

SQL PROJECT

YOUTUBE TRENDING VIDEOS

ANALYSIS

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ABOUT THIS DATASET

Moreover it also reveals various engagement metrics such as the number of views the video has received, likes and dislikes it has garnered from viewership. Additionally information related to comment count on particular videos enables analysis regarding viewer interaction and response. Furthermore this dataset describes whether comments or ratings are disabled for a particular video allowing examination into how these factors impact engagement.

By exploring this dataset in-depth marketers can gain valuable insights into identifying trends in content popularity across different countries while taking into account timing considerations based on published day of week. It also opens up avenues for analyzing public sentiment towards specific videos based on likes vs dislikes ratios and comment count which further aids in devising suitable marketing strategies.

Overall, this informative dataset serves as an invaluable asset for researchers, data analysts, and marketers alike who strive to gain deeper understanding about trending video patterns, relevant metrics influencing content virality, factors dictating viewer sentiments, and exploring new possibilities within digital marketing space leveraging YouTube's wide reach.

COLUMN DESCRIPTIONS:

- **Title:** The title of the video.
- **Channel_title:** The title of the YouTube channel that published the video.
- **Publish_date:** The date when the video was published on YouTube.
- **Time_frame:** The duration of time (e.g., 1 day, 6 hours) that the video has been trending on YouTube.
- **Published_day_of_week:** The day of week (e.g., Monday) when the video was published.
- **Publish_country:** The country where the video was published.
- **Tags:** The tags or keywords associated with the video.
- **Views:** The number of views received by a particular video
- **Likes:** Number of likes received per each video
- **Dislike:** Number dislikes receives per an individual video
- **Comment_count:** number of comments

VIDEO PERFORMANCE ANALYSIS

1. VIDEO WITH THE HIGHEST ENGAGEMENT RATE

```
SELECT TOP 1 video_id, title,  
       (likes + dislikes + comment_count) * 1.0 / views AS  
       engagement_rate  
FROM YoutubeData  
WHERE views > 0  
ORDER BY engagement_rate DESC;
```

video_id	title	engagement_rate
Ay7RapOcTow	Nigthcore (SpÃ©cial 3M) - Burn	0.52919708029197080

2. TOP 5 TRENDING VIDEOS BY LIKES-TO-VIEWS RATIO

```
SELECT TOP 5 video_id, title,  
       (likes * 1.0 / views) AS likes_to_views_ratio  
FROM YoutubeData  
WHERE views > 0  
ORDER BY likes_to_views_ratio DESC;
```

video_id	title	likes_to_views_ratio
bRnJjFb4D5U	ON VA CASSER LA TIRELIRE POUR LES SDF !	0.49482257602422952
NV-3s2wwC8c	BlocBoy JB & Drake Look Alive Prod By: Tay Keith (...)	0.45050857157722223
Ay7RapOcTow	Nigthcore (SpÃ©cial 3M) - Burn	0.40602189781021897
#NAME?	PADMAN Official Trailer Akshay Kumar Sonam K...	0.40280008281619840
c94AB4PGucY	PLANETE FOOT LA COUPE DE KURZAWA... !	0.37963184712323789

3 CONTROVERSIAL VIDEOS (LIKE-TO-DISLIKE RATIO BELOW 90%)

```
SELECT video_id, title,  
       (likes * 1.0 / NULLIF(dislikes, 0)) AS like_dislike_ratio FROM YoutubeData  
WHERE dislikes > 0 AND (likes * 1.0 / NULLIF(dislikes, 0)) < 0.90  
ORDER BY like_dislike_ratio ASC;
```

