Hidden Trends in Kickstarter Data

Hitting the Goal with Kickstarter

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# Introduction

Kickstarter is a crowdfunding platform that was launched in 2009 with the goal of helping “bring creative projects to life.” In the intervening years, the site has connected hundreds of thousands of creative projects with millions of backers with over $4 billion pledged to Kickstarter projects. Project creators choose a deadline and a minimum funding goal for their project. If the goal is not met by the deadline, no funds are collected. To date, 157,049 projects have successfully reached their funding goal.

Kickstarter began publishing their data in 2012. Allowing access to Kickstarter data gives creators the opportunity to analyze and understand what makes for a successful project. In this study, we analyzed a database of four thousand past projects in order to uncover any hidden trends and answer the following questions:

1. What conclusions can we make about Kickstarter campaigns based on this dataset?

2. What are some of the limitations of this dataset?

3. What how else could we analyze and visualize this data in future studies?

## Determining Success by Project Category

Our initial analysis organized the projects in the dataset by category to determine how many projects of each type were launched, how many succeeded in achieving their funding goals, how many failed, and how many were cancelled or were currently “live.” In this dataset, the projects fell into nine categories: film and video, food, games, journalism, music, photography, publishing, technology, and theater. Theater projects were the most common with nearly double the number of projects (1393) than the next most popular category of music, which had 700 projects in the dataset (Table 1). Theater projects also made up the largest number of successful projects in the dataset; however, visualization of the data (Figure 1) suggests that proportionally music and film/TV projects have a better success to failure ratio. Determining success rates as a percentage of total projects initiated for each category would be an informative future analysis.

**Table 1. Number of Projects in Each Category by Status (Successful, Live, Failed, or Cancelled)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| country | (All) |  |  |  |  |
|  |  |  |  |  |  |
| **Count of state** | **Column Labels** |  |  |  |  |
| **Row Labels** | **successful** | **live** | **failed** | **canceled** | **Grand Total** |
| film & video | 300 |  | 180 | 40 | 520 |
| food | 34 | 6 | 140 | 20 | 200 |
| games | 80 |  | 140 |  | 220 |
| journalism |  |  |  | 24 | 24 |
| music | 540 | 20 | 120 | 20 | 700 |
| photography | 103 |  | 117 |  | 220 |
| publishing | 80 |  | 127 | 30 | 237 |
| technology | 209 |  | 213 | 178 | 600 |
| theater | 839 | 24 | 493 | 37 | 1393 |
| **Grand Total** | **2185** | **50** | **1530** | **349** | **4114** |

**Figure 1. Project Status by Category**

Furthering this analysis, we then quantified project status by subcategory (Table 2). From this breakdown, we could determine that plays were the most popular project in the dataset and also made up the largest total number of successful projects. Again, visualization of the data in Figure 2 shows that nearly one-third of plays failed or were cancelled. Therefore, despite having the highest raw number of successful projects, the success rate of plays is much lower than several other subcategories, many of which show 100% success – documentary film, hardware, rock music, and television being a few examples. It is also clear from this data that certain subcategories present challenging odds at successfully finding funding with many subcategories showin 100% failure rats, including animation, drama, jazz, mobile games, and restaurants.

**Table 2. Number of Projects in Each Subcategory by Status (Successful, Live, Failed, or Cancelled)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| country | (All) |  |  |  |  |
| Category | (All) |  |  |  |  |
|  |  |  |  |  |  |
| **Count of state** | **Column Labels** |  |  |  |  |
| **Row Labels** | **successful** | **live** | **failed** | **canceled** | **Grand Total** |
| animation |  |  | 100 |  | 100 |
| art books |  |  |  | 20 | 20 |
| audio |  |  |  | 24 | 24 |
| children's books |  |  | 40 |  | 40 |

**Table 2. (Continued)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Count of state** | **Column Labels** |  |  |  |  |
| **Row Labels** | **successful** | **live** | **failed** | **canceled** | **Grand Total** |
| classical music | 40 |  |  |  | 40 |
| documentary | 180 |  |  |  | 180 |
| drama |  |  | 80 |  | 80 |
| electronic music | 40 |  |  |  | 40 |
| faith |  | 20 | 40 |  | 60 |
| fiction |  |  | 40 |  | 40 |
| food trucks |  |  | 120 | 20 | 140 |
| gadgets |  |  | 20 |  | 20 |
| hardware | 140 |  |  |  | 140 |
| indie rock | 140 |  | 20 |  | 160 |
| jazz |  |  | 60 |  | 60 |
| makerspaces | 9 |  | 11 |  | 20 |
| metal | 20 |  |  |  | 20 |
| mobile games |  |  | 40 |  | 40 |
| musical | 60 |  | 60 | 20 | 140 |
| nature |  |  | 20 |  | 20 |
| nonfiction | 60 |  |  |  | 60 |
| people |  |  | 20 |  | 20 |
| photobooks | 103 |  | 57 |  | 160 |
| places |  |  | 20 |  | 20 |
| plays | 694 | 19 | 353 |  | 1066 |
| pop | 40 |  |  |  | 40 |
| radio & podcasts | 20 |  |  |  | 20 |
| restaurants |  |  | 20 |  | 20 |
| rock | 260 |  |  |  | 260 |
| science fiction |  |  |  | 40 | 40 |
| shorts | 60 |  |  |  | 60 |
| small batch | 34 | 6 |  |  | 40 |
| space exploration | 40 |  | 2 | 18 | 60 |
| spaces | 85 | 5 | 80 | 17 | 187 |
| tabletop games | 80 |  |  |  | 80 |
| television | 60 |  |  |  | 60 |
| translations |  |  | 47 | 10 | 57 |
| video games |  |  | 100 |  | 100 |
| wearables | 20 |  | 120 | 60 | 200 |
| world music |  |  |  | 20 | 20 |
| **Grand Total** | **2185** | **50** | **1530** | **349** | **4114** |

