SUCCESS OF KICKSTARTER PROJECTS – A detailed study.

By Kalpana Srinivasan.

I have chosen a kaggle dataset based on Kickstarter projects. Kickstarter is currently the largest and most dominant crowdfunding platform. I have tried to analyze the factors that determine the success of the projects hosted in the Kickstarter platform.

SUMMARY:

Kickstarter is one crowd-funding platform where people can launch projects to raise funds for the realization of their dreams. Backers (people who back a project) pledge certain amount towards the funding goal. If the expected goal amount is reached within the given deadline, then the campaign is successful, if not it is a failure. Low funding goal, optimum funding period and more backers are the key factors for success.

For my data story telling project, I have focused on how to host a successful Kickstarter campaign. Here, all fields used are self-explanatory except these:

- usd_pledged: conversion in US dollars of the pledged column (conversion done by Kickstarter).
- o usd pledge real: conversion in US dollars of the pledged column (conversion from Fixer.io API).
- usd goal real: conversion in US dollars of the goal column (conversion from Fixer.io API).

DESIGN:

I started by asking this simple question: "How can I make a project I host to be successful?" I started exploring the dataset by visualizing them. When I was exploring every variable, I got many other details that caught my attention. I decided to include them in the story.

Initial Design:

Exploring variables one by one gave me an idea about which variables are linked, which ones are the main reason for success of project etc. I created a hierarchy for main category and subcategory. This way I saw how many sub categories does each main category have. It was helpful in digging the data into a further level. I created many bar charts and I wanted to try as many chart types as possible and use it appropriately. That's how I chose

- Maps for representing the reach of the Kickstarter platform,
- Pie chart for exploring status of the projects hosted
- Bubble chart for representing two different variables
- Line chart for time related visualization and so on.

I got feedback from two DAND Students, my mentor Mr Hemanth and one other friend. I had to change the axis ticks, labels, colours and tooltip to enhance the clarity and readability. There was no major change in chart type, except for the pie chart. I changed the pie chart to bar chart as specified in the feedback. My mentor gave me positive comments and asked me to change the width of the text boxes so that both of them are of equal size. I did that. My friend, who is not aware of tableau, helped me by pinpointing the typo I had made here and there. I asked his

feedback during the design stage itself so I have not included the earlier and the current versions after his comments.

(Please note: From here on, I will refer visualizations as viz.)

<u>Final design:</u>

Viz1: To represent the kickstarter's reach, maps would be the best way to visualize it.

Viz2: For this visualization, labels were used to show the number of projects hosted every year.

Viz3: The success and failure rate was represented in a pie chart. After feedback it was changed to bar chart.

Viz4: There are 15 categories and 36 subcategories. To represent them I chose bar charts.

Viz5: Bar charts with labels of % of backers per country.

Viz6: Number of backers category wise represented in bar chart with labels of few notable categories.

Viz7: Comparing 3 values: Average number of backers, Average funding goal and status of the projects. Combined chart came in handy for this.

Viz8: To represent the status based on pledged and funding goal, I chose bubble chart.

Viz9: To find the optimum funding period, a line chart representing number of projects in the given number of days was used.

Viz10: Plotting pledged amount and the average funding period is also a bubble plot with status as colours of the bubbles.

Viz11: Category wise success and failure rate is represented as bar chart with success highlighted.

Viz12: Conclusions have been drawn by showing the visualization of comparing Goal, number of backers and the main category.

LINKS TO THE VERSIONS IN TABLEAU:

Initial version:

https://public.tableau.com/profile/kalpana8283#!/vizhome/Kickstarterproject_initialdraft/Analysis

After first feedback:

https://public.tableau.com/profile/kalpana8283#!/vizhome/Kickstarterproject_udacity/Analysis

Final Version:

https://public.tableau.com/profile/kalpana8283#!/vizhome/Kickstarterproject_2nditeration/Analysis

FEEDBACK:

I designed my first draft and published it for feedback in the DAND slack community. My heartfelt thanks to Rebecca Barnes for her detailed feedback. It has helped me a lot in understanding the intrigues of how to present a story, clearly and interestingly. I incorporated most of her feedback except few.

