# Analysis and Recommendations on Kickstarter Campaign

Objective:

Analyze the dataset on the Kickstarter campaigns containing the outcome, length, goal, and amount pledged, etc. Drive recommendations on how to set up the campaign for our client who wants to launch a board game project through funding raised on Kickstarter.
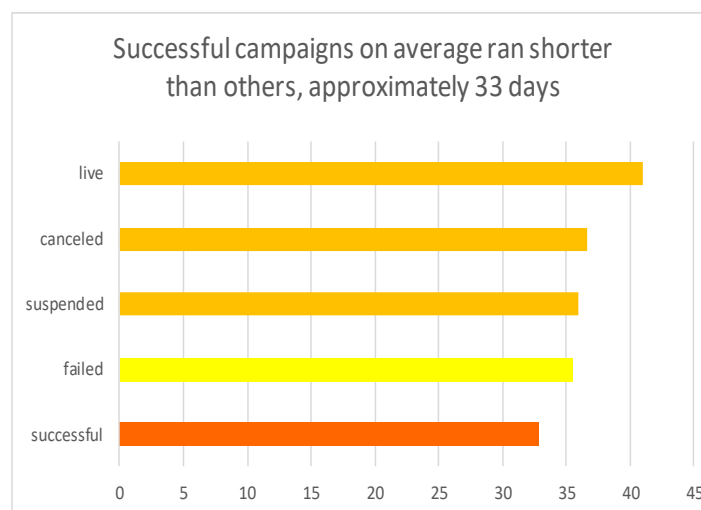
Analysis on Kickstarter Campaigns:

Successful campaigns on average raised US$23,117, which is 15 times more than failed campaigns.
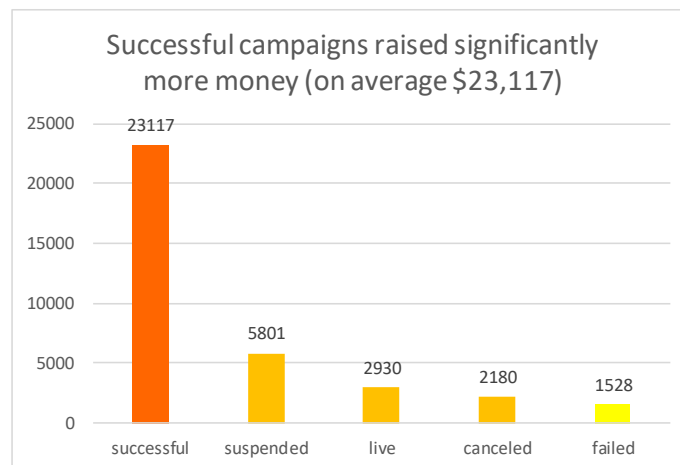

Length

Successful campaigns on overage ran about 33 days, which is slightly shorter than unsuccessful ones. However, the differences are not significantly large.

Categories

The top three categories with the most backers are Film & Video, Music, and Publishing with an average length of 35 days, while the bottom three are Crafts, Dance, and journalism with an average of 33 days. Interestingly, the most backed categories are different from those that attracted the most money. The top three categories that have raised the most money are Design, Games, and Technology, while the bottom three are Theater, Publishing, and Crafts. It's understandable that backers would tend to contribute more to campaigns that offer interesting and valuable rewards, which in a way explained why Design, Games and Technology would raise more money than Film, Music, and books.
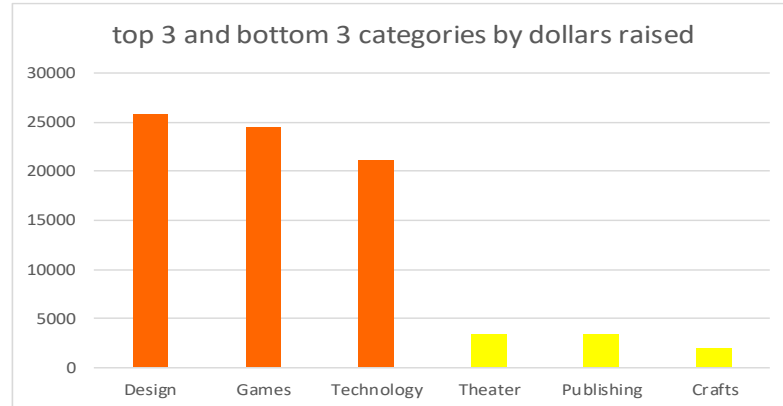

The takeaways from the above analysis are:

1. Games category, which is where our client falls into, have great potentials to raise money on Kickstarter platform. On average, a campaign under Games category raise $24,396.

