Trending Insights

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Agenda

- Background
- Challenges
- Insights
- Practicability
- Potential

Background

YouTube

Search

SIGN IN

Home

Trending

Subscriptions

Library

History

Sign in to like videos, comment, and subscribe.

SIGN IN

BEST OF YOUTUBE

Music

Sports

Gaming

Movies

TV Shows

News

Live

Fashion

Trending

Can You Turn Colored Pencils Into Paint?

The King of Random

351K views • 1 day ago

The Weeknd - Blinding Lights (Audio)

The Weeknd

5.9M views • 2 days ago

Chicago Bulls vs Portland Trail Blazers - Full Game Highlights ...

House of Highlights

320K views • 1 day ago

A Holiday Reunion – Xfinity 2019

Xfinity

10M views • 3 days ago

HAWKS at ROCKETS | FULL GAME HIGHLIGHTS | Novembe...

NBA

144K views • 16 hours ago

#5 Alabama vs #15 Auburn Highlights: Bama suffers HUG...

CBS Sports

445K views • 19 hours ago

Bills vs. Cowboys Week 13 Highlights | NFL 2019

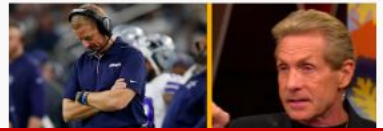
NFL

1.8M views • 2 days ago

Customizing 8 Apple Watches 📱💦Then Giving Them Away!!

MARKO

1.7M views • 2 days ago



Data Sources

YouTube

Data Sources

Data Sources

2 Columns

items__id	int(11)
items__snippet__title	text

16 Columns for each country

category_id	int(11)
channel_title	text
comment_count	int(11)
comments_disabled	text
description	text
dislikes	int(11)
likes	int(11)
publish_time	text
ratings_disabled	text
tags	text
thumbnail_link	text
title	text
trending_date	text
video_error_or_removed	text
video_id	text
views	int(11)

Data Sources

2 Columns

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items__snippet__title	text

16 Columns for each country

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trending_date	text
video_error_or_removed	text
video_id	text
views	int(11)

Selected Dataset

Canada
United States
Great Britain

212 Day Range
11/14/2017 - 06/14/2018

40,000+ entries
for each country

Challenges

Challenges

Limited selection from data set compilation due to language barriers

Data format issues leading to difficulty in transferring over data set to MySQL

Multiple file formats and applications

Solutions

Removed duplicate entries before uploading to SQL

Modified Primary Key (Video_id) to remove #NAME? errors in Excel

Converted JSON file to Excel and Join; Standardized steps

Insights by Country

Processing the Data

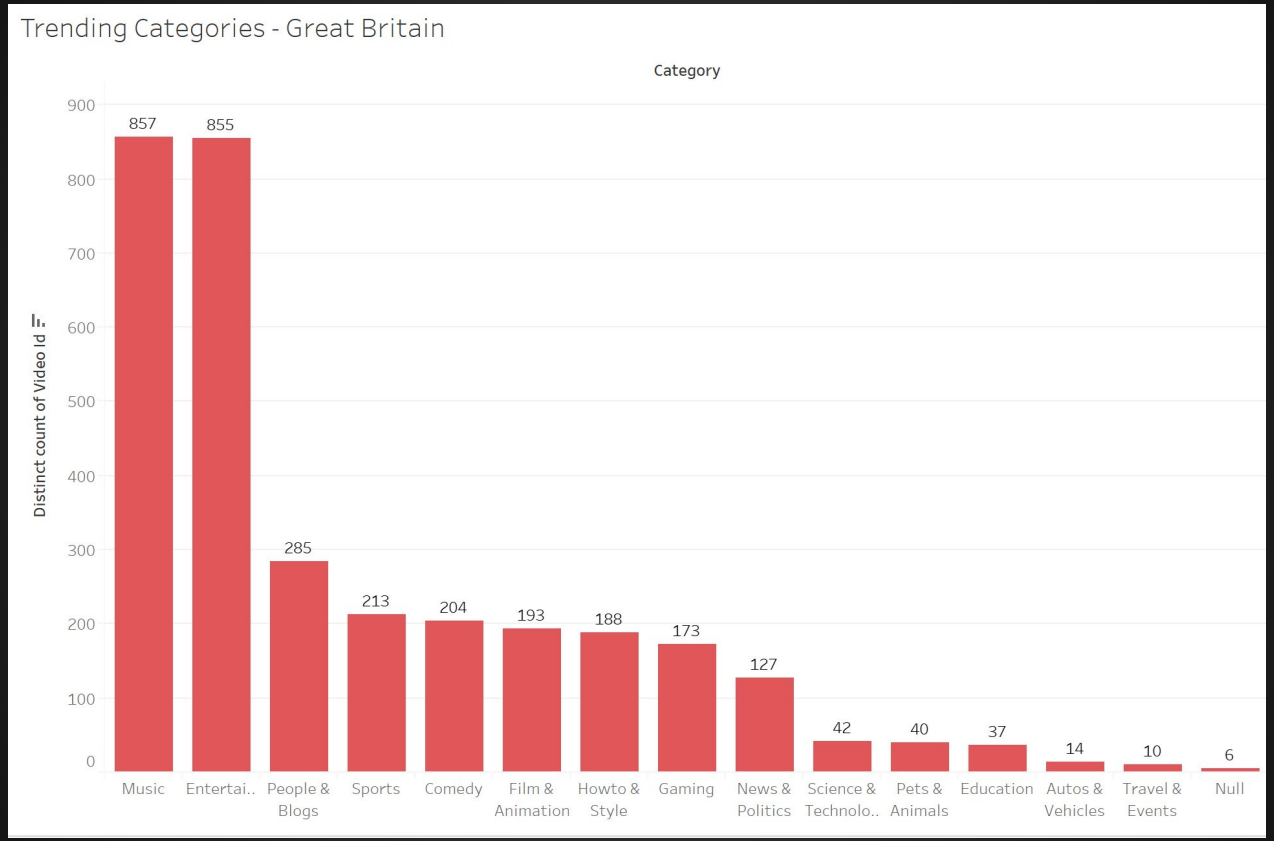
Unique Videos Table

- Simplified the dataset to include one entry per video
- Used the trending figures from the most recent day it was trending

