

|  |  |  |
| --- | --- | --- |
| Analysis of  Crowdfunding |  | |
| This report provides a summary of the outcome of the Crowdfunding Data Analysis for the Data Analytics Bootcamp October 2024 Module 1 Exercise.  By Amy Tola |  | |
| Time of Year When the crowdfunding campaigns are initiated, seem to have an impact on the success. July is the month in which the highest number of successful campaigns were initiated, with 58 out of 565 or 10.2% of the successful campaigns being initiated in that month. June is the second most successful month, with 55 out of 565 or 9.7% succesful occurring in June.  Similarly, the highest number of failed campaigns were initiated in January with 36 out of 364 or 9.9%. August was the month with the second highest rate if failed campaings initiated, with 35 out of 364 or 9.6%. Figure 1 provides an overview of Campaign outcome by month.  Figure 1 Category There are observable patterns associated with the category of campaigns being selected also. As evident in Figure 2 below, Theater has both the highest number of campaigns overall with 34.4% of all campaigns being theater, and the the highest number of successful campaigns, with 33% of the succesful campaigns belonging to this category. Theater also has the highest number of failed campaigns, with 36.2 percent of failed campaigns belonging to this category. Journalism campaigns had the lowest number of compaigns, with only 4 campaigns launchedin this category, but all four of these campaigns were successful, so even though the occurrences are low, the success rate is 100%.  Figure 2 | |  |
| Goal Analysis When reviewing the outcome of the campaigns based on the funding Goals, there were three Goal Ranges that were 100% successful, as shownin Figure 3 below, those ranges are: $15,000 - $19,999, $20,000-$24,999 and $30,000 to $34,999. The Goal ranges with the highest failure rates were $10,000 to $14,999 and Greater than $50,000. | |  |

Figure 3

# Backer Analysis

Table 1 provides a statistical summary of the success of the crowdfunding campaigns by the number of backers. When comparing these data sets, the number of backers has significance when compared to the outcome. Specifically, the average number of backers for the successful campaigns is 851.15, much higher than the average of 585.62 backers for the failed campaigns. The median value of the successful campaigns is 201, where the median of the Failed campaigns is 114. The maximum number of backers for the successful campaigns (7295) is significantly higher than the maximum amount on the failed campaigns of 6080 on the successful campaigns. For the purpose of this exercise, the average number of backers seems the most relevant. Since the funds require a minimum donation amount of one might conclude that campaigns with higher numbers of backers are more likely to be successful as this data supports. Since the median is the Middle value of the population, its relevance on outcome is unclear.

Table 1

|  |  |  |  |
| --- | --- | --- | --- |
| **Successful Campaign Backers Data** | | **Failed Campaign Backers Data** | |
| **Mean** | 851.15 | **Mean** | 585.62 |
| **Median** | 201.00 | **Median** | 114.50 |
| **Minimum** | 16.00 | **Minimum** | 0.00 |
| **Maximum** | 7295.00 | **Maximum** | 6080.00 |
| **Variance** | 1603373.73 | **Variance** | 921574.68 |
| **StDevP** | 1266.24 | **StDevP** | 959.99 |

# Summary of Conclusions

Based on the crowdfunding data as presented, the following observations were made:

* Crowdfunding campaigns that were initiated in July had the highest success rates.
* Campaings with the goal within the ranges of: $15,000 - $19,999, $20,000-$24,999 and $30,000 to $34,999, had higher success rates. The very low and very high goal ranges had higher failure rates.
* The number of backers for successful campaigns was higher on average than the unsuccessful campaigns, indicating more backers is related to success of the campaign.
* Theater is the most popular type of campaign with 34.4% of all compaigns being this type.
* Jouralism had the highest success rate at 100%, but the lowest occurrence with 4 total.

It should be noted, that the majority of samples in this data set are from the US, so the conclusions made may vary regionally. To be more globally applicable, a larger dataset including more international data should be reviewed. Additionally, in order to understand the correlation between some of these variables that are correlated to successful outcomes, the following additional evaluations are recommended:

* A line graph that assesses Parent Cateogry by month with report filters for Country and outcome. By filtering for outcome of successful and country, you could draw more meaningful conclusions about what types of campaigns are successful during what time of year in each country. For example, although theater is the most common category overall, in August in the US theater has the lowest number of successful campaigns compared to the rest of the year.
* If we added the “Mode” to our statistical analysis of the number of backers and outcome, you would see that the most frequent value in the Failed campaigns is 1 and 80 in the successful campaigns.