interesting to see. We have a graph that shows Launch date of a campaign versus the outcome, but I'd like to know if how long a campaign runs has a strong positive or negative impact on the outcome.
5. Statistical Analysis: Is there more variability in successful campaigns or failed campaigns? Does this make sense? Why or why not?
  - a. There is a greater variance in successful campaigns. This makes sense because while there are outliers in both data sets, successful campaigns have outliers that are larger numbers. As mentioned above, how many backers you get is more important, so successful campaigns tend to have more backers so the higher numbers in the successful data set contribute to a higher variance.

Outcome	Backers_Count	Outcome	Backers_Count
successful	158	failed	0
successful	1425	failed	24
successful	174	failed	53
successful	227	failed	18
successful	220	failed	44
successful	98	failed	27
successful	100	failed	55
successful	1249	failed	200
successful	1396	failed	452
successful	890	failed	674
successful	142	failed	558
successful	2673	failed	15
successful	163	failed	2307
successful	2220	failed	88
successful	1606	failed	48
successful	129	failed	1
successful	226	failed	1467
successful	5419	failed	75
successful	165	failed	120
successful	1965	failed	2253
successful	16	failed	5
successful	107	failed	38
successful	134	failed	12
successful	198	failed	1684

  

Successful Campaigns	
Mean:	851
Median:	201
Minimum:	16
Maximum:	7295
Variance:	1603374
Standard Deviation:	1266

  

Failed Campaigns:	
Mean:	586
Median:	115
Minimum:	0
Maximum:	6080
Variance:	921575
Standard Deviation:	960

