

YOUTUBE TREND ANALYSIS

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PROJECT DESCRIPTION

- **Analyze which factors will affect how popular a Youtube video will be**
- **Investigate frequently used words and phrases in certain Youtube videos and correlate the relationship between words and popularity**
- **Model and organize a database through coding to layout a table of most popular videos, from there, perform analysis on what helped certain videos to be popular**
- **Our goal: help advertisers/sponsors decide what kind of video would be best to promote**

HYPOTHESIS

- **Key words such as proper names of famous artists will most result in the most popular videos due to sheer name recognition**
- **The more key words a Youtube video has to its title, the more likely it will be able to garner popularity through searches, views, likes, shares, etc.**
- **Video will gain popularity through traction and time, with a peak that is followed by a gradual decline**

OVERVIEW ABOUT YOUTUBE

- **ONLINE VIDEO-SHARING PLATFORM CREATED IN 2005**
- **YOUTUBE HAS 2 BILLION MONTHLY ACTIVE USERS.**
- **50 MILLION CONTENTS CREATORS ON YOUTUBE**
- **5 BILLION VIDEOS ARE WATCHED PER DAY.**
- **1 BILLION HOURS OF YOUTUBE CONTENT IS WATCHED PER DAY.**
- **73% OF US ADULTS USE YOUTUBE.**

Data Set

(Trending Youtube Video Statistics)

- **The data set we pulled from takes into account several months of data of trending Youtube videos globally**
- **To determine top trending YT videos, the website takes into consideration the amount of activity surrounding the video, this includes: views, shares, comments, likes, buzz on other social platforms, etc.**
- **Source:** https://www.kaggle.com/datasnaek/youtube-new#US_category_id.json

Data Sets

(Trending YouTube Video Statistics)

video_id	trending_date	title	channel_title	publish_time	tags	views	likes	dislikes	comment_count	description	category_name	
0	2kySGSvSYSE	2017-11-14	WE WANT TO TALK ABOUT OUR MARRIAGE	CaseyNeistat	2017-11-13 17:13:01+00:00	SHANTEll martin	748374	57527	2966	15954	SHANTELL'S CHANNEL - https://www.youtube.com/s...	People & Blogs
1	1ZAPwrtAFY	2017-11-14	The Trump Presidency: Last Week Tonight with J...	LastWeekTonight	2017-11-13 07:30:00+00:00	last week tonight trump presidency "last week ...	2418783	97185	6146	12703	One year after the presidential election, John...	Entertainment

[illegible]

- **PANDAS: DATA MANIPULATION AND ANALYSIS**
- **WORD CLOUD : DATA VISUALIZATION TECHNIQUE USED FOR REPRESENTING TEXT DATA IN WHICH THE SIZE OF EACH WORD INDICATES ITS FREQUENCY OR IMPORTANCE.**
- **MATPLOTLIB: A PLOTTING LIBRARY FOR THE PYTHON**
- **SQL : Programming and designed for managing data held in a relational database management system**

BY CATEGORY

```
cloud(vid_data_df,"category_name",["views"])
```



	sum(max_views)	category_name	category_id
0	4828186880	Music	10
1	2828466347	Entertainment	24
2	825269649	Film & Animation	1
3	773873112	Comedy	23
4	667660862	People & Blogs	22
5	639466822	Sports	17
6	557056875	Howto & Style	26
7	428563438	Science & Technology	28
8	239483937	Gaming	20
9	231807005	News & Politics	25
10	152579019	Education	27
11	104204643	Pets & Animals	15
12	102913586	Autos & Vehicles	2
13	58778988	Travel & Events	19
14	31064609	Nonprofits & Activism	29
15	3049600	Shows	43