2. In order to launch a successful campaign, it's not enough just to attract a large number of backers. We also need to design attractive rewards to make each backer more willing to contribute more money.

Countries

The top three countries with the most successful campaigns in terms of dollars are the U.S., the UK and Canada. Most of the campaign is based in the US and raised in US Dollar.
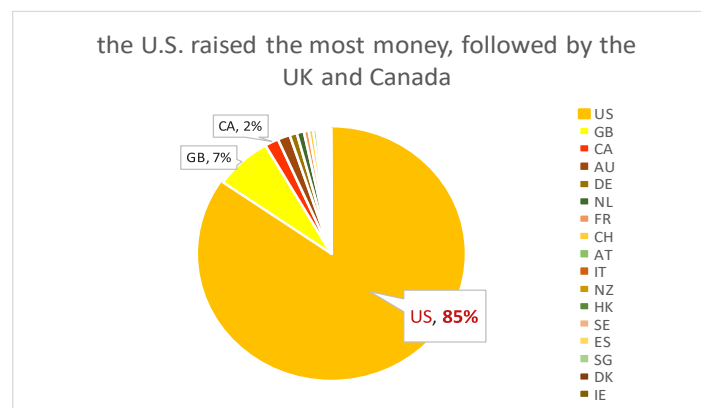
Board Game Subcategory (See APPENDIX 1 for Analysis on Board Game and Recommendations)

Success drivers for a board game project:

The most successful board game company raised almost $4 millions for its "Gloomhaven (Second Printing)" Campaign, attracting 40,642 backers. (See APPENDIX 4 for more details). Gloomhaven set a goal of $100,000 and ended up pledging 40 times more than their goal. Some key drivers of success are:

1. Rewards are attractive and diversified. Main pledge is $99 for the board game itself. At the same time, they also offered rewards for returning backers and "Add-ons" for backers with less willingness to contribute a large amount (ranging from $1 - $20).

2. Community reputation and strong fan base due to the successful launch of 1st print.

3. A goal of $100,000 is set fairly low and easy to achieve, considering Gloomhaven's 1st print previously raised $386,104 on Kickstarter.

Campaign length

The successful board game campaigns ran on average 30 days, which aligns with what Kickstarter recommended. We don't see a strong correlation between campaign length and the dollar amount raised.

One would expect that longer campaigns would potentially attract more backers. However, thinking from a backer's perspective, the sooner the campaign they backed ends, the sooner the rewards are promised if the campaign succeeded or the money contributed will be refunded if the campaign failed. Hence, backers may prefer the ones whose deadline is sooner, which is more likely to be those with a shorter length. We want to make it short but not too short. Hence, anywhere between 25-35 days is a reasonable length.

Campaign length doesn't have strong influence on amount raised
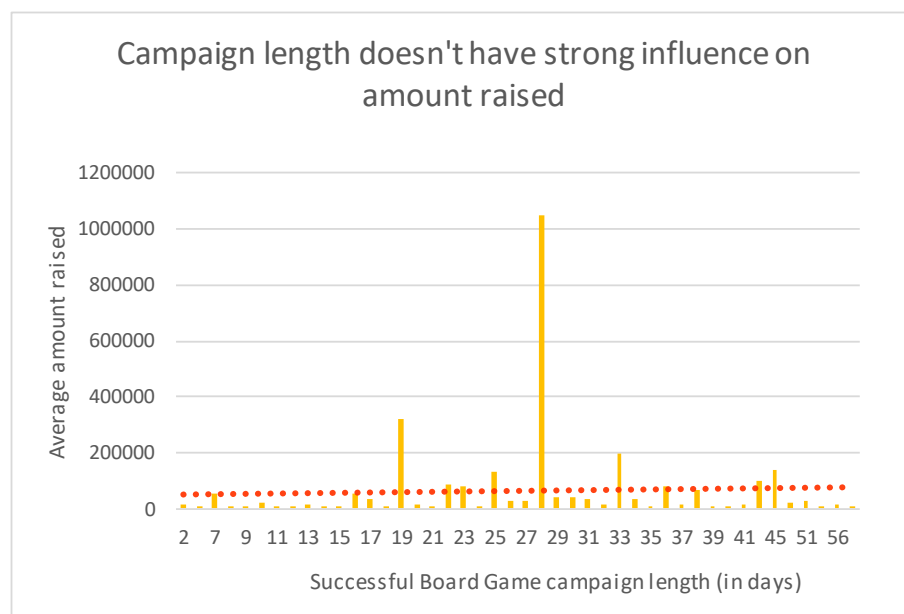
Backers:

