

# YOUTUBE TRENDING VIDEO ANALYTICS

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## Title:

YouTube Trending Video Analytics: A Comparative Analysis of India and the US

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## Introduction:

This project aims to analyze patterns in YouTube trending videos from India and the United States. By examining view counts, category performance, and sentiment of video titles, the objective is to uncover what drives video popularity across these two major regions.

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## Abstract:

Using datasets from Kaggle, the project analyzes trending video data from both India ([INvideos.csv](#)) and the United States ([USvideos.csv](#)). Sentiment analysis was performed on video titles using the VADER NLP library. Data was visualized through an interactive Power BI dashboard which includes filters by category, country, and date. Insights were drawn around content trends, sentiment influence, and engagement metrics.

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## Tools Used:

- **Python:** For data cleaning, merging, and sentiment analysis (Pandas, VADER)
  - **Power BI:** For creating an interactive and visually rich dashboard
  - **Excel:** For basic data checks and intermediate processing
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## Steps Involved:

### 1. Data Preparation:

- Combined `USvideos.csv` and `INvideos.csv` datasets
- Mapped `category_id` to actual category names using `category_id.json`
- Cleaned columns and removed duplicates

### 2. Sentiment Analysis:

- Applied VADER sentiment analyzer on video titles
- Added sentiment scores and classified into Positive, Neutral, Negative

### 3. Visualization:

- Built a dashboard in Power BI with bar charts, pie charts, line graphs, and a sentiment-impact scatter plot
- Included slicers for country, category, and publish date

### 4. Insight Extraction:

- Top trending categories were “Music” and “Entertainment” in both countries
- US had a higher number of consistently trending videos
- Positive sentiment titles had slightly higher view counts, especially in India

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## Conclusion:

This analysis shows how content type and title sentiment can impact YouTube trends. Power BI helped identify that Music and Entertainment dominate across both countries. The sentiment trend suggests that emotionally appealing titles often lead to better engagement. These insights can guide content creators and marketers targeting regional audiences on YouTube.

SCREENSHOT:

