YouTube Trending Video Analytics –Report

Date: 2025-09-08

# Abstract

This study analyzes trending YouTube videos across multiple regions to uncover genre popularity, sentiment dynamics, and timing effects. After standardizing datasets and enriching them with VADER sentiment on titles and tags, we rank categories by average views using SQL and model trending duration as a time-based signal.

# 1. Introduction

Context, motivation, and objectives.

# 2. Data & Methodology

Datasets, cleaning & standardization, sentiment analysis (VADER), SQL ranking, and time-series methods.

1) Repository & Data Layout

2) Data Dictionary (Kaggle Trending format)

3) Standardization & Cleaning (Python)

4) Sentiment Analysis (Titles & Tags)

5) Feature Engineering (Trending Duration & Time Series)

6) SQL Schema & Loads

7) Visualizations (Matplotlib/Seaborn)

8) Tableau — Datasource & Dashboard

9) Final Report — Data Story Outline

10) Reproducible Environment

11) Validation & QC Checklist

12) Deliverables Mapping

13) Quickstart (TL;DR)

14) Tailoring to IN/US/GB + Postgres

# 3. Results

Key findings with figures and tables.

## 3.1 Genre Popularity

## 3.2 Sentiment vs Performance

## 3.3 Trending Duration & Timing

## 3.4 Regional Comparisons

# 4. Recommendations

Actionable guidance by region/category.

# 5. Limitations & Future Work

Data biases, hidden dislikes post-2021, potential model improvements.

# Appendix

Table dictionary, SQL snippets, feature definitions.