Over the years, there are more and more backers attracted to the Board Game category, reaching an average of 1275 backers per campaign in 2017.
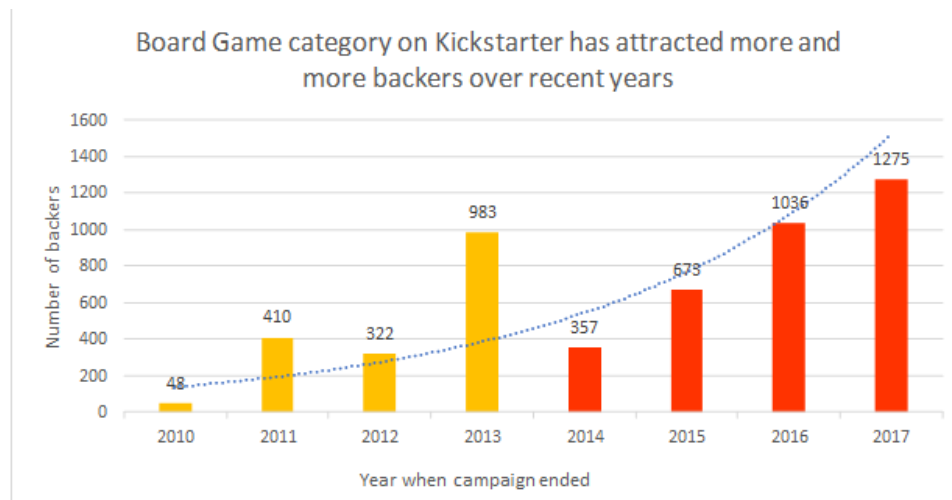
The number of backers varied largely across campaigns. In order to estimate a realistic number, we want to look at the median of number of backers for all successful board games instead of the mean, which is biased due to significant outliers.

In our client's case, we could expect a range from 199 to 260 backers, where the upper end is based on the median of number of backers over the past 8 years, while lower end is only based on year 2017.

statistics	Number of Backers
2017 median	199
2017 mean	1275
all time median	260
all time mean	852

Recommendations:

Since will need a minimum of $15,000 USD to get this project off the ground. We would set the goal as $15,000 USD, in the hope that we'll raise more than our goal. Among the successfully board game campaigns, on average each backer contributes about $73. Hence, approximately we need at lease 204 backers to meet our goal.

Without more details on the board game we are developing, we cannot develop a detailed rewards scheme yet. However, we should learn from the successful campaigns of Gloomhaven.

1. Make sure we define target customers based on our specific board game product features and then tailor rewards to customer demographics (age, gender, country, language, interests, etc.).

2. Diversify the rewards with multiple pledge-to-be-rewarded thresholds: from as little as $1 to as much as $99, for instance. We provide a wide range of rewards based a wide range of minimum amount pledged This would help we capture the backers with low interest and willingness to contribute to high interests and willingness to contribute.

3. Develop contents such as blogs, marketing videos, and posts on social media channels and forums to widely advertise our product and attract backers. This would strike interests in the boardgame community and potentially benefit our future campaigns.

4. Anywhere between 25-35 days are reasonable length. We could set up campaign length as 30 days, which is the mean, median, and the mode for all the successful board game campaigns.

5. Take cost of rewards production and shipping into consideration as we may require a higher initiation fund than 15000 to cover those costs if campaign is successful.

