Project #4

Data Visualization Project

Youtube Data US

Dashboard Link:

https://public.tableau.com/profile/marwa.qabeel#!/vizhome/YouTubevideosviewsAnalysis/YouTubevideosviewCountForUSYouTubedata?publish=yes

Insight 1

"Youtube Videos View Count Visualisations"

The First visualization is a dashboard consists of 3 Worksheets investigate the US YouTube data related to views.

Worksheet # 1: "Top Channels By Views"

It's a bar chart for the sorting of the channels descending by views number, the bar chart here is the perfect choice to visualize categorical data.
From the bar chart, we can conclude that the top channel is **Marvel Entertainment** with views number more than **900M** views and by adding publish time to filters card the most viewed channel for 2017 is **YouTube Spotlight** with almost **800M** views.

Worksheet #2: "Average Views over Time"

The line plot represents the average views number for a YouTube Video for US viewers over the years, the smallest average views for a video was at the fourth quarter of 2009 with an average views of 3,068 views for the video and the highest average views was recorded in the first quarter of 2018 with more than 1,300,000 views on average.

Worksheet #3: "Views Count per US States"

The last worksheet on the dashboard is a map of the US states displaying the views number of YouTube Videos for each state. Using **Tooltips** to add the visualization of the Views Count per Category for every state.

If we hover over each state we can see a sorted bar chart with the categories views, for example, a state like **Mississippi (MS)** has the least Views of YouTube App Videos (≃ **4M Views) and almost all the total views count on only one category which is Entertainment category,** other states such as **Florida (FL)** and **California (CA)** have more than **3B** views each but Florida state has the most views count on Entertainment category while California got the most count of views from Music Category.

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Worksheet Link:

https://public.tableau.com/profile/marwa.qabeel#!/vizhome/CommentstoViewscountperCategory/CommentsbyViewsCountforvideosofeachCategory?publish=yes

Insight 2

"Comments by Views Count for Videos of each Category"

The second visualization is a worksheet exploring the relationship between the number of views to the number of comments on these videos for each category based on US youtube data.
The result is a Scatter Plot which is a great visual for comparing two quantitative variables (Views Vs. Comments).

The scatter plot has a Strong-Positive correlation coefficient for the measure of the correlation between the two variables. To be sure of the correlation coefficient relation for the scatter plot, I calculated it in Excel using CORREL(col1, col2) function and r =0.7 which confirm the Strong-Positive correlation between Views and comments.

Using colors here is very important to draw attention that the correlation of views to comments count based on the different categories.

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Dashboard Link:

https://public.tableau.com/profile/marwa.qabeel#!/vizhome/YouTubevideosLikesDislikesAnalysis/USYouTubevideosLikesDislikesAnalysis?publish=yes

Insight 3

“Youtube Videos Likes & Dislikes Visualisations”

The third visualization is a dashboard of 3 worksheets visualize Likes and Dislikes counts in correlation with other elements or variables.

Worksheet # 1: “Most Liked channel of Music & Entertainment categories”

Comparing the number of likes for each channel of Music & Entertainment categories to detect the channels with the highest Likes number.

By applying category name as a filter to get only the liked channels for Music and Entertainment we found that **Music** Category comes first with the most likable channel **ibighit** with more than **57M** likes, then **Entertainment** category with **Marvel Entertainment** channel as the highest likes numbers in this category (**≃ 30M**).

Also using the channel title/ category name hierarchy with colors and details from the marks card help to define the relationship between the channels and its categories to the number of likes.

Worksheet # 2: “AVG. Likes & Dislikes for a video per Publish Time”

The second worksheet is Dual axis line plots to qualify AVG. Likes & Dislikes numbers for US YouTube data over Publish Time. By drilling down into year publishing time on the columns to the quarter of the year for publishing time we got two lines for Likes and Dislikes Averages. the two lines overlapping on each other until the fourth quarter of 2017 which ranked the highest averages for Likes(47,239) and Dislikes(3,042) views, then surprisingly dropping down at the first quarter of 2018 Likes(46,324) and Dislikes(1,836) views.

Worksheet # 3: “Dislikes & Views count per Videos Categories”

The third Worksheet of the dashboard is a Scatter-Plot draw the relationship between the views count and Dislikes count per each YouTube Video category.
The Plot correlation coefficient is Strong-Positive and by calculating it in Excel confirm this correlation between the two variables as (r = 0.86).

Note:- All the colors used in the visualizations designs are friendly- colors for color-blindness people.

Resources:

(N/A)