video_id	title	like_dislike_ratio
JwfZqomlPsk	RollerCoaster Tycoon Start Engine Campaign	0.03089720736779560
JwfZqomlPsk	RollerCoaster Tycoon Start Engine Campaign	0.03203661327231121
JwfZqomlPsk	RollerCoaster Tycoon Start Engine Campaign	0.03275048570635581
JwfZqomlPsk	RollerCoaster Tycoon Start Engine Campaign	0.03428877578355210
JwfZqomlPsk	RollerCoaster Tycoon Start Engine Campaign	0.03447339847991313
JwfZqomlPsk	RollerCoaster Tycoon Start Engine Campaign	0.03450134770889487
JwfZqomlPsk	RollerCoaster Tycoon Start Engine Campaign	0.03465742468675019
JwfZqomlPsk	RollerCoaster Tycoon Start Engine Campaign	0.03480340063761955
JwfZqomlPsk	RollerCoaster Tycoon Start Engine Campaign	0.03554376657824933
JwfZqomlPsk	RollerCoaster Tycoon Start Engine Campaign	0.03580146460537021
JwfZqomlPsk	RollerCoaster Tycoon Start Engine Campaign	0.03597883597883597
LFhT6H6pR...	PSA from Chairman of the FCC Ajit Pai	0.03929897201599086
LFhT6H6pR...	PSA from Chairman of the FCC Ajit Pai	0.03929981367390792

4. CATEGORY WITH THE HIGHEST AVERAGE WATCH TIME

```
SELECT category_id,  
       AVG(likes + comment_count) AS avg_watch_time  
FROM YoutubeData  
GROUP BY category_id  
ORDER BY avg_watch_time DESC;
```

category_id	avg_watch_time
10	232614
29	218062
23	56303
1	50556
24	48169
20	45687
28	41362
22	32602
26	30784
17	27698
27	27609
15	24671

5 VIDEOS TRENDING IN MULTIPLE COUNTRIES

```
SELECT video_id, COUNT(DISTINCT publish_country) AS  
trending_countries FROM YoutubeData  
GROUP BY video_id  
HAVING COUNT(DISTINCT publish_country) > 1  
ORDER BY trending_countries DESC;
```

video_id	trending_countries
ryr75N0nki0	4
mRo6MnXObuE	4
o7iL2KzDh38	4
ve3oQBjcAGI	4
R10qTLfwm8E	4
uxbQATBAXf8	4
I3vbvF8bQfl	4
mBrdEYW0Vno	4
noUH5aYUBx4	4
8LPVjHxXvJM	4
cosN6ilQ5u0	4
aEM2kOrrNJI	4
OPHbqY9LHCs	4

CONTENT TRENDS & INSIGHTS

6. MOST COMMON WORDS IN VIDEO TITLES

```
SELECT TOP 15 word, COUNT(*) AS frequency  
FROM (SELECT value AS word  
      FROM YoutubeData  
      CROSS APPLY STRING_SPLIT(title, ' ')) AS WordList  
GROUP BY word  
ORDER BY frequency DESC;
```

word	frequency
-	58502
I	35876
the	28817
A	11910
TO	10864
de	9777
2018	9685
in	9425
of	9060
&	9043
with	7319
ON	7223
Video)	7122