APPENDIX 1: Analysis on Board Game and Recommendations

Board Game Category Summary	
avg length	30
avg goal	$10,652
avg pledged	$62,759

recommended goal	*$15,000*
recommended length	*$30*
avg $ raised per backer	$74
# of backers needed	204
# of backers estimated	260

Descriptive Statistics across successful board game campaigns							
Campaign length		*goal*		*amount pledged*		*number of backers*	
Mean	30.0	Mean	10651.8	Mean	62759.4	Mean	852.6
Standard Error	0.6	Standard Error	1298.9	Standard Error	18534.3	Standard Error	183.7
Median	30.0	Median	5000.0	Median	12002.0	Median	260.5
Mode	30.0	Mode	5000.0	Mode	#N/A	Mode	62.0
Standard Deviation	10.0	Standard Deviation	20455.8	Standard Deviation	291878.7	Standard Deviation	2893.5
Sample Variance	99.7	Sample Variance	418437774.2	Sample Variance	85193176989.6	Sample Variance	8372282.3
Kurtosis	2.4	Kurtosis	78.8	Kurtosis	138.7	Kurtosis	147.3
Skewness	0.5	Skewness	7.6	Skewness	11.0	Skewness	11.2
Range	58.0	Range	249999.0	Range	3999726.0	Range	40634.0
Minimum	2.0	Minimum	1.0	Minimum	74.0	Minimum	8.0
Maximum	60.0	Maximum	250000.0	Maximum	3999800.0	Maximum	40642.0
Sum	7432.0	Sum	2641641.0	Sum	15564324.0	Sum	211438.0
Count	248.0	Count	248.0	Count	248.0	Count	248.0

- **Skewness: All four variables are positively skewed. Hence the means are biased towards larger numbers. Medians are better measure of central values.**

- **Maximum amount pledged and number of backers correspond to the Gloomhaven 2nd print.**

APPENDIX 2: Data Selection Thought Process

1. First, 140 records with an outcome "undefined" have been removed because they provide us little information. It's noticed that all the 140 records are from the same country with name N,0'', which I assumed to be null, hence removed.

2. second, since our client's currency of interest is USD and most of the campaign are raised in USD, I choose to focus my analysis on campaigns in USD. This would also ensure the consistency of the currency when we compare data across categories.

3. Since our client is in the Board Game category, we should focus on the campaigns under Tabletop Games and Playing Cards subcategory. This way we will be comparing apples to apples.

APPENDIX 3: SQL Code

```
CREATE TABLE summary (name VARCHAR(100), category VARCHAR(20), subcategory VARCHAR(20),

country VARCHAR(20), currency VARCHAR(20), deadline datetime,launched datetime,

length INT, goal FLOAT, pledged FLOAT, backers FLOAT, outcome VARCHAR(20));


INSERT INTO summary

SELECT campaign.name, category.name as category, sub_category.name AS subcategory,

country.name AS country, currency.name AS currency, deadline, launched

DATEDIFF(deadline,launched) AS length,

goal, pledged, backers, outcome

FROM campaign

LEFT JOIN sub_category

ON campaign.sub_category_id=sub_category.id

left join category

on sub_category.category_id=category.id

LEFT JOIN country

ON campaign.country_id=country.id

LEFT JOIN currency
```

```
ON campaign.currency_id = currency.id;


SELECT * FROM summary;

DELETE FROM summary

WHERE outcome= 'undefined';


SELECT DISTINCT country, currency, sum(pledged) as total_pledged, AVG(pledged) as avg_pledged

from summary

group by country, currency;      #most of the money are raised in the US, hence let's focus on
campaigns in USD


SELECT outcome, AVG(goal) AS avg_goal, AVG(pledged) AS avg_pledged, AVG(length) AS avg_length

from combined

where currency='USD'

group by outcome; ##answer to question 1


SELECT distinct category, COUNT(backers), AVG(length) as avg_length, AVG(pledged) as avg_pledged

FROM summary

where currency="USD"

GROUP BY category

ORDER BY COUNT(backers) DESC;


SELECT * from summary

where currency="USD" and subcategory in ("Tabletop Games", "Playing Cards") and
outcome="successful";
```

APPENDIX 4: Gloomhaven Rewarding Scheme

Main Pledge

GLOOMHAVEN

$99

Returning Backers

$7 — 4 HP/XP Trackers

$15 — Revised Rule and Scenario Books

Add Ons

$10

$20 — 18 Miniatures (Included in Main Pledge)

17 Solo Scenarios and Item Cards

$5 — 18 Standees

Gloomhaven first print:

Funding period: Sep 2 2015 - Sep 30 2015 (28 days)

4,904 backers pledged $386,104 to help bring this project to life.

Gloomhaven second print:

Funding period: Apr 4 2017 - May 2 2017 (27 days)

40,642 backers pledged $3,999,795 to help bring this project to life.

New Backers: 5,749--backers had never backed a project on Kickstarter before

Returning Backers: 34,893--backers had backed a project on Kickstarter before