- I thought the labels in the pie chart is necessary as the legend will not have the percentage of successful or failed projects.
- I had to color the main categories and their sub categories accordingly. But when I did that, because there are many sub categories for each main one, there was too much color in the chart. Hence I had to revoke it. (Rebecca too mentioned it in her second feedback)
- For the bubble chart, I had removed the x-axis labels and instead colored the bubbles to show the difference. Rebecca had asked me to remove the legend, which in this case will not be useful.

Here is the actual feedback I received.

Rebecca [14 hours ago]

Story title: I'd either try for a story title that captures the main message of your project, or hide it (this is an option in the Story menu)

Page one:

- I think this does a great job as an introduction to the topic
- Small typo: I would suggest "How _far_ is kickstarter's reach?"
- I'm interested in why you used % and not total number of records. I figure that you'd probably get similar shading but I would be able to get a sense of how many records we are talking about here.
- I notice that you've included the value for some of the countries. Given that I can hover over and see this information, I wonder if it's just cleaner to leave it off.
- Final tip for this page: when I do hover over the country, the tool tip isn't as clear as it could be. You can edit what the words say if you click on the Tooltip icon in the Marks section Page two:
- You can edit the y-axis title if you wish by double clicking on it. (You can also edit the title of the Legend) I think you could call it something that makes those values a bit clearer.
- The color shading is very pretty but if you are wanting to highlight 2015, you could possibly get more impact by making the other years grey and that one a different color.

Rebecca [14 hours ago]

Page three:

- The first thing that I notice is that this is quite a large pie chart . You can change the size of charts by click on the dropdown menu on the side when you are on a dashboard and selecting the Floating option. You can do the same with the Legend. Just gives you some more control over how large things are.
- Also, I'd say that if you are providing the legend, you don't need to also try to label the chart segments. Especially with some of the smaller segments, I think it can make it a bit messy.
- Oh, same point on the Legend title, I think you could potentially edit it to make it a bit clearer. I was thinking "Status" might work? (edited)

Rebecca [14 hours ago]

Page four:

- Sorting the charts in decreasing order definitely makes them easier to read
- What I think could be really cool is if you were able to color the bars on the left and then have the same coloring for the bars on the right that are in that sub-category. It would help me be able to connect what goes with what.

Rebecca [14 hours ago]

Page five:

- Again, I like the sorting of the bars
- The labels on the bars are also quite good
- Given that you have added the labels to the bars, you should be able to hide the header that is for the y-axis

Rebecca [14 hours ago]

Page six:

- I think you could do the same labeling of the bars here (with the nubmers) and it would be quite good. I think you can format them to be in millions if they are too large otherwise.
 - And then you could hide the y-axis header again.
 - I also think you could hide the title at the top

Rebecca [14 hours ago]

Page seven:

- I think this is a great comparison chart
- I think that give that you've got the axis labels, I don't think that the legend is necessary as well
- I also noticed that what is provided is what looks like the total (SUM) of these categories. If you changed that to average you can do so with the drop down menu for the relevant row or column it would give me a better understanding of how many backers a successful typically project has and what is a typical target for a successful project.
 - You could also potentially float this chart to control it's positioning on the page
 - I like the 'key message' box you have here (edited)

Rebecca [14 hours ago]

Page eight:

- I have the same suggestion of using average rather than SUM for these totals, again because it will help me do the comparisons
- Some of the other pieces of feedback that I've provided for previous slides apply here as well, so you could probably play around with some of that

Rebecca [14 hours ago]

Page nine:

- I notice that 30 days seems to be the most common funding period for any of the projects (the only one that I can't really tell is failed) do you think that this is then a critical distinguishing factor that contributes to success?
- I think you could play around with some of the titles here as well, especially perhaps saying "Funding Period (in days)" just to be super clear

Rebecca [13 hours ago]

Page ten:

- This is quite a nice plot
- Again, I'd try to change the y-axis to average from SUM
- With regards to the labels for the circles, I think they look quite nice on the plot and I'd hide the Legend on the side
- It's also possible to hide the gridlines and I think it would be great to make this plot look really clean

Rebecca [13 hours ago]

Page eleven:

- This is quite a visually intense slide. It might be helpful to decide which you would prefer to highlight (either failed or success) and give that a color and then make the other a more grey color
 - It could also be good to sort these in order of either failed or successful if possible
- I also notice that there is one label in the purple that is black and not white :slightly_smiling_face: However, again, given that I can hover over them, because there is a lot going on for this slide, I think it could be easier to hide the labels for this one
- Because there is a lot of information in the caption for this one, I would if you could summarize it into a box like you did on a previous slide (edited)

Rebecca [13 hours ago]

Page twelve:

- I think this is a cool way to show the information, and a fun summary slide
- I have my same issue again are the numbers for backers totals (SUM) or averages? I think you want averages.
- I'd also suggest showing me more categories than just Technology and Theater. I'm guessing these are the smallest and the largest, but I think it could be good to show a range.

Rebecca [13 hours ago]

I think you've done a good job of exploring and understanding the information but I think with some tweaks you could make your plots even more impactful.'

After making changes, I resubmitted and got these comments from Rebecca: Rebecca

You've incorporated lots of my feedback - I think it helps, I hope you do too: slightly smiling face: Just a couple notes

- 1. For the pie chart, personally, I would keep the Legend and drop the labels, but if you want to keep the labels, is it possible to center them on the pie chart?
- 2. For the bar charts, I realize that you did this at my recommendation but it ended up with a LOT of colors, but it's now much easier to match the colors on the right with the ones on the left. I was wondering if to balance it, if you could JUST color the ones on the left that have subcategories and leave the rest of them grey. Then the matching is possible, but it's not quite as intense. : slightly_smiling_face:
 - 3. Yay for averages! This makes lots more sense to me!
 - 4. For your bubble plot, I think you can hide the legend now?

All the best with the submission: slightly_smiling_face:

FEEDBACK #2:

Another feedback I received was from Elrathion. Below is his feedback:

@kalpvasan your second story box seems suspect

Elrathion [12:07 AM]

124 in 2018. I'd probably exclude that data point or give it some caveat Story 3 is very confusing

Pies in general are not good practice for data visualization :wink:

Not sure if your bar charts need that much color it doesn't highlight your point more Also, your text cut off

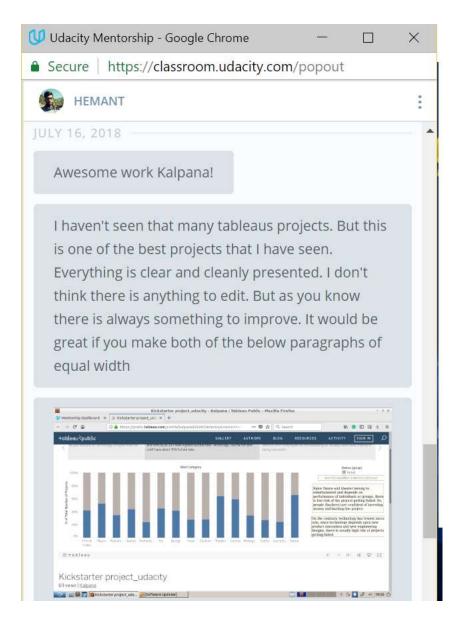
Elrathion [12:12 AM]
I'd rethink this one
Uploaded this image: image.png
Elrathion [12:12 AM]
You can probably visualize this better.

Changes I made:

I excluded the data point in viz1. For story 3,I changed the chart type from pie to bar. In story 4, I removed the colors, (which I initially did after Rebecca's comments). I also fixed the typo. I did not change the visualization for story 7, as I don't think there is still better chart type to explain the point I wanted to understand.

FEEDBACK #3:

My Mentor Hemanth, gave this feedback:



References:

- 1. https://help.kickstarter.com/hc/en-us/categories/115000499013-Kickstarter-basics
- 2. https://www.entrepreneur.com/article/226555
- 3. https://mycause.zendesk.com/hc/en-us/articles/360000082516-What-happens-if-Iexceed-my-goal-or-don-t-reach-my-goal
- 4. https://community.tableau.com/thread/143761
- 5. https://onlinehelp.tableau.com/current/pro/desktop/en-us/help.htm#qs freeform dashboards.html%3FTocPath%3DDashboards%7COrganizin g%2520Dashboards%7C 1
- 6. https://www.thedataschool.co.uk/michael-mcfadden/add-label-chosen-mark-tableau/