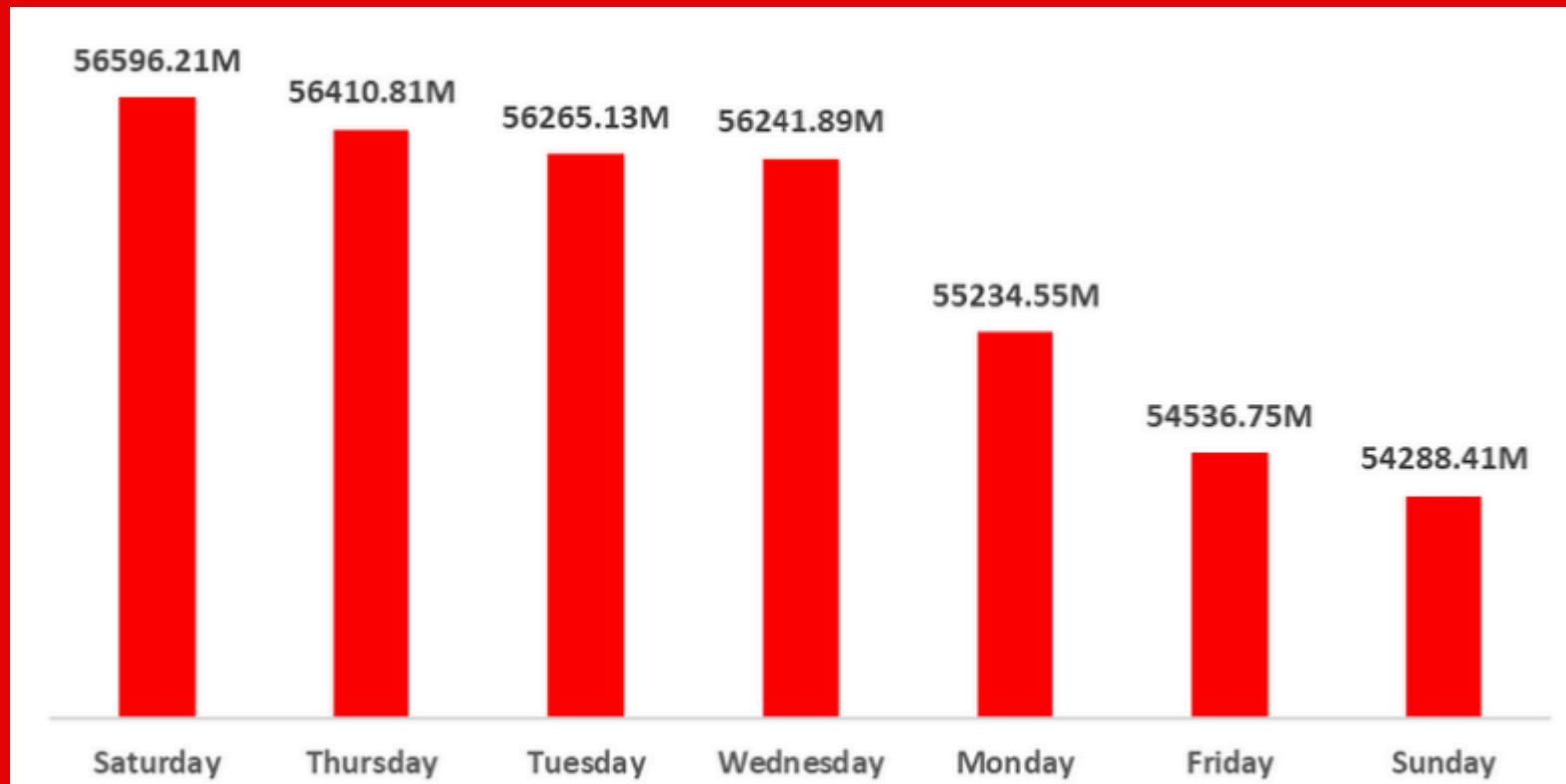
7. CATEGORY WITH THE MOST VIRAL VIDEOS (VIEWS > 10M)

```
SELECT category_id, COUNT(*) AS viral_video_count  
FROM YoutubeData  
WHERE views > 10000000  
GROUP BY category_id  
ORDER BY viral_video_count DESC;
```

category_id	viral_video_count
10	5042
24	1196
1	442
17	299
22	127
28	106
23	97
20	79
25	37
26	32
29	24
2	17
27	11

