**Module 1 Challenge Report**

**Ed Spiezio-Runyon**

Three Conclusions About Crowdfunding Campaigns

Crowdfunding campaigns can be a runaway success in putting a new product or service to market, giving innovators access to small-scale investors. A crowdfunding campaign can let someone fund their project successfully through a central site at a fraction of the advertising and administrative costs of finding backers.

If this sample dataset of 986 completed or canceled campaigns is representative, approximately 57.3% of campaigns (565) are successful, 36.9% (364) fail, and 5.8% (57) are canceled. Historically, those numbers are far and above the success of other business ventures, implying that these crowdfunding campaigns can greatly improve business success rates.

The ease of setting up a crowdfunding campaign, relative to creating a brick-and-mortar business or launching a new product using the more old-fashioned route, allows for rapid modifications, removal of products, and the addition of incentives to increase sales without large-scale retooling of a massive product creation line. This allows the project managers to be more rapidly responsive to the customer base by allowing them to secure funds prior to committing to the production, unlike more traditional routes.

Limitations of the Dataset

This appears to represent approximately 1/50th of the projects in Kickstarter’s history. However, we don’t know how the sample data was selected, either at random or in blocks collected from different project dates, so we can’t know for certain whether it’s a representative sample.

The pledged amounts can’t be compared readily since they are shown in different currencies. This could be remedied through conversion to a standard currency (although to be accurate across time they would have to be converted at the exchange rates at the time the projects were active), but this is not present in this dataset.

The dataset analysis shows number of backers as a sign of success of a project. However, this isn’t necessarily helpful, since many projects will have backer levels as low as $1 in order to raise additional funds by those who may want to support the project, but don’t want to purchase the final project. The dataset analysis attempts to make the case using an average donation amount, but this still doesn’t consider numbers of micro-donors or even any large donors.

The statistical analysis I’ve included (“Bonus Statistical” tab) shows a very large sample variance of 1.6 million for successful projects and 924,000 for failed projects. The measure for this analysis, however, is the backer count which as discussed above cannot be relied upon as a predictor for success or failure. In this instance, the sample variance of backer counts provides no real usable data on success or failure.

Other Tables/Graphs and Value

I’ve shown a pivot table (“Bonus - Cat vs % Funded” tab) with parent and sub-categories and percent funded, which reveals that certain categories such as theater, film & video, music, and technology are significantly more likely to be successfully funded than others such as journalism.

Interestingly, another statistical summary (“Bonus - % Funded Stats” tab) shows that the difference between success and failure of funding can be as low as 0.33%, with a minimum successful funding percentage of 100.01% and a maximum failure of 99.68%. This could provide insight into the value of those micro-donor options, as it’s entirely possible that even a few more backers at even those low levels could have pushed some of the failures to be successful.

Another pivot table (“Bonus - Cat vs Sub vs Pledge” tab) shows an interesting breakdown between parent category, sub-categories, and the sum of the amounts pledged, which even further reveals some of the unexpected trends (such as theater as the big winner of pledged amounts). However, as noted above, this cannot be a dollar-to-dollar comparison, as it does not take currency exchange rates into consideration. It may be valuable to examine success and failure trends based on specific currencies used, but this would limit the available data for this analysis.