Outline

Introduction

This analysis report was taken from the data of 1,000 sample projects with information and outcomes from platforms such as Kickstarter and Indiegogo to be analyzed and visualized to discover hidden trends amongst the successful and failed projects. The data given is from the years 2010 to 2020 and includes data from seven different countries. The analysis will begin with the conclusions deducted from the dataset. Then vital KPI's, limitations, statistical analysis, and suggestions for further study of the data will be given.

Vital Key Performance Indicators (KPI's)

Based on the data provided and arranged, the findings indicate the following:

Project Category Popularity and Successes

The most common project in crowd-funding from this dataset is theatre leading with 344 total projects that are all listed in one sub-category: plays. Out of 344 projects, there were 187 successful plays.

Film and video is the second most common parent category with 178 total projects and six sub-categories of: animation, documentary, drama, science fiction, shorts, and television. Out of 178 total projects, 102 were successful and the most successful sub-category was 'documentary' with 34 out of 60 successful projects.

Music is the third most common parent category with 175 total projects and six sub-categories of: electric music, indie rock, jazz, metal, rock, and world music. Out of 175 total projects, 99 were successful. 'Rock' is the most common sub-category of music with 49 out of 85 successful projects.

The least common parent category is journalism with 4 projects all in the sub-category of: audio. 4 out of 4 projects were successful in audio.

The second lowest number of projects in the parent category of photography has 42 projects and only one sub-category: photography books. 26 out of 42 photography books were successful.

Time of Year Created

When looking at the time of year when projects were created, the highest success rates for projects appear when the date created is in the months of June and July. While the number of failed projects during these months is around or sightly below the average of 30, the number of successful projects is significantly above the average number of 47 with June having 55 successful projects and a 63% success rate and July having 58 successful projects and a 62% success rate.

The months showing the lowest success rates are December and August. December shows slightly above the average failures with 32 and only 42 successes making December as a start date only a 50% chance of success, and the month with the lowest rate of success is August with 35 failed projects, only 41 successful projects leaving only a 48% chance of success for projects created in August.

Goal Ranges and Success Rates

Goal amounts that were funded ranged from less than 1000 to equal to or over 50000. The goal ranges with the most projects were 5000 to 9999, greater than or equal to 50000, and 1000 to 4999. Of these three ranges, the highest success rate falls in the range of 1000 to 4999 with an 83% success rate and only 16% rate of failure. The range of 5000 to 9999 had a 52% success rate and a 40% failure rate, and the range of greater than or equal to 50000 had only a 37% success rate and a 53% rate of failure.

While some goal ranges had higher success rates and lower failure rates, the number of projects in those categories was minimal compared the categories with the most projects and data available. The three ranges with low total projects but the highest percentage of success were : 15000 to 19999, 20000 to 24999, and 30000 to 34999 with 100% success rate, but only 7-10 projects per range compared to several hundred projects in the above-listed ranges.

Limitations of the Dataset

The limitations of this dataset are:

1. The data ends in 2020, which is now four years old, and much will have changed in categories, platforms, economics, and outcomes since then.
2. The data does not specify the platform that each project came from in order to determine the best platforms to utilize in crowd-funding.
3. The data has several countries listed, but the vast majority of data are taken from the US leading the user to be able to sort by country, but not getting a true picture of countries other than the US.

Statistical Analysis of Backers

The chart below shows the mean, median, minimum, maximum, variance, and standard deviation of the number of backers for successful and failed projects. While the median number of backers for projects is within a smaller range for success or failure, the mean number of backers shows us that, on average, successful projects have more backers, making a higher number of backers have a higher chance of success for a project. Sharing the mean number of backers with a client could be more helpful in achieving a higher rate of success.

Backers	Successful	Failed
The mean number of backers	851.15	585.62
The median number of backers	201.00	114.50
The minimum number of backers	16.00	0.00
The maximum number of backers	7295.00	6080.00
The variance of the number of backers	1606216.59	924113.45
The standard deviation of the number of backers	1267.37	961.31

Conclusions

The top three conclusions from this dataset analysis are:

1. Theatre, documentaries, and rock music are the most popular projects and had the highest project counts funded out of the dataset.
2. A project created in June or July may have a higher chance of success while a project created in August or December may have a lower chance of success.
3. A higher number of backers with a medium to lower amount of money as a goal has a higher chance of being funded.

Suggestions for Additional Tables/Graphs

Additional suggestions for tables and graphs include:

1. Analyze and visualize the percentages of success rates within the most popular categories to determine not just the counts of successes and failures but also the percentage of success and failures for categories and sub-categories with the highest amount of projects.
2. Visualize the percentage of success and failures for each month projects were created as well as the data to look at when projects ended or the length of the project to determine if project length or deadline has an impact on the success or failure of the project.
3. Use the number of backers, but also the average number of donations or average percent of project goal donated per backer to get a better idea of backer numbers and amounts needed to successfully fund a project.

Added Value for each number:

1. Looking at the percentage of success and failure within the most popular categories can give a better understanding of which parent categories and sub-categories are the most funded rather than simply looking at the successful count or the percentage successful.

2. Utilizing the start dates, end dates, and length of projects can provide more data to help determine end dates and project lengths that may have increased chances of success.

3. Visualizing the average percentage of a donation from backers in successful projects can assist in marketing strategies and goals for a new project.