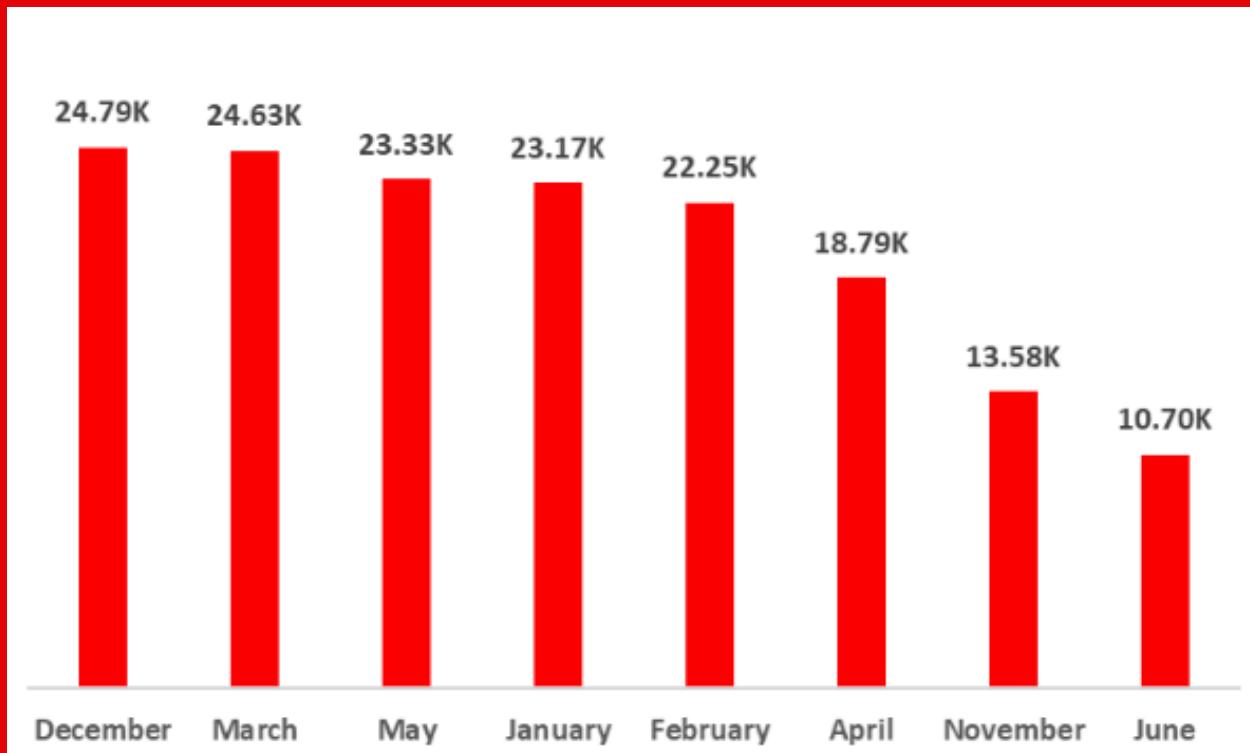
8. DAY OF THE WEEK WITH THE MOST VIEWS

```
SELECT DATENAME(WEEKDAY, trending_date) AS day_of_week,  
       SUM/views) AS total_views  
  FROM YoutubeData  
 GROUP BY DATENAME(WEEKDAY, trending_date)  
ORDER BY total_views DESC;
```



9. MONTH WITH THE HIGHEST UPLOADS

```
SELECT DATEPART(MONTH, trending_date) AS month,  
COUNT(*) AS uploads  
FROM YoutubeData  
GROUP BY DATEPART(MONTH, trending_date)  
ORDER BY uploads DESC;
```



month_name	uploads
December	24786
March	24625
May	23327
January	23168
February	22253
April	18788
November	13581
June	10695

10. MOST FREQUENTLY USED TAGS

```
SELECT TOP 10 tag, COUNT(*) AS tag_count
FROM (SELECT value AS tag
      FROM YoutubeData
      CROSS APPLY STRING_SPLIT(tags, '|')) AS TagList
GROUP BY tag
ORDER BY tag_count DESC;
```

tag	tag_count
Null	11225
The Late Show,Stephen Colbert,Colbert,Late Show,c...	252
senegal,video,divertissement,humour,yousou ndour,...	250
James Corden,The Late Late Show,Colbert,late night...	217
Vaani rani,rani,Radhika in funny character,venu aravi...	213
ABC,americanidol,idol,american idol,ryan,seacrest,rya...	210
hkayet tounisia,elhiwar ettounsi,denya okhra,oumour j...	198
the real,daytime,talk show,women,tamera mowry,adri...	197
best vines 2018,funny vines,funny videos,funniest vid...	171
BIGHIT,é'íž'íš,é°©íf,ítŒé_éç,BTS,BANGTAN,é°©...	171