**Figure 2. Project Status by Subcategory**

## Determining Success Over Time

Our next analysis looked at the success of projects over time. We organized the data for all categories/subcategories by the month in which the project was created, including all years within the dataset, and then quantified the projects by status (Table 3). From this analysis we could determine that June was the overall most popular month to initiate a project although project success peaked in May (Figure 3). The total number of projects launched and the number of successful projects reached its minimum in December, which was the only month in which failures exceeded successes.

**Table 3. Number of Projects per Month by Status (Successful, Live, Failed, or Cancelled)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Category | (All) |  |  |  |
| Years | (All) |  |  |  |
|  |  |  |  |  |
| **Count of state** | **Column Labels** |  |  |  |
| **Row Labels** | **successful** | **failed** | **canceled** | **Grand Total** |
| Jan | 184 | 148 | 34 | 366 |
| Feb | 202 | 106 | 27 | 335 |
| Mar | 179 | 108 | 28 | 315 |
| Apr | 193 | 102 | 27 | 322 |
| May | 232 | 126 | 26 | 384 |
| Jun | 213 | 148 | 27 | 388 |
| Jul | 192 | 148 | 44 | 384 |
| Aug | 167 | 134 | 32 | 333 |
| Sep | 148 | 127 | 24 | 299 |
| Oct | 184 | 150 | 20 | 354 |
| Nov | 180 | 114 | 37 | 331 |
| Dec | 111 | 119 | 23 | 253 |
| **Grand Total** | **2185** | **1530** | **349** | **4064** |

**Figure 3. Number of Projects by Status Over Time**

## Determining Success by Funding Goal

Finally, we analyzed the data based on the project creator’s funding goal to determine if the size of the project affected the success rate. For this analysis we broke down the funding goal limit into twelve ranges beginning with goals of less than $1000 and moving up to goals over $50,000 (Figure 4). From this, we can determine that project success is inversely related to the funding goal for projects less than $10,000 with success generally leveling off around 40-50% for projects between $10,000 and $40,000. Projects with goals greater than $50,000 had the lowest success rate at 19%.

**Figure 4. Success Rate (%) Based on Project Funding Goal**

## Conclusions

From the analysis above, we can begin to draw some conclusions about successful Kickstarter projects. First, although theater projects comprise the largest number of successful Kickstarter projects by category, evaluation of subcategory data reveals that other types of projects have a greater likelihood of success with several subcategories showing 100% success rates within the dataset. Second, projects are most likely to succeed if launched in the beginning of the year with the number of successful projects peaking in May. Furthermore, projects initiated in December are least likely to succeed, possibly due to the competing financial demands on backers resulting from the Christmas holiday season (especially given that the dataset is heavily weighted toward US projects). Finally, we can conclude that projects with smaller funding goals (less than $10,000) are the most likely to succeed; projects with goals of less than $1000 had the highest success rate at 71%. The leveling off of the success rate above $10,000 could be reflective of the fact that above a certain dollar threshold projects likely must attract funding from backers that extend beyond the circle of friends, family and acquaintances that surround the project creator(s). Smaller projects may be able to rely on funding from networks of stakeholders, whereas larger funding goals require that the project entice backers through word-of-mouth and the merits of the idea.

With only 4000 entries, the size of this dataset could be a limiting factor considering that this sample may not be fully representative of the full Kickstarter data set. In particular, we do not know if this data set is comprised of randomly sampled Kickstarter projects. The way that the data were compiled could result in skewed data. A larger data set, one that represented more categories of projects and more countries, or a data set that was randomly sampled from the full Kickstarter data source might generate more informative results.

Additional analysis on this dataset could include tables/graphs depicting the rate of successful projects by category as a percentage of total projects initiated for each type. This would give us a better understanding of what types of projects are popular among backers, and not just which ones are popular amongst creators. Analyzing backer counts would also be informative. Determining which projects attracted larger numbers of backers could provide more usable information about what types of projects take off by word-of-mouth or generate buzz as opposed to projects that simply have rich benefactors. An analysis of the average donation versus the size of the project could also provide similar insights.