**YouTube Channel Performance Analysis**

**Introduction**

This report provides an in-depth analysis of YouTube channel performance using an interactive dataset from Kaggle “**YouTube Trending Video Dataset (updated daily)**”. The analysis focuses on key metrics such as views, likes, comments, and sentiment analysis, categories, trending section, time frame etc. helping stakeholders understand content performance and optimize future content strategies.

**Key Findings**

* **Total Views:** 390.73 billion views across all videos.
* **Sentiment Analysis:**
  + Positive sentiment: 67.39 billion views, 1.92 billion likes, and 190 million comments.
  + Neutral sentiment: 260.43 billion views, 7.19 billion likes, and 767 million comments.
  + Negative sentiment: 62.91 billion views, 1.49 billion likes, and 178 million comments.

**Sentiment Analysis by Tags**

* Positive tags generated the highest views (157.86 billion) and likes (4.17 billion).
* Neutral tags had 140.21 billion views and 4.17 billion likes.
* Negative tags had 92.65 billion views and 2.25 billion likes.

**Geographic Insights**

* Highest engagement rates were recorded in the US, followed by Canada, France, and the UK.
* Engagement varied significantly by time frame, with the highest between 9:00 to 9:59.

**Recommendations**

1. **Focus on Positive Content:** Given the high views for positively labeled content, create more videos with positive themes.
2. **Optimize Posting Time:** Schedule uploads between 9:00 to 10:00 for higher engagement.
3. **Enhance Content with Top-Performing Tags:** Use the best-performing positive and neutral tags to improve reach.
4. **Target US Audience More Effectively:** Since the US has the highest engagement rate according to dataset , consider creating US-specific content.

**Conclusion**

This analysis highlights the importance of sentiment, timing, and tags in driving YouTube performance. By optimizing content strategy based on these insights, the channel can further enhance its reach and engagement.

**Helping hand in this project**

Visual studio - [https://code.visualstudio.com/](%20https:/code.visualstudio.com/)

Kaggle dataset used - <https://www.kaggle.com/datasets/rsrishav/youtube-trending-video-dataset>

Github - <https://github.com/>

Jupyter notebook - <https://jupyter.org/>

Power bi - <https://powerbi.microsoft.com>

Excel, Word - <https://www.microsoft.com/en-us/microsoft-365/download-office>