Engagement Rates

- Like Ratio
- Dislike Ratio
- Comment Ratio

Category Sentiment Analysis - Great Britain



Category Sentiment Analysis - Great Britain

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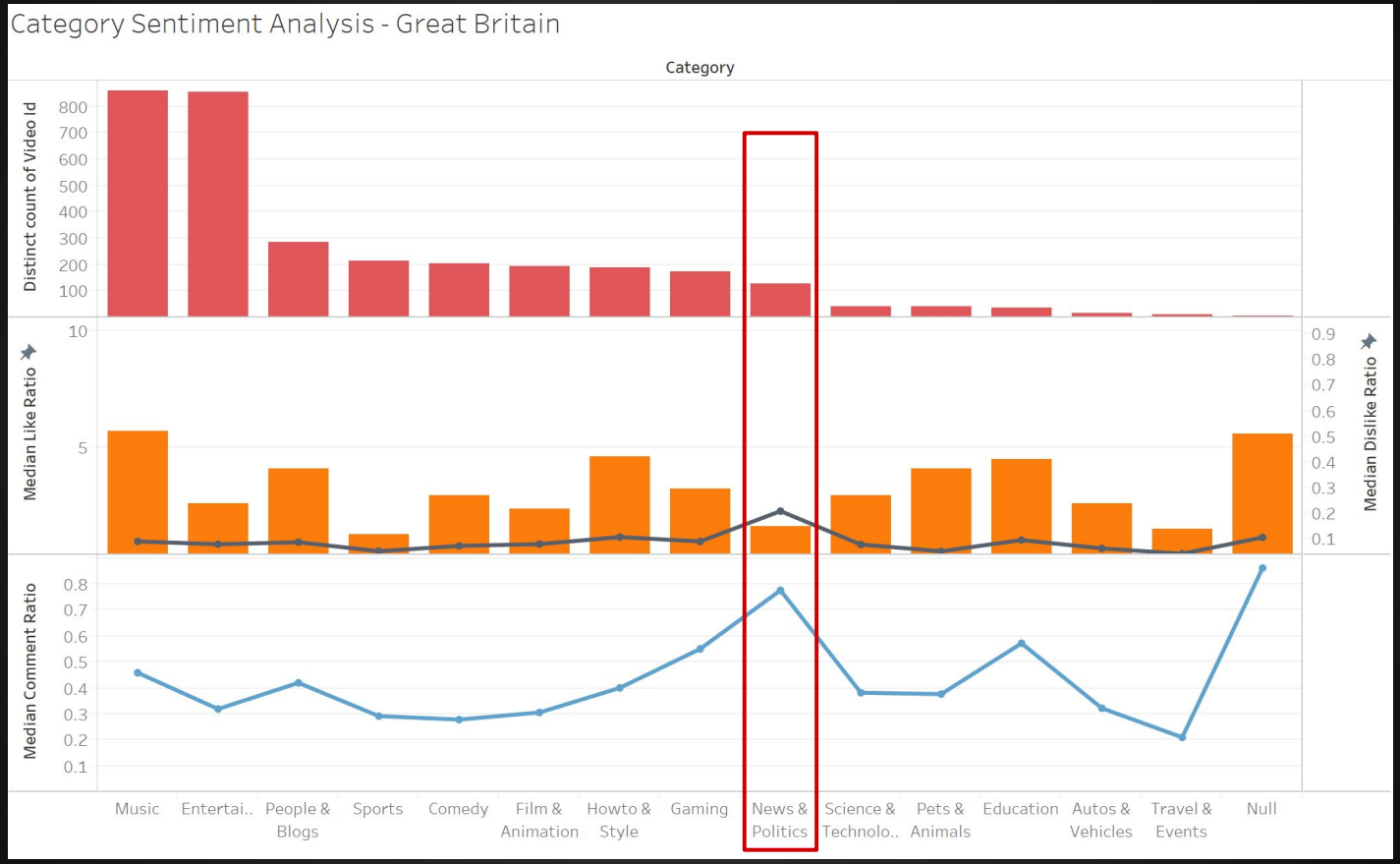
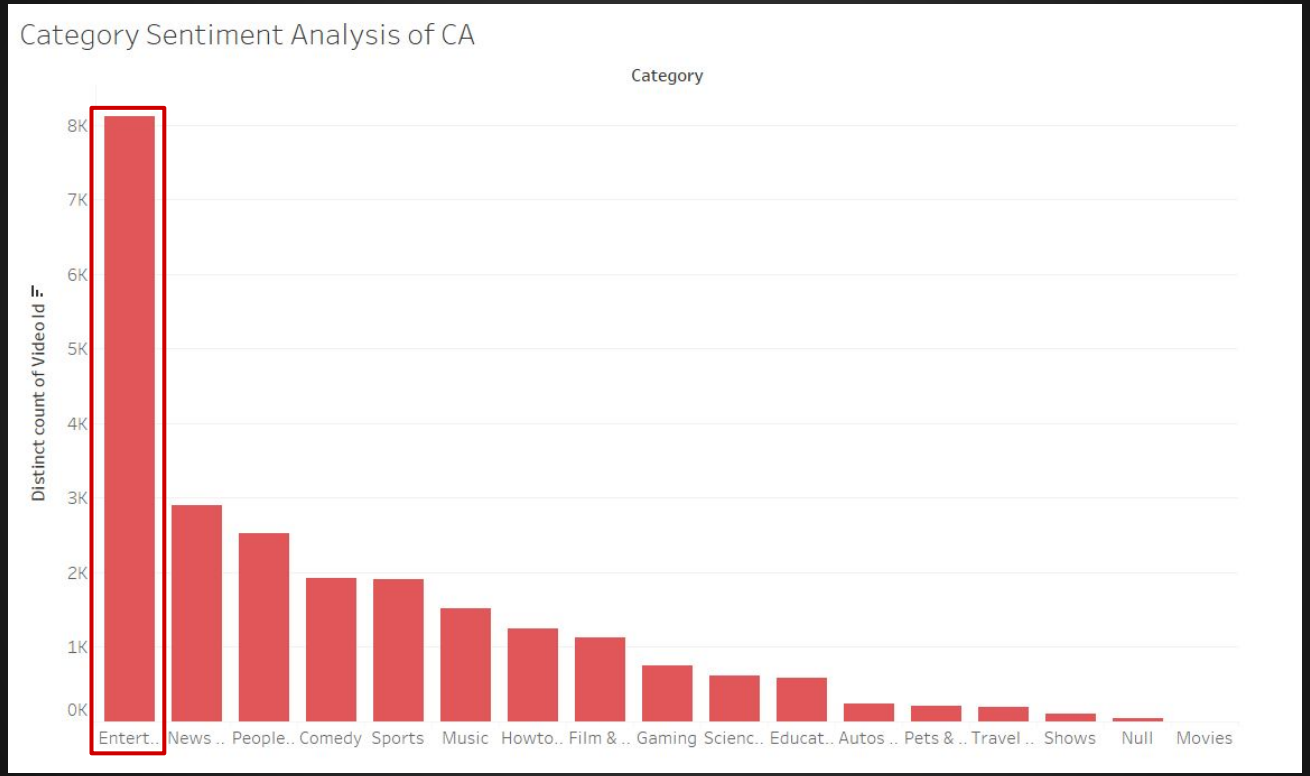
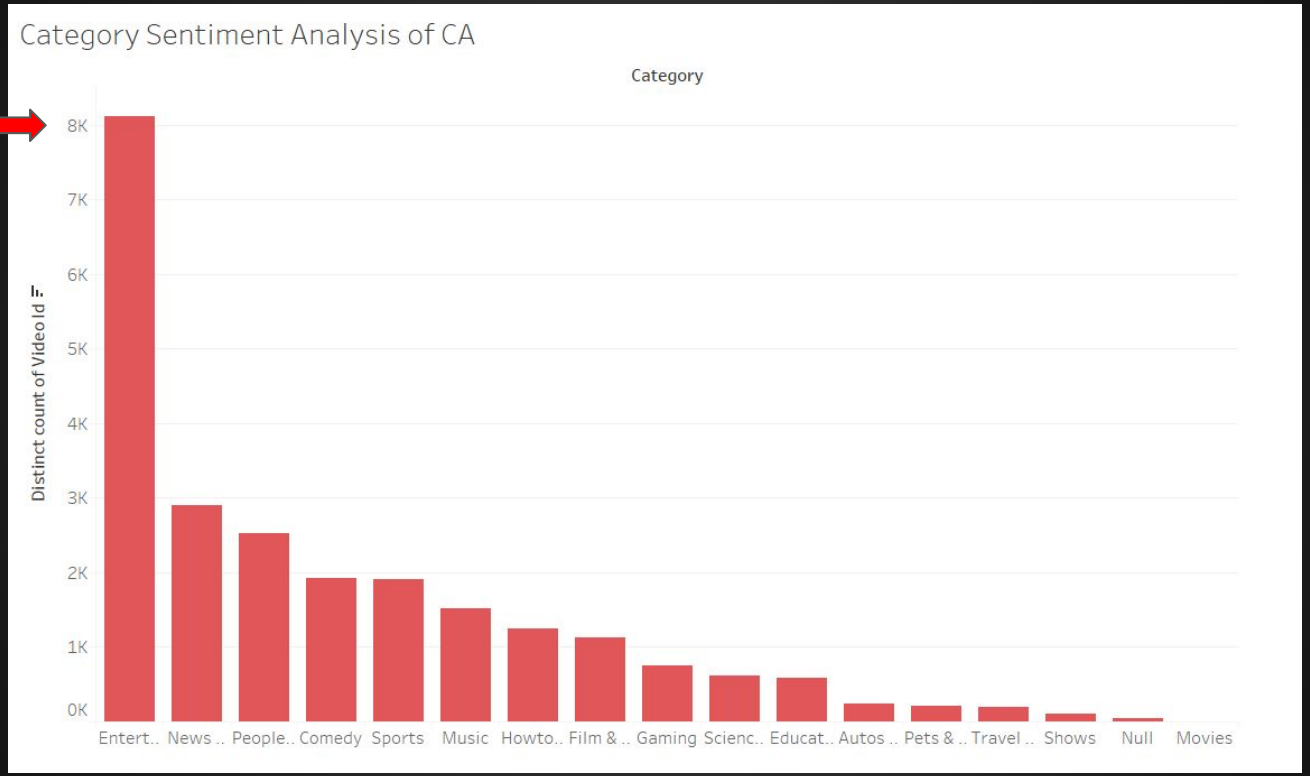


