

Udacity BA – Analyst final project.

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Part –1 : General description:

1. Link to the dashboard:

(Make sure to uncheck the “hide” or close buttons, to see the visualizations!)

- [Here](#) (press Ctrl+click).
- ***THERE IS ONLY ONE LINK, BECAUSE ALL THE PLOTS ARE ON THE SAME PAGE!***
- ***(it's better! Isn't it?)***

2. The dashboard make visualizations of:

- Likes, dislikes, number of channels, and comments by states in US.
- Likes, dislikes, number of channels, and comments by categories.
- “Category by time” show how much uploads to every category by time. you could compare some categories too, because it is a “multicheck” box!
- I saw that there is a lot of uploads in specific times, so I have added the possibility to choose period and see the uploads just in this period.
- All the tags in a “word cloud” plot – so we could see what the popular tags are.

3. I have built the dashboard with Streamlit and Plotly and not with Tableau because:

- It's more flexible.
- It's open source.
- Very, very easy to use.
- The capabilities of this dashboard are like Tableau and more!
- I hope that you will see the capabilities of this dashboard and evaluate my work, even if it isn't built with Tableau.

4. I was helped by this Coursera course:

- [Create Interactive Dashboards with Streamlit and Python](#)
- I was helped too by a YouTube video of [“how to deploy streamlit app on aws”](#).

Part 2 – insights:

- States plots:

1. [Link](#) (same link to all plots)

2. Summary:

- We see that there isn't the same countries in the features we checked !

For example: In the feature of "YouTube channels" – California, Texas, Georgia, Florida on the head, but in the "likes" feature, Maryland and Washington on the head!

in the "dislikes": Florida, Alabama, Arizona and Washington on the head.

While on the comments Maryland, Montana, Washington on the head.

3. Design Choice:

- Here it is very clear that if I want to show data by states, I should use a map to visualize it.

4. Resources: N/A

- Categories Bar Plots:

1. [Link](#) (same link to all plots)

2. Summary:

- We see interesting correlation between "dislikes" and "comments" in both the features the order is the same: Music, Gaming, entertainment.
- We see that there are more "entertainment" channels than all other the categories, but the music category is leading on the "likes" feature, and the music category gets more likes than any other category.

3. Design Choice:

- I choose a bar plot because it's a great way to visualize categorical variable with numeric values. Like here that we have categorical variable(categories) with numerical values like - "number of channels", "number of likes" etc. A pie chart could be useful too in such cases, but here we have too many values in the categorical variable, so pie chart isn't good in this situation.

4. Resources: N/A

- "Comparing categories By Time" plots:

1. [Link](#) (same link to all plots)

2. Summary:

- we see in that in all the categories a there is a "big bang" in 2018.

I don't know if it because the data is partial before it, or maybe really there was an explosion of YouTube channels in 2018

3. Design Choice:

- I choose to use line plots because time is continual variable, and the line plots could visualize clearly the changes in the categories over time.
 - I choose to do the dashboard Multi Select so the viewer could compare two categories over time and see the differences between them.
 - I choose to do a Time Period limitation so if the viewer wants to see or compare categories only for a period of time, he could do it. It's important because in 2018 we see that there are a lot of channels almost in all categories, and the visualization is very dense. So divide the visualization to periods makes it clear.
4. Resources: N/A

- **Word Cloud plot**

1. [Link](#) (same link to all plots)
 2. Summary:
 - On the “word cloud” we see that the most popular tags are “funny”, “comedy”, “music”, “pop”, “science”, “food”.
 3. Design Choice:
 - I choose the word cloud visualization to show the frequency of words, because it’s a very “artistic” way to visualize that. The eye catches immediately the bold and big words which are the most frequent words.
- Resources: N/A

