# Analysis

## Written Report

The data represents crowdfunding campaigns, noting values such as their funding goals, number of backers, funding received, and project category. This data may be useful in predicting the chance of success of a new project based on several criteria, but the analysis does not consider differences in country/currency, duration, or whether the platform promoted a campaign.

### Conclusions

#### 1. Backers should expect to see/be asked to fund Theater/Play campaigns

The category theater/plays is an overrepresented population, representing 34% of all campaigns. There were over four times the number of projects in this category than in the next highest subcategory, music/rock, and almost double the next highest top-level category, film & video. Either the platform caters better to the crowdfunding needs of theater/play projects than others or the general population is creating more of these types of projects.

Campaigns in this category should expect a chance of success (41% failed) that is slightly lower than the chance of success for all other categories (38% failed).

#### 2. You are more likely to have successful campaign if it is launched in June or July

More successful campaigns are launched in June or July. These months accounted for 20% of successful campaigns while accounting for 18% of all total campaigns.

August, however, was the worst month for launching a campaign, with 46% of campaigns failing. The difference in the number of successful campaigns between the best month (June) and the worst (August) is 12%. The number of successful campaigns again increased in September (34% failed).

#### 3. A campaign of $1,000 to $4,999 is most likely to be successful

23% of campaigns launched with a goal between $1,000 and $4,999. Of these, 83% were successful. This may be either because backers tend to donate the same amount regardless of project goal or whale backers funding low-goal projects by themselves, but analysis was not conducted comparing goal buckets to average donation amounts or number of backers.

We see a drop off of successful projects at $5,000, however. 31% of campaigns had a goal between $5,000 and $9,999. Of these, 40% failed and another 8% were canceled.

While campaigns of $15-25K and $30-35K showed a 0% failure rate, they only represent 2.4% of all campaigns.

### Limitations and Suggestions for Further Analysis

Analysis was not conducted to examine the influence of country/currency, whether the project was promoted as either a staff pick or in the spotlight, or how long the campaigns ran.

A table examining the relationship of successful campaigns to how long they were open could provide insight on whether premature closure drastically reduces chances of success. This could be filtered to category and launch date.

The data does not indicate whether actions may be taken to gain staff pick or spotlight promotion. A series of tables examining whether the project was promoted with consideration to category, starting or ending day of the week/month, country, goal, or percent funded could help reveal a relationship.

## Statistical Analysis

In both sets, the median represents the data better. Using a histogram, it is easy to see that the mean is skewed as it sits in the middle of a long tail for both sets. This is to be expected. The minimum number of backers is capped at 0 while the maximum has no limit. The median still does not provide a great signal for the data, which has an asymmetric distribution rather than a normal one. The largest buckets of backers are:

* Status: successful -- between 100 and 150
* Status: failed -- between 0 and 20

Comparing campaign types, greater variance appears in the successful campaign data. This makes sense and is expected. Successful campaigns require backers to reach a minimum goal but do not limit the number of backers though a goal is reached. This can lead to the campaigns being overfunded. Conversely, failed campaigns cannot have fewer than zero backers. It is also likely that data will skew towards zero backers as smaller numbers of backers are intuitively indicative of failed campaigns.