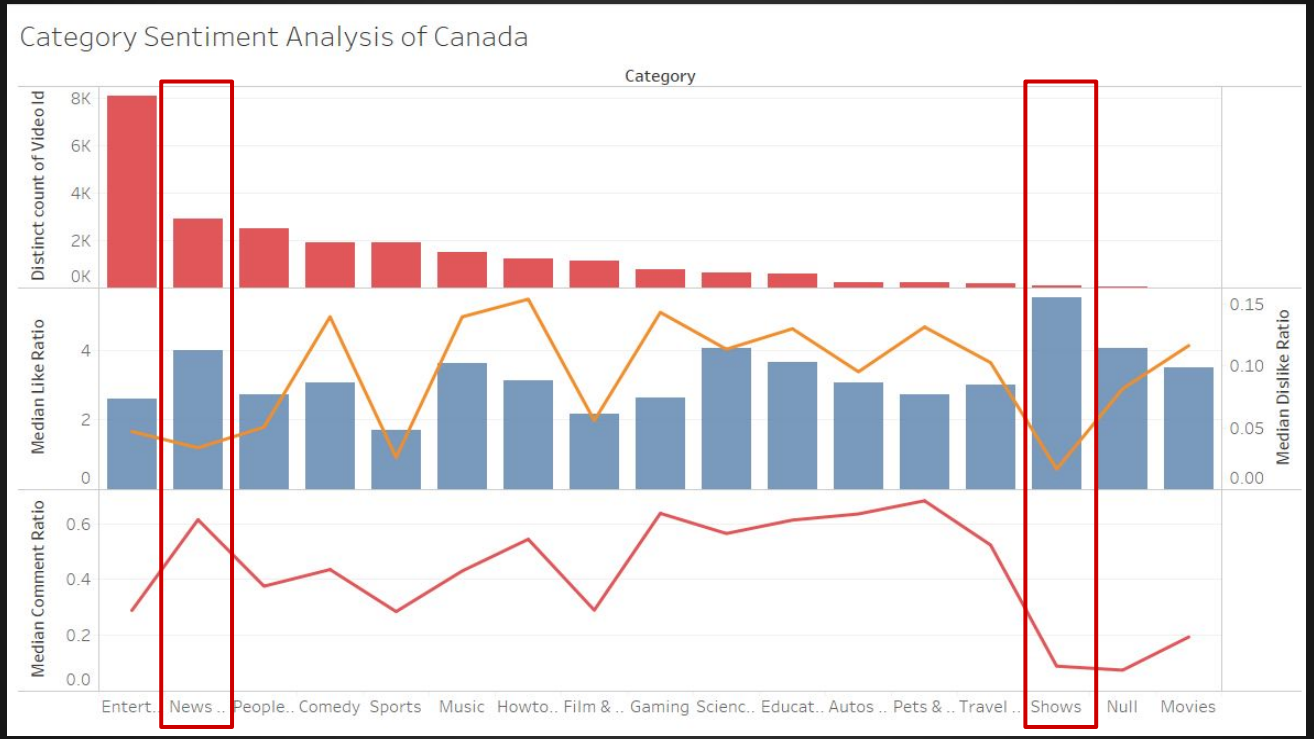
Category Sentiment Analysis - Canada



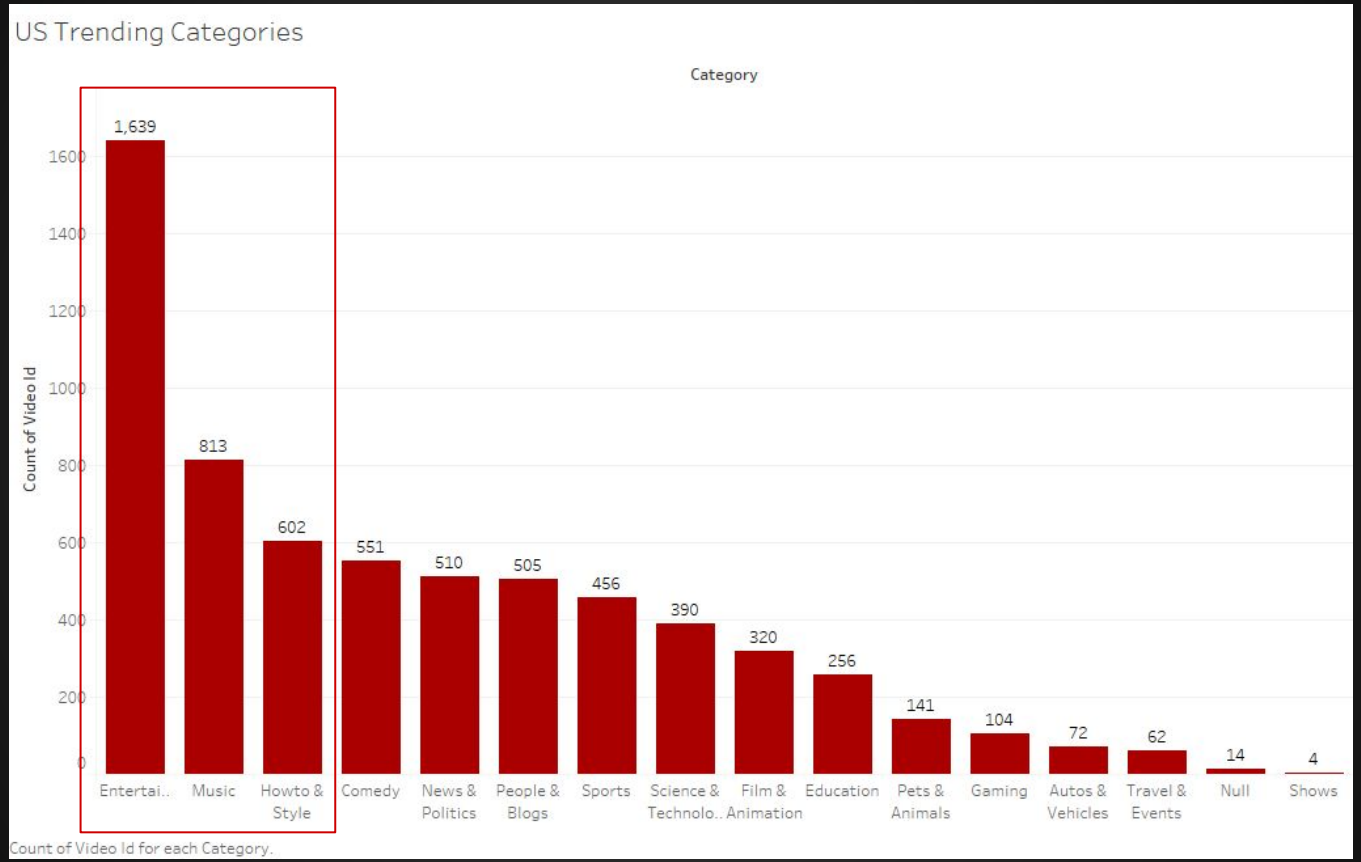
Category Sentiment Analysis - Canada



Category Sentiment Analysis - Canada



Category Sentiment Analysis - United States



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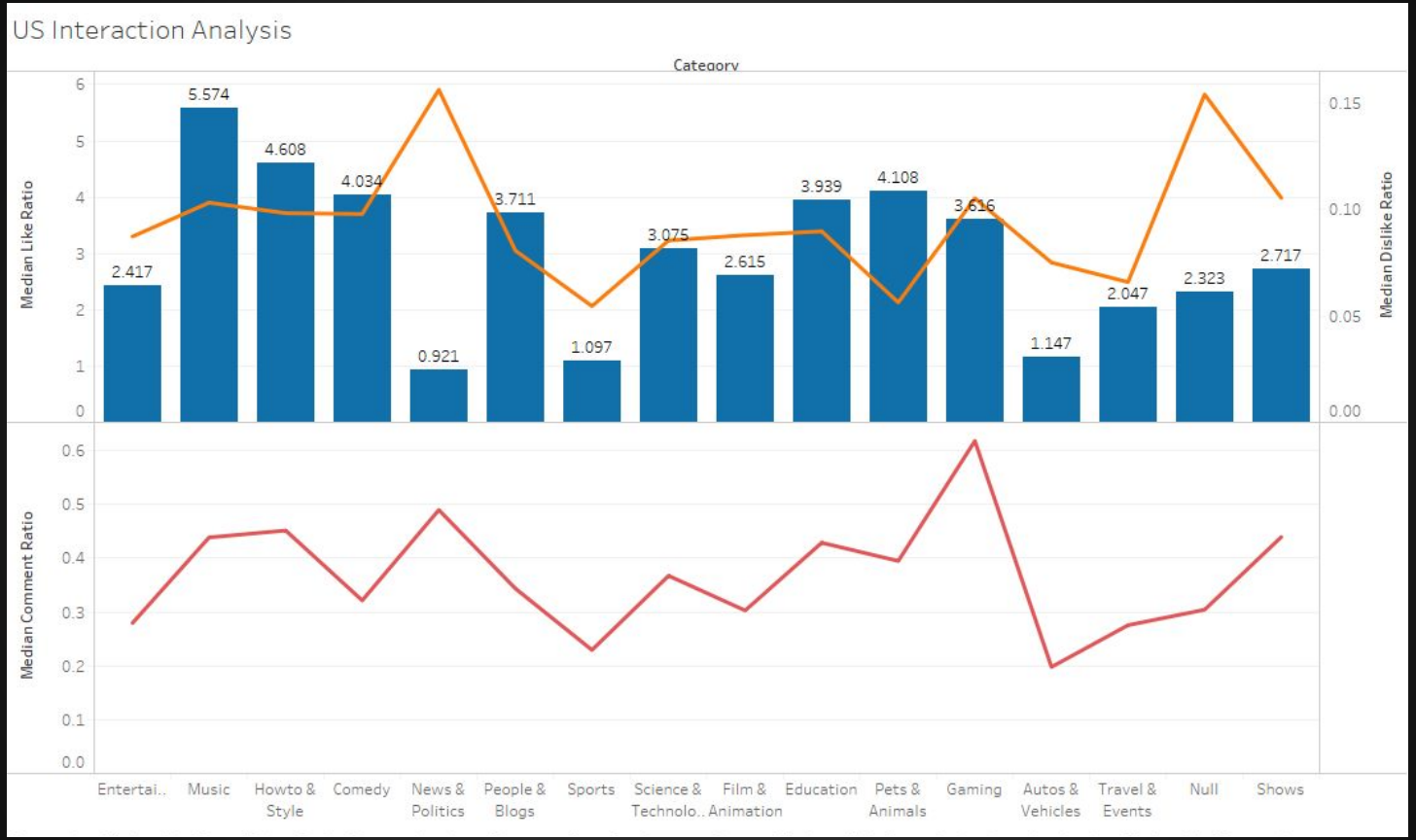


Category Sentiment Analysis - United States

