

## Delve into Kickstarter

### Question 1:

- a) The data reveals that theater, music, and film & video are highly successful while publishing, food, and journalism are not.

Count of state	Column Labels				
Row Labels	canceled	failed	live	successful	Grand Total
theater	3%	35%	2%	60%	100%
music	3%	17%	3%	77%	100%
film & video	8%	35%	0%	58%	100%
technology	30%	36%	0%	35%	100%
photography	0%	53%	0%	47%	100%
games	0%	64%	0%	36%	100%
publishing	13%	54%	0%	34%	100%
food	10%	70%	3%	17%	100%
journalism	100%	0%	0%	0%	100%
Grand Total	8%	37%	1%	53%	100%

For example, this trend is stable along countries like USA, Great Britain, and New Zealand.

country	US					country	GB				
Count of state	Column Labels					Count of state	Column Labels				
Row Labels	canceled	failed	live	successful	Grand Total	Row Labels	canceled	failed	live	successful	Grand Total
theater	3%	38%	1%	58%	100%	theater	2%	25%	2%	72%	100%
music	3%	17%	3%	77%	100%	music	3%	21%	3%	74%	100%
film & video	7%	31%	0%	62%	100%	technology	23%	36%	0%	42%	100%
technology	29%	33%	0%	38%	100%	film & video	4%	57%	0%	40%	100%
publishing	12%	49%	0%	39%	100%	photography	0%	60%	0%	40%	100%
photography	0%	54%	0%	46%	100%	games	0%	52%	0%	48%	100%
games	0%	65%	0%	35%	100%	publishing	18%	47%	0%	35%	100%
food	9%	68%	2%	20%	100%	food	10%	80%	10%	0%	100%
journalism	100%	0%	0%	0%	100%	Grand Total	4%	34%	1%	61%	100%
Grand Total	8%	36%	1%	54%	100%						

country	NZ				
Count of state	Column Labels				
Row Labels	canceled	failed	successful	Grand Total	
theater	20%	40%	40%	100%	
film & video	0%	0%	100%	100%	
technology	60%	40%	0%	100%	
publishing	0%	100%	0%	100%	
Grand Total	33%	42%	25%	100%	

Interestingly, the USA, Great Britain, and Canada makes up 92% of the Kickstarter projects locations overall while the USA has a 75.6% success rate when state is broken-down.

Row Labels	Count of state	Country
US	73.8%	United States
GB	14.7%	United Kingdom
CA	3.5%	Canada
AU	1.8%	Australia
DE	1.3%	Germany
IT	0.7%	Italy
FR	0.7%	France
NL	0.5%	Netherlands
ES	0.5%	Spain
SE	0.5%	Sweden
IE	0.4%	Ireland
DK	0.3%	Denmark
MX	0.3%	Mexico
NZ	0.3%	New Zealand
NO	0.2%	Norway
CH	0.1%	Switzerland
AT	0.1%	Austria
HK	0.1%	Hong Kong
BE	0.0%	Belgium
LU	0.0%	Luxembourg
SG	0.0%	Singapore
Grand Total	100%	

Count of state	Column Labels				
Row Labels	canceled	failed	live	successful	Grand Total
US	73.6%	71.7%	66.0%	75.6%	73.8%
GB	7.2%	13.4%	16.0%	16.8%	14.7%
CA	4.9%	4.2%	2.0%	2.9%	3.5%
DE	0.9%	1.8%	0.0%	1.1%	1.3%
AU	4.0%	2.7%	0.0%	0.9%	1.8%
ES	0.3%	0.6%	0.0%	0.5%	0.5%
FR	1.4%	0.7%	4.0%	0.5%	0.7%
IE	0.6%	0.3%	2.0%	0.4%	0.4%
IT	0.9%	1.2%	0.0%	0.3%	0.7%
SE	1.4%	0.6%	0.0%	0.3%	0.5%
DK	1.1%	0.4%	0.0%	0.2%	0.3%
NZ	1.1%	0.3%	0.0%	0.1%	0.3%
AT	0.0%	0.1%	2.0%	0.1%	0.1%
NL	1.1%	0.9%	2.0%	0.1%	0.5%
LU	0.0%	0.0%	0.0%	0.1%	0.0%
NO	0.0%	0.3%	0.0%	0.1%	0.2%
BE	0.0%	0.1%	0.0%	0.0%	0.0%
SG	0.0%	0.0%	0.0%	0.0%	0.0%
CH	0.9%	0.1%	0.0%	0.0%	0.1%
MX	0.3%	0.5%	6.0%	0.0%	0.3%
HK	0.3%	0.1%	0.0%	0.0%	0.1%
Grand Total	100%	100%	100%	100%	100%

- b) Secondly, Plays in the category of theater performed well while Rock, Classical Music, Electrical Music, Pop, and Metal performed 100% successfully as a percent of Row Total.

