

# Udacity Data Foundations Project 4

Link 1:

<https://public.tableau.com/profile/aysun.akarsu#!/vizhome/YoutubeDashboard1/Dashboard2?publish=yes>

Summary 1:

The total views of youtube videos more than doubled from November 14th 2017 to March 19,2018 from less than 200 M views to almost 500 M views in US. Although both in 2017 Q4 and 2018 Q1, entertainment category has the highest number of videos, it is the music category which has the highest total views of videos. However, entertainment category stands out from other categories by receiving views from almost all states. In 2017 Q4, it was from the state Florida youtube videos got most views from however in 2018 Q1, this situation was changed and youtube received the most total number of views from California in US.

Design 1:

Colorblind-friendly palette is used not to exclude colorblind people in three graphs. Map graph is chosen for geographical data to show total views per state in US. The colors of map are encoded with a diverging palette to show the number of total views by tableau default. For sequential data, to show total views and number of videos by trending day and category, area chart is chosen.

Link 2:

<https://public.tableau.com/profile/aysun.akarsu#!/vizhome/YoutubeStory1/Story1?publish=yes>

## Summary 2:

Music, entertainment, film&animation, comedy are top 4 categories when we look at the total views of youtube videos per categories. However the rankings change in terms of engagement rate. Engagement rate is defined as

$$(\text{Total likes} + \text{Total dislikes} + \text{Total number of comments}) * 1000 / \text{Total views}$$

## Design 2:

Less is more. Only one color, blue is used in both graphs for clarity. Horizontal bar chart is perfect for simplicity. Only top 10 categories are kept in each graph to make the graphs more comprehensible.

## Link 3:

<https://public.tableau.com/profile/aysun.akarsu#!/vizhome/YoutubeWorksheet1/YearPublishTimeperCategories?publish=yes>

## Summary 3:

The trending youtube videos in 2017 Q4 and 2018 Q1 are not published in previous years. To put in another way, the videos published before 2017 don't have much weight in total views of trending videos in 2017 Q4 and 2018 Q1. The videos which became trending in our dataset are published in 2017 Q4 and 2018 Q1, same year of their trending date. The same phenomenon can be seen well especially in 2018 Q1, most of the videos which became popular are published in the same year.

## Design 3:

Tableau 20 palette is used as color choice because there are more than 10 publish dates which don't fit in color blind palette size. Bar chart is chosen for its simplicity. Some categories with very few total video views are excluded from the graph in order to avoid data and chart junk.