Executive Summary: TikTok Project Lab Analysis

1. Problem

The TikTok data team is conducting an exploratory data analysis (EDA) to distinguish claim videos from opinion videos based on engagement metrics.

The dataset contains key video performance indicators, including:

- Video views, likes, shares, comments, and downloads
- Video duration
- Author verification and ban status
- Claim vs. opinion classification

The goal is to uncover patterns, detect outliers, and provide insights into how engagement levels correlate with claim statuses.

2. Response

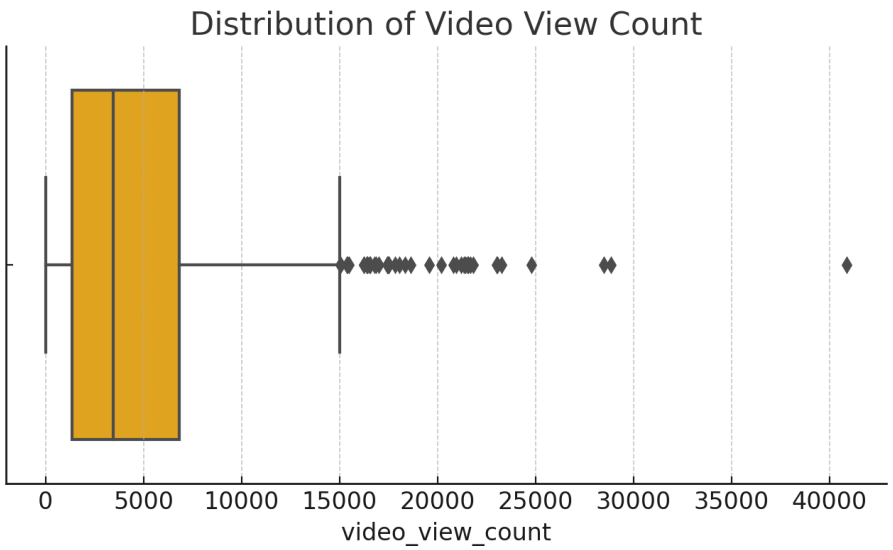
Data Cleaning & Exploration:

- The dataset was assessed for missing values, data types, and statistical summaries.
- Summary statistics and visualizations were created to understand the distribution of variables.