Count of state	Column Labels				
Row Labels	canceled	failed	live	successful	Grand Total
theater	3%	35%	2%	60%	100%
plays	0%	33%	2%	65%	100%
spaces	9%	43%	3%	45%	100%
musical	14%	43%	0%	43%	100%
music	3%	17%	3%	77%	100%
rock	0%	0%	0%	100%	100%
indie rock	0%	13%	0%	88%	100%
faith	0%	67%	33%	0%	100%
jazz	0%	100%	0%	0%	100%
classical music	0%	0%	0%	100%	100%
electronic music	0%	0%	0%	100%	100%
pop	0%	0%	0%	100%	100%
world music	100%	0%	0%	0%	100%
metal	0%	0%	0%	100%	100%

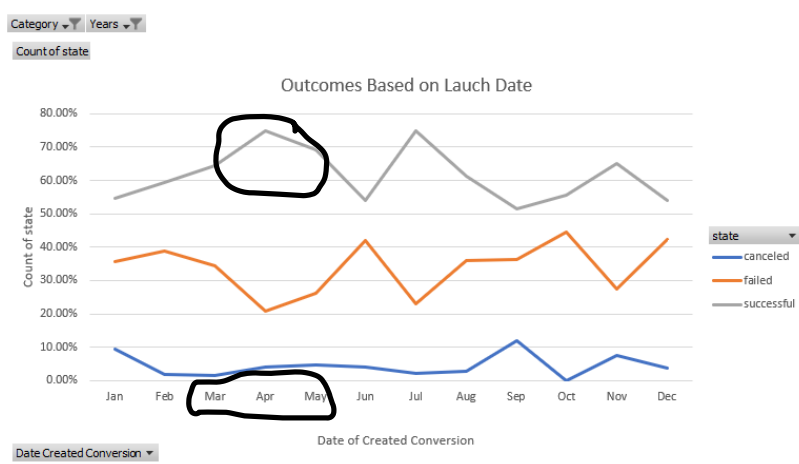
Additionally, Video Games, Mobile Games, Places, Nature, People, and Restaurants had 100% failure rate as a percent of Row Total.

games					
video games	0%	100%	0%	0%	100%
tabletop games	0%	0%	0%	100%	100%
mobile games	0%	100%	0%	0%	100%
photography	0%	53%	0%	47%	100%
photobooks	0%	36%	0%	64%	100%
places	0%	100%	0%	0%	100%
nature	0%	100%	0%	0%	100%
people	0%	100%	0%	0%	100%
food	10%	70%	3%	17%	100%
food trucks	14%	86%	0%	0%	100%
small batch	0%	0%	15%	85%	100%
restaurants	0%	100%	0%	0%	100%

- c) In addition, including only theater, music, and film & video, May and June tend to have a high rate of success while December has the lowest rate of success.

Count of state	Column Labels					
Row Labels	canceled	failed	live	successful	Grand Total	
Jan	6.06%	26.06%	1.21%	66.67%	100.00%	
Feb	1.61%	25.27%	8.60%	64.52%	100.00%	
Mar	2.79%	24.02%	14.53%	58.66%	100.00%	
Apr	1.74%	29.07%	0.00%	69.19%	100.00%	
May	2.16%	26.41%	0.00%	71.43%	100.00%	
Jun	1.94%	27.18%	0.00%	70.87%	100.00%	
Jul	3.16%	30.53%	0.00%	66.32%	100.00%	
Aug	4.37%	32.24%	0.00%	63.39%	100.00%	
Sep	2.70%	31.76%	0.00%	65.54%	100.00%	
Oct	0.57%	37.71%	0.00%	61.71%	100.00%	
Nov	2.78%	27.78%	0.00%	69.44%	100.00%	
Dec	3.51%	37.72%	0.00%	58.77%	100.00%	
Grand Total	2.72%	29.29%	2.10%	65.89%	100.00%	

For the most recent year with complete data for the entire year, successful rate was highest for theater, music, and film & video in the months of March, April, and May.



## Question 2:

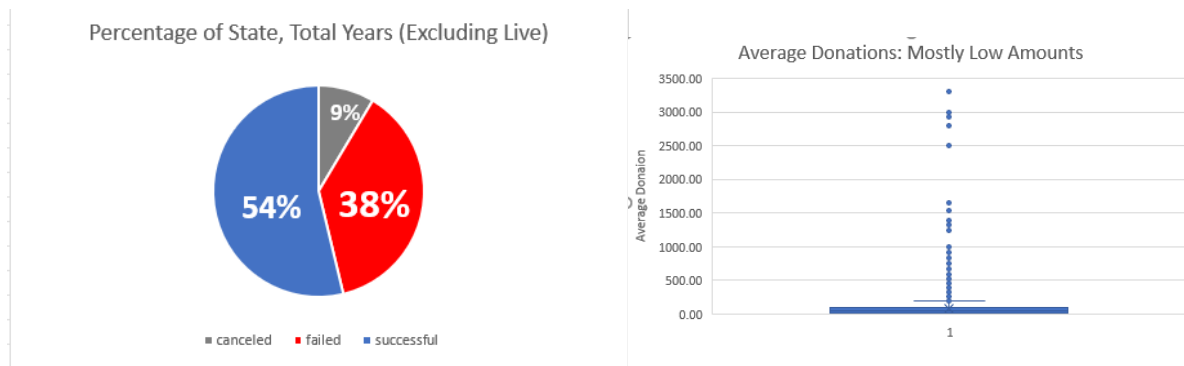
One limitation of this data set is that the data is outdated. The most recent year with complete data is 2016, which is seven years old. A lot of developments and trends could happen to the field and the Kickstarter domain. Additionally, the data did not account for variable like gender, culture, and education level of the Kickstarter project members. These data variables could shed some light on successes and failure rate.