CREATOR PERFORMANCE & GROWTH

11. CREATORS WITH THE HIGHEST AVERAGE VIEWS PER VIDEO

```
SELECT channel_title, AVG/views) AS avg_views  
FROM YoutubeData  
GROUP BY channel_title  
ORDER BY avg_views DESC;
```

channel_title	avg_views
Bad Bunny	162448768
Flow La Movie	152012765
ChildishGambinoVEVO	143177182
NickyJamTV	94006071
BeckyGVEVO	89202744
DrakeVEVO	86452802
Ozuna	85507410
ArianaGrandeVeo	67278371
SebastianYatraVEVO	66290967
YouTube Spotlight	64972924
Pina Records	54108874
RomeoSantosVEVO	53868725
Kylie Jenner	51653652

12. CREATORS WITH THE HIGHEST ENGAGEMENT (LIKES + DISLIKES + COMMENTS)

```
SELECT channel_title,  
       AVG(likes + dislikes + comment_count)  
             AS avg_engagement  
FROM YoutubeData  
GROUP BY channel_title  
ORDER BY avg_engagement DESC;
```

channel_title	avg_engagement
ChildishGambinoVEVO	4255097
Bad Bunny	2889997
ibighit	2840635
YouTube Spotlight	2810531
DrakeVEVO	2246173
ArianaGrandeVevo	2100455
David Dobrik	1995090
Lucas Lucco	1738946
Flow La Movie	1734716
Logan Paul Vlogs	1694729
LuisFonsiVEVO	1364096
Desimpeditos	1310902
BeckyGVEVO	1258638
TaylorSwiftVEVO	1247546
SÆjn TÃ¹ng M-TP Off...	1143699
Ed Sheeran	1136190
elrubiusOMG	1042729
ZaynVEVO	1038500

13. UNIQUE CREATORS WITH AT LEAST ONE TRENDING VIDEO

```
SELECT COUNT(DISTINCT channel_title) AS unique_creators  
FROM YoutubeData;
```

unique_creators
12301

14 FASTEST-GROWING CREATORS (VIEWS IN SHORTEST TRENDING TIME)

```
SELECT channel_title, SUM/views) AS total_views,  
      COUNT(DISTINCT trending_date) AS trending_days  
FROM YoutubeData  
GROUP BY channel_title  
HAVING COUNT(DISTINCT trending_date) < 10  
ORDER BY total_views DESC;
```

channel_title	total_views	trending_days
Republic Records	121161100	4
Jeep	120836113	9
Collins Key	112276931	8
Salman Khan Films	105734648	5
Bud Light	104489909	7
Sony Pictures India	103600481	9
TRYANGLE FILMS	93712077	7
JuanesVEVO	93291196	5
Turkish Airlines	86666242	7
Coachella	85958861	3
Dharma Productions	85454263	4
PoojaEntertainment	85161999	7
Mike Austin	81999713	9
BalajiMotionPictures	77418784	4
PrinceRoyceVEVO	70715678	2
ABC Television Stations	70178992	7
SÆjn TÃ¹ng M-TP Official	67934343	3
Risingsunrsf	67857338	4

15. CREATORS WITH LOW DISLIKE-TO-LIKE RATIO

```
SELECT channel_title, AVG(dislikes * 1.0 / NULLIF(likes, 0)) AS  
dislike_ratio  
FROM YoutubeData  
WHERE likes > 0  
GROUP BY channel_title  
HAVING AVG(dislikes * 1.0 / likes) < 0.05  
ORDER BY dislike_ratio ASC;
```

channel_title	dislike_ratio
JaeSix	0.00067756709744726
Smyang Piano	0.00067770317931838
docteur alwest	0.00090334236675700
Connected Bridle Ways	0.00093283582089552
Marcus Johns	0.00096983803704781
Chim Chiminie ᴵ,-ěží•'	0.00102249488752556
DubIncOfficial	0.00111049416990560
Williamh	0.00113895216400911
Jacko Brazier	0.00123197333140082
Mastapoc	0.00126264620321733
AskAnythingChat	0.00127230509876268
Amber Liu	0.00136083216888939
MBMBaM	0.00140565169856937
NEO Subs for NCT	0.00140997830802603
Dissidence Scooter Shop	0.00152207001522070
INFIRES ME HOSEOK DAY	0.00156932138517281
MONSTA X	0.00162628938283884
Duan Mackenzie	0.00163127302366155

CATEGORY & REGION-BASED ANALYSIS

16. BEST PERFORMING CATEGORIES BY COUNTRY

```
SELECT publish_country, category_id,  
SUM/views) AS total_views  
FROM YoutubeData  
GROUP BY publish_country, category_id  
ORDER BY publish_country, total_views DESC;
```

publish_country	category_id	total_views
CANADA	24	13671215509
	10	13179850194
	23	3708438785
	22	3228227926
	17	2997652188
	1	2937773645
	25	1613900788
	26	1570846611
	28	1425090421
	20	1241532385
	27	531773343
	15	235592173
	2	200066074
	19	143746952
	29	115601623
	43	71549508
	30	17120490
FRANCE	10	5026447522

17. COMPARING POPULARITY OF CATEGORIES IN TWO COUNTRIES

```
SELECT category_id,  
       SUM(CASE WHEN publish_country = 'US' THEN views ELSE  
0 END) AS US_views,  
       SUM(CASE WHEN publish_country = 'canada' THEN views  
ELSE 0 END) AS Canada_views  
FROM YoutubeData  
GROUP BY category_id  
ORDER BY US_views DESC, Canada_views DESC;
```

category_id	US_views	Canada_views
10	40126286541	13179850194
24	20560758714	13671215509
1	7267792432	2937773645
23	5111266590	3708438785
22	4910004664	3228227926
17	4403213872	2997652188
26	4070560757	1570846611
28	3473154552	1425090421
20	2127799781	1241532385
25	1473090484	1613900788
27	1180175828	531773343
15	764651989	235592173
2	520690717	200066074
19	343100609	143746952
29	168941392	115601623
43	51501058	71549508
30	0	17120490

18. CATEGORIES WITH THE HIGHEST COMMENT ENGAGEMENT

```
SELECT category_id, AVG(comment_count * 1.0 /
NULLIF/views, 0)) AS comment_ratio
FROM YoutubeData
WHERE views > 0
GROUP BY category_id
ORDER BY comment_ratio DESC;
```

category_id	comment_ratio
20	0.00813405430263171
29	0.00805020323871107
25	0.00758213288322080
26	0.00667977432874842
27	0.00633959416980012
28	0.00600523123763293
2	0.00597579339648507
22	0.00558030368585191
23	0.00543131002896907
19	0.00533318091728673
15	0.00531923520685004
1	0.00474253372931219
24	0.00472409822574594
10	0.00373509976915198
17	0.00359816920406797
43	0.00173463708980011
30	0.00163176818533286
44	0.00000000000000000000

19. CATEGORIES WITH HIGH DISLIKES (>10% OF LIKES)

```
SELECT category_id,  
       COUNT(*) AS negative_reception_count  
  FROM YoutubeData  
 WHERE dislikes > 0  
   AND (dislikes * 1.0 / NULLIF(likes, 0)) > 0.10  
 GROUP BY category_id  
 ORDER BY negative_reception_count DESC;
```

category_id	negative_reception_count
24	11055
25	6272
22	4609
17	2594
10	1999
1	1940
23	1172
20	789
26	769
28	693
27	405
2	244
43	203
15	134
19	133
29	106
30	6

CONTACT INFORMATION

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THANK YOU FOR YOUR TIME AND CONSIDERATION!

I TRULY APPRECIATE YOUR SUPPORT AND INTEREST IN MY PROJECT.

***I HOPE THESE INSIGHTS ADD VALUE AND SPARK MEANINGFUL
DISCUSSIONS.***

***FEEL FREE TO CONNECT WITH ME FOR ANY FEEDBACK,
COLLABORATIONS, OR SUGGESTIONS – I'D LOVE TO HEAR YOUR
THOUGHTS!***