

YouTube US Video Data Analysis

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• Objective:

To analyze trending YouTube video data from the United States to uncover insights about viewer preferences, video performance, and engagement metrics such as views, likes, dislikes, and comments.

• Dataset Information:

Dataset: USvideos.csv (from Kaggle's Trending YouTube Video dataset). It includes video statistics such as video_id, title, category, views, likes, dislikes, comment_count, etc.

• Steps Followed:

1. Data Cleaning: Removed duplicate and null entries, and formatted date columns.
2. Data Transformation: Added new columns for easier analysis (e.g., trending duration).
3. Exploratory Data Analysis (EDA): Used histograms, bar plots, and line charts to identify trends.
4. Visualizations: Top 10 viewed videos, category-wise performance, likes vs dislikes, etc.
5. Insights & Recommendations were derived based on the visual analysis.

• Key Insights:

- Videos with high views often belong to categories like Entertainment and Music.
- Some videos have high dislike ratios despite having many views.
- Engagement (comments, likes) tends to correlate with views but not always.
- A few channels repeatedly trend, showing creator dominance in YouTube trends.

• Conclusion:

The analysis revealed how content category, engagement metrics, and channel consistency affect video performance. These insights are useful for content creators, marketers, and YouTube strategists.

• Future Improvements:

- Build an interactive dashboard using Power BI or Tableau.
- Apply Natural Language Processing (NLP) to analyze video titles and tags for trends.
- Compare US data with other countries to explore global trends.