## Questions 3:

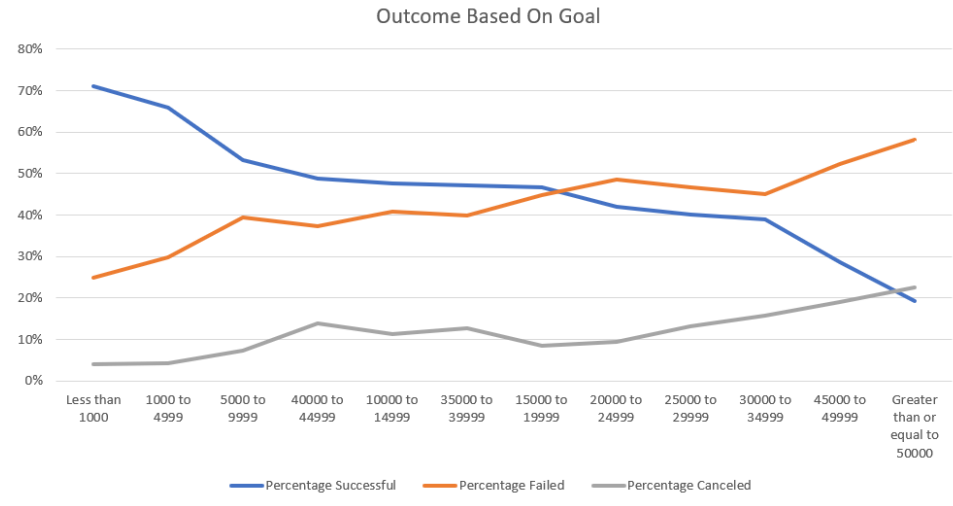
To visualize the Staff picks along the state of the project (successful, failed, etc.) along the columns and values while looking at the percentage of row total, we see that staff picks are more successful (87%) than projects that are not staff picks, which are successful by only 48%.

Count of state	Column Labels				
Row Labels	canceled	failed	live	successful	Grand Total
FALSE	10%	41%	1%	48%	100%
TRUE	1%	12%	0%	87%	100%
Grand Total	8%	37%	1%	53%	100%

Finally, the history of success (54%) vs. failure (38%) is favorable. With the average donation amount low and little to no financial risk to the project starter, Kickstarter is a great way to raise necessary funds for projects that might never get launched the traditional way. My call to action is to start a theater, music, and film & video project in May and June, especially Plays and Rock, Classical Music, Electrical Music, Pop, or Metal music projects.



Additionally, I would ask for only \$10,000 as a goal for funding (Bonus 1).



## Addendum

### Bonus Question 2

The median describes the data better as there are outliers. Since the means are much larger than the median for both successful and failed groups, the data is skewed to the left with large outliers. The variance of successful is much larger and thus, has more variability. This makes sense since popular Kickstarter projects seems to gain a larger variability of backers. A successful Kickstarter project has different qualities that are viewed differently by different types of backers while a failed Kickstarter project has consistent qualities that backers recognize that lead it to a negative outcome. In addition, a two-sample t-test reveals that the means of the outcome are significantly different ( $p < .0001$ ). Yet, the limitation of conducting a test with the mean is the poor representativeness of the data with the mean compared to the median.

t-Test: Two-Sample Assuming Unequal Variances		
	Variable 1	Variable 2
Mean	194.4251716	17.70980392
Variance	713167.3791	3775.689439
Observations	2185	1530
Hypothesized Mean Difference	0	
df	2217	
t Stat	9.744704727	
P(T<=t) one-tail	2.66678E-22	
t Critical one-tail	1.645541227	
P(T<=t) two-tail	5.33356E-22	
t Critical two-tail	1.961034596	

### References

Topic	Cells	Source
Splitting a cell by delimiter	Column Q and Column R	<a href="https://www.howtoexcel.org/tutorials/split-text-by-delimiter/">https://www.howtoexcel.org/tutorials/split-text-by-delimiter/</a>
Converting Timestamp to Date	Column S and Column T	<a href="https://www.extendoffice.com/documents/excel/2473-excel-timestamp-to-date.html">https://www.extendoffice.com/documents/excel/2473-excel-timestamp-to-date.html</a>