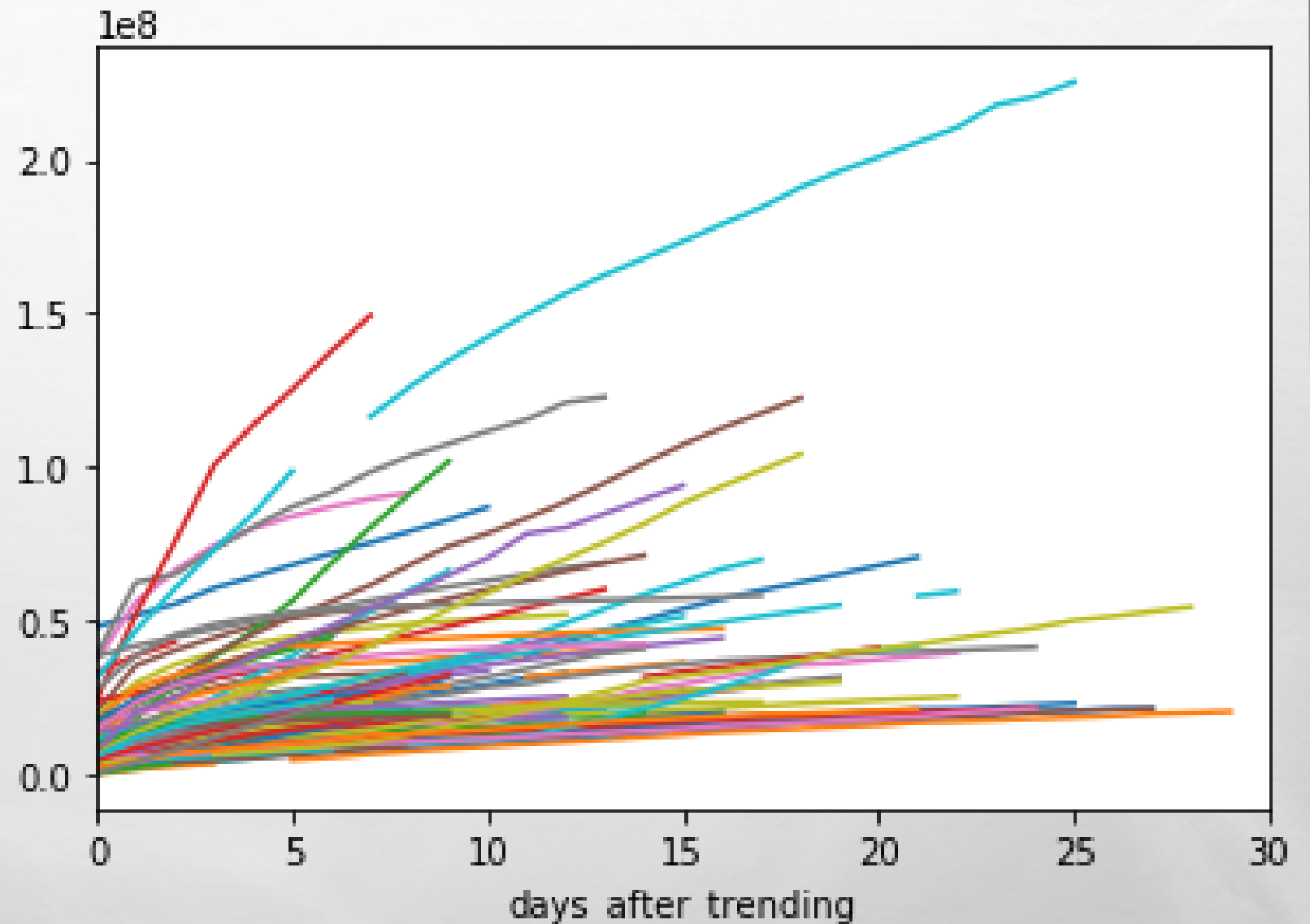
By Category Observations

- **The videos in the database were established into categories to differentiate genres for the most popular YT videos**
- **Our code sorted through, organized the videos by genre type, and found the most frequented videos, The photo above signifies popularity of the genre by size of the text**
- **Overall: music, entertainment, film, and comedy were the most frequented while travel, nonprofits, and shows generated the least amount of viewer activity**
- **Conclusion drawn: Sponsor/Partnership expenses is probable to be much more expensive for the popular genres due to sheer market advantage, and is something advertisers should take into account**

TREND BY LIKES & PUBLISHED DATE

	video_id	title	min(trending_date)	publish_time	max(likes)
0	7C2z4GqqS5E	BTS (방탄소년단) 'FAKE LOVE' Official MV	2018-05-19	2018-05-18	5613827
1	VYOjWnS4cMY	Childish Gambino - This Is America (Official V...	2018-05-08	2018-05-06	5023450
2	ffxKSjUwKdU	Ariana Grande - No Tears Left To Cry	2018-04-21	2018-04-20	3094021
3	FlsCjmMhFmw	YouTube Rewind: The Shape of 2017 #YouTubeRe...	2017-12-07	2017-12-06	3093544
4	kTlv5_Bs8aw	BTS (방탄소년단) 'MIC Drop (Steve Aoki Remix)' Offi...	2017-11-25	2017-11-24	2729292
...
95	vn9mMeWcgoM	Jurassic World: Fallen Kingdom - Official Trai...	2017-12-09	2017-12-08	550348
96	d1D1SJ-KqaQ	WINNER - 'EVERYDAY' M/V	2018-04-06	2018-04-04	548563
97	9v_rtaye2yY	Migos, Nicki Minaj, Cardi B - MotorSport (Offi...	2017-12-09	2017-12-08	548457
98	GEB2f5dpFXs	THRIFTING BRANDS!! GOODWILL WITH GREATLIZA.	2017-12-22	2017-12-21	527481
99	ycy30Llbq4w	Shawn Mendes Lost In Japan (Audio)	2018-03-24	2018-03-23	522793

DAYS TRENDING GRAPH



Days Trending Graph Observation

- **The days trending graph showcases how long a video stays in a “trending” status after its original post date**
- **Due to social marketing, we tend to see consistent growth in videos over a 30 day period, usually the first month is a consistent growth and attraction period, with extreme cases like the outlier showing that sometimes there is a second wave of popularity**
- **Overall conclusion could be made for advertisers that entry into a video sponsorship should be made right away, and they can ride the wave with the video as its “trending” status grows, as it will more than likely die out after the first 30 day period**

Overall Conclusion

- **Shown by both the most frequented words in YT video titles and by the most frequented genres, music videos are definitely the most trended videos on the web**
- **Videos also have a long lifespan to go trending, as most are seen to still be growing within a 30 day period, however, the first month tends to be the best for monetization and ad revenue generation**
- **Advertisers should take this into account when choosing to sponsor or endorse certain videos**