Insights Across Countries

Top YouTube Categories By Country

Music	Entertainment	Entertainment
Entertainment	Music	News & Politics
People & Blogs	HowTo & Style	People & Blogs

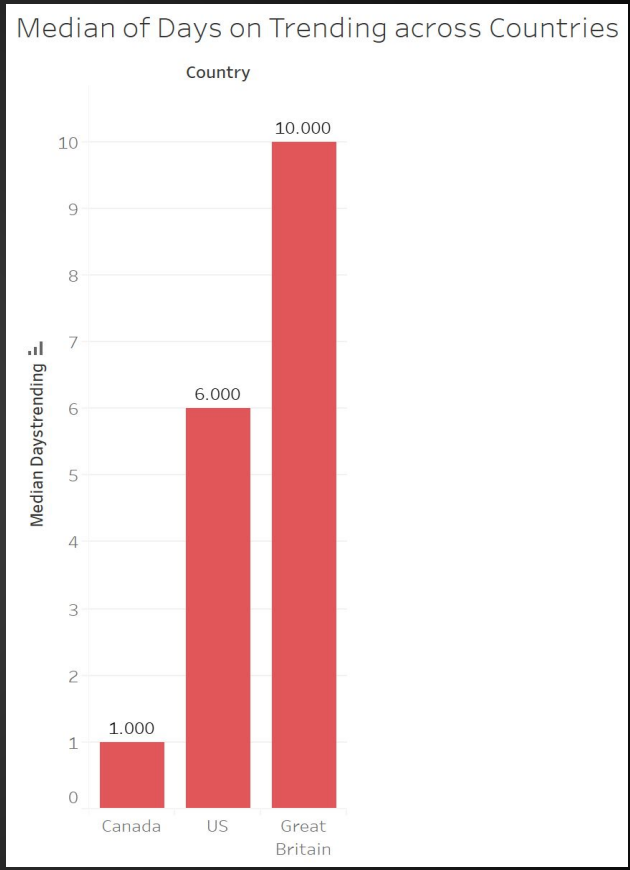
Trending Statistics Across Countries

Great Britain

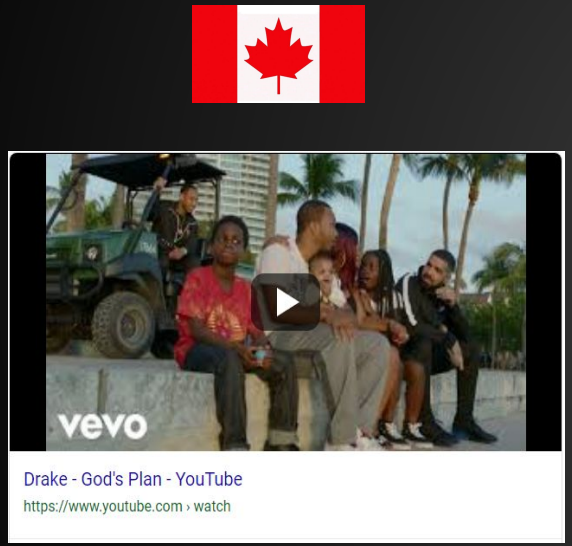
- High figure suggests Brits fixate on a particular video longer
  - Music videos drive repeat viewers

Canada

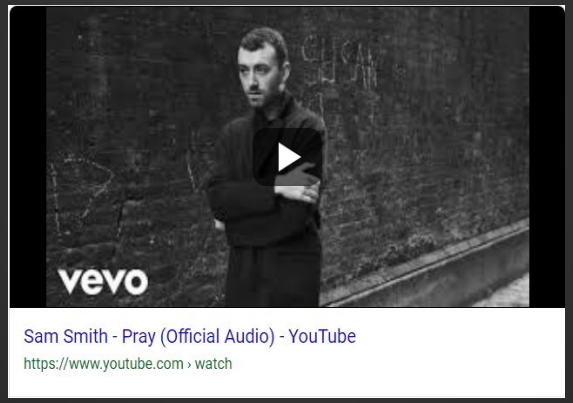
- Low figure implies high turnover on trending page
  - Suggests viewers get bored easily



Longest Trending Video



15 Days



29 Days

38 Days

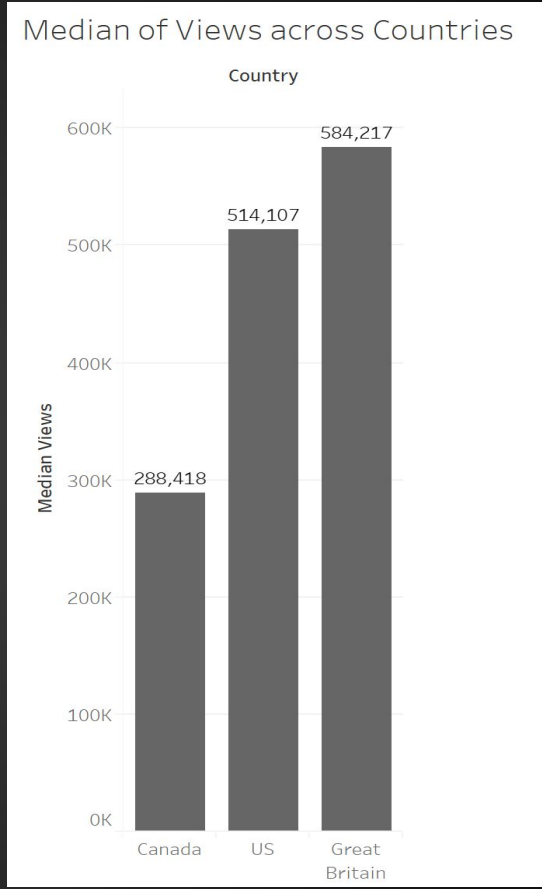
View Statistics Across Countries

Canada

- ~200K views as median
  - Suggests lower bar for viewership to obtain trending status
  - Value variety, not popularity

US & Great Britain

- ~ 500K views as median
  - Popularity is important factor for trending page



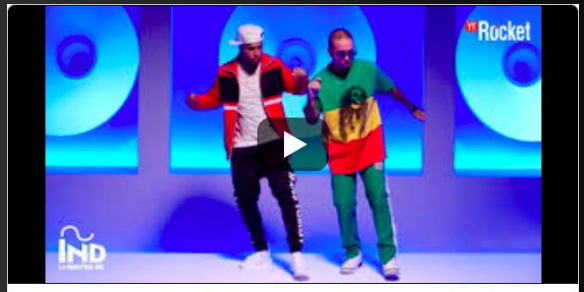
Most Viewed Videos

YouTube Rewind: The Shape of 2017 | #YouTubeRewind ...
YouTube · YouTube

138.7 M Views

Childish Gambino - This Is America (Official Video) - YouTube
https://www.youtube.com › watch

225.2 M Views



Nicky Jam x J. Balvin - X (EQUIS) | Video Oficial ... - YouTube
https://www.youtube.com › watch

424.5 M Views

Top Channels by Country

Rank	Great Britain	US	Canada
1	The Tonight Show Starring Jimmy Fallon 22.7M subscribers	ESPN	VikatanTV
2	TheEllenShow 35.4M subscribers	TheEllenShow 35.4M subscribers	SET India
3	Jimmy Kimmel Live 15.7M subscribers	The Tonight Show Starring Jimmy Fallon 22.7M subscribers	MSNBC
4	The Late Late Show with James Corden	Jimmy Kimmel Live 15.7M subscribers	The Young Turks
5	Saturday Night Live	Netflix	RadaanMedia

Practicability

Usability of Insights

Advertisers

Channels/ Influencers

Categories

Regions

Media Competitors

Partnerships

Market strategies

Content strategies

YouTubers

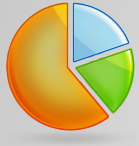
Inspirations

CPM rate

Goals and strategies

Potential

More Useful Data Points



Demographics

More trend analysis and insights

Trending Rank

Actual popularity level and factors

Readable data format

More diverse data and wording analysis

Thank you for watching!

Comment your questions

And don’t forget to Like and Subscribe to our Channel!

Appendix

Popular Channels

Canada

	channel_title	VideoCount
2	VikatanTV	159
3	SET India	155
4	MSNBC	153
5	The Young Turks	149
6	RadaanMedia	148

US

	channel_title	VideoCount
2	ESPN	84
3	TheEllenShow	74
4	The Tonight Show Starring Jimmy Fallon	72
5	Jimmy Kimmel Live	70
6	Netflix	58

Great Britain

	channel_title	VideoCount
2	The Tonight Show Starring Jimmy Fallon	51
3	TheEllenShow	47
4	Jimmy Kimmel Live	44
5	The Late Late Show with James Corden	38
6	Saturday Night Live	37

```
SELECT  channel_title,
count(distinct video_id) as
VideoCount
FROM Country_VIdeos
GROUP BY channel_title
ORDER BY VideoCount desc;
```

Popular Video Categories

Canada

1	category_id	Category_Name	VideoCount
2	24	Entertainment	8292
3	25	News & Politics	2975
4	22	People & Blogs	2561
5	23	Comedy	1957
6	17	Sports	1932

US

1	category_id	CategoryName	VideoCount	AvgDaysTrending
2	24	Entertainment	1639	6.0622
3	10	Music	813	7.941
4	26	Howto & Style	602	6.8854
5	23	Comedy	551	6.2904
6	25	News & Politics	510	4.8686

Great Britain

1	category_id	CategoryName	VideoCount	AvgDaysTrending
2	10	Music	857	15.7456
3	24	Entertainment	856	10.5794
4	22	People & Blogs	286	10.3462
5	17	Sports	213	9.0282
6	23	Comedy	204	8.8775

```
SELECT category_id, items__snippet__title as
CategoryName, count(category_id) as VideoCount,
avg(u.daystrending) as AvgDaysTrending
FROM Counntry_UniqueVideos as u
INNER JOIN categories as c
ON u.category_id=c.items__id
GROUP BY category_id
ORDER BY VideoCount desc;
```

Unique Table Query

```
CREATE TABLE uniquevideos
SELECT video_id, title, channel_title, category_id, count(title) as daystrending, max(views) as
views, max(likes) as likes, max(dislikes) as dislikes, comment_count as comments,
((likes/views)*100) as LikeRatio, ((dislikes/views)*100) as DislikeRatio,
((comment_count/views)*100) as CommentRatio, tags, description, publish_time, thumbnail_link
FROM USVideos
GROUP BY title
ORDER BY max(views) desc;
```

	Great Britain	U.S	Canada
Start date	11/14/17	11/14/17	11/14/17
End date	6/14/18	6/14/18	6/14/18
Number of days	212	212	212
Total Records	38429	40901	40881
Total Unique Records	3246	6439	24555
Avg Number of Days Trending	7.3	6.35	1.66
Avg Number of Views	1,732,598	1,952,232	1,147,036

Averages & Maximum

Average Number of Views

```
SELECT avg(endviews)
FROM
(SELECT title, max(views) as EndViews
FROM Country_Videos
GROUP BY  title
ORDER BY max(views) desc) as sub1;
```

Average Number of Days on Trending Page

```
SELECT avg(titlecount)
FROM
(SELECT title, count( title) AS titlecount FROM
Country_Videos
GROUP BY title) as sub1;
```

Longest Trending Video

```
SELECT title, count(distinct(title)
FROM USVideos
WHERE max(count(distinct(title)))
GROUP BY title;
```

Highest Viewed Video

```
SELECT title, views
FROM USVideos
WHERE max(views)
GROUP BY title;
```

SQL Code

```sql
## Total Entries ##
Select count(video_id)
from cavideos;

## Distinct Videos ##
select Count(distinct(title))
from cavideos;

select count(title)
from UniqueVideos;

## Range of Queries ##
select distinct(category_id)
from cavideos
order by category_id;

## Finding channels with counts of unique videos on trend page ##
select channel_title, count(distinct video_id) as VideoCount
from cavideos
group by channel_title
order by VideoCount desc;
```

```sql
## Average number of views when on TP ##
select avg(endviews)
from
(Select title, max(views) as EndViews
From cavideos
Group by title
Order by max(views) desc) as sub1;

## Average days on TP ##
select avg(titlecount)
from
(select title, count( title) as titlecount from cavideos
group by title) as sub1;

## Unique vid table ##
create table UniqueVideos
Select video_id, title, channel_title, category_id, max(views), max(likes), max
From cavideos
Group by title
Order by max(views) desc;
```

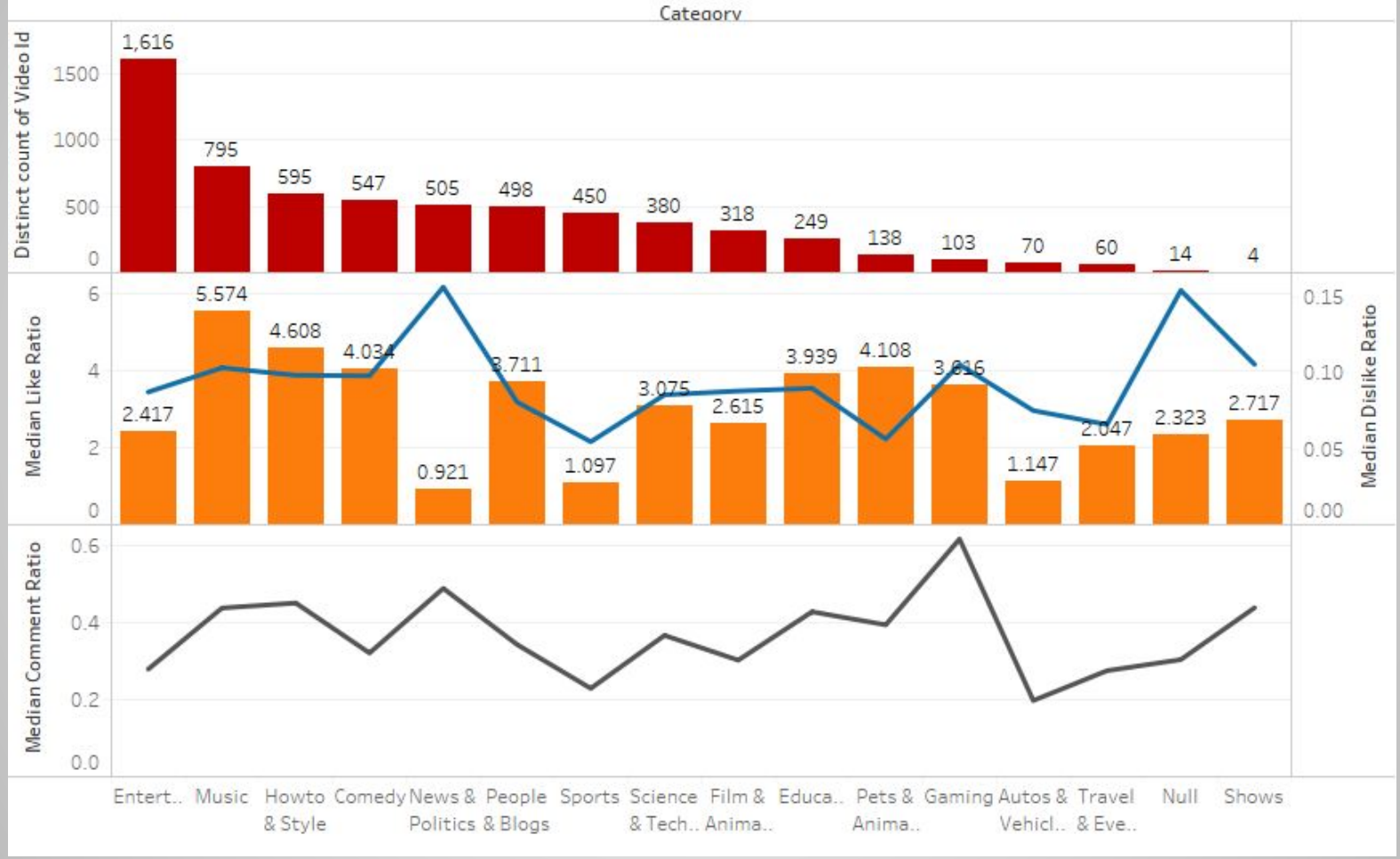
```sql
## Number of days ##
Select count(distinct trending_date)
from cavideos;

## Distinct Videos ##
create table DistinctVideos
select distinct title as DistTitles, video_id,category_id,trending_date,channel_title,publish_time,views
from cavideos
group by disttitles
order by titlecount desc;

## Like and Dislike % ##
select *, ((likes/views)*100) as LikePerc, ((dislikes/views)*100) as DislikePerc from distinctvideos
group by LikePerc
order by likeperc desc;

## Popular Channels on Trending ##
select distinct channel_title as Channels, count(channel_title) as ChannelCount
from cavideos
group by Channels
order by ChannelCount desc;

## Average days on Trending Page ##
```

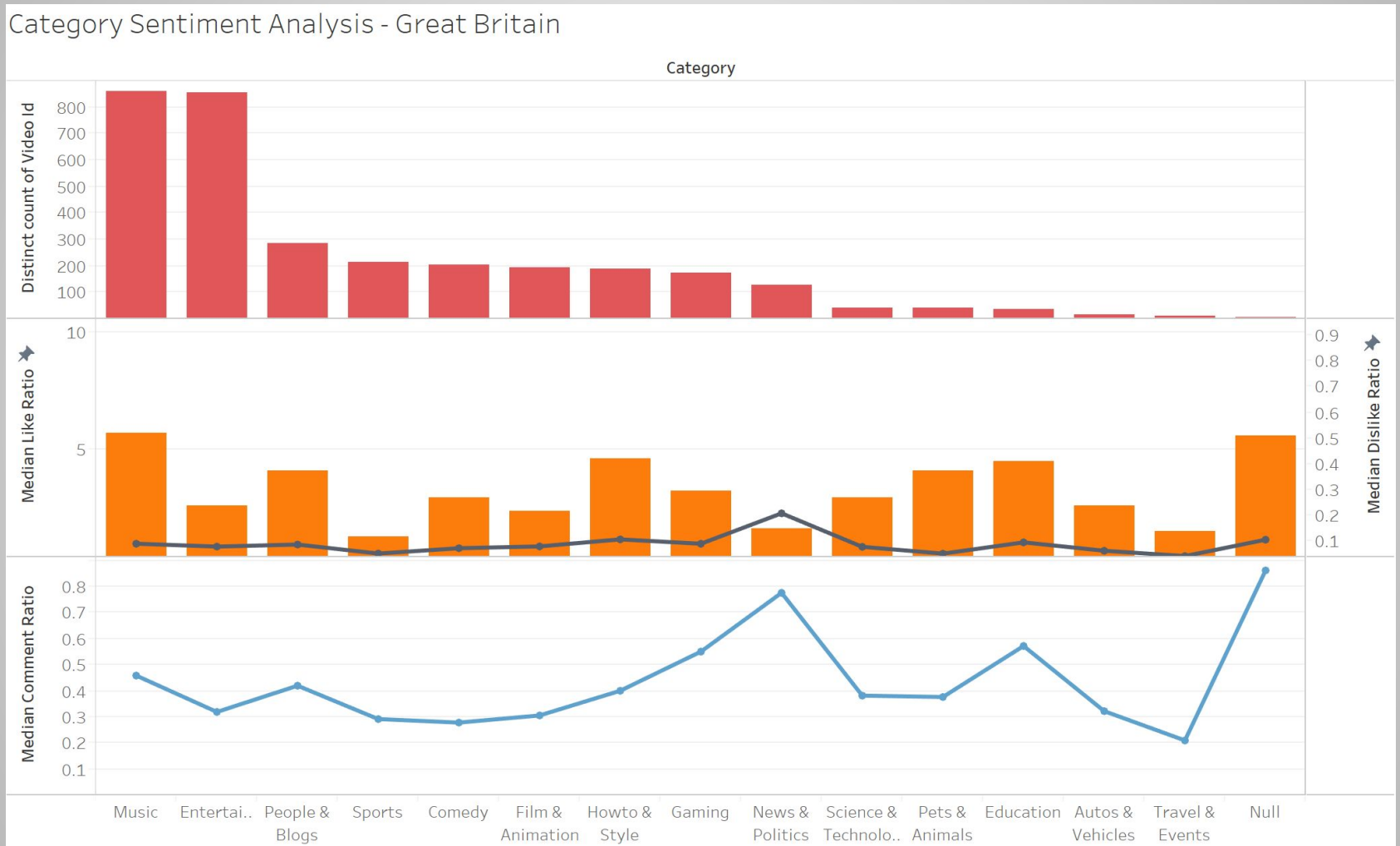
```sql
## Average days on Trending Page ##
select avg(titlecount)
from distinctvideos;

## Average Views ##
select avg(views)
from cavideos;

## Most popular channels ##
select channel_title, count(video_id) as VideoCount
from uniquevideos
group by channel_title
order by VideoCount desc;

## Table with unique videos ##
Select title, max(views)
From cavideos
Group by title
Order by max(views) desc;
```

```sql
## Title analysis ##
select count(title)
from uniquevideos
where title like "%!%";

select count(title)
from uniquevideos
where title like "%?%";

select count(title)
from uniquevideos
where title like "%!!%";

## Finding the top category of video ##
select category_id, count(video_id)
from uniquevideos
group by category_id
order by count(video_id) desc;
```

```sql
## Finding most commented on video ##
select title, comment_count
from cavideos
group by title
order by comment_count desc;

## Finding most disliked video ##
select title, dislikes
from cavideos
group by title
order by dislikes desc;

## Finding most liked video ##
select title, likes
from cavideos
group by title
order by likes desc;

## Finding the amount of BTS songs ##
select count(distinct title)
from cavideos
where title like "%BTS%";

## Total number of unique videos ##
select count(video_id)
from uniquevideos;
```

US Category Analysis



Category Sentiment Analysis of Canada

Category Sentiment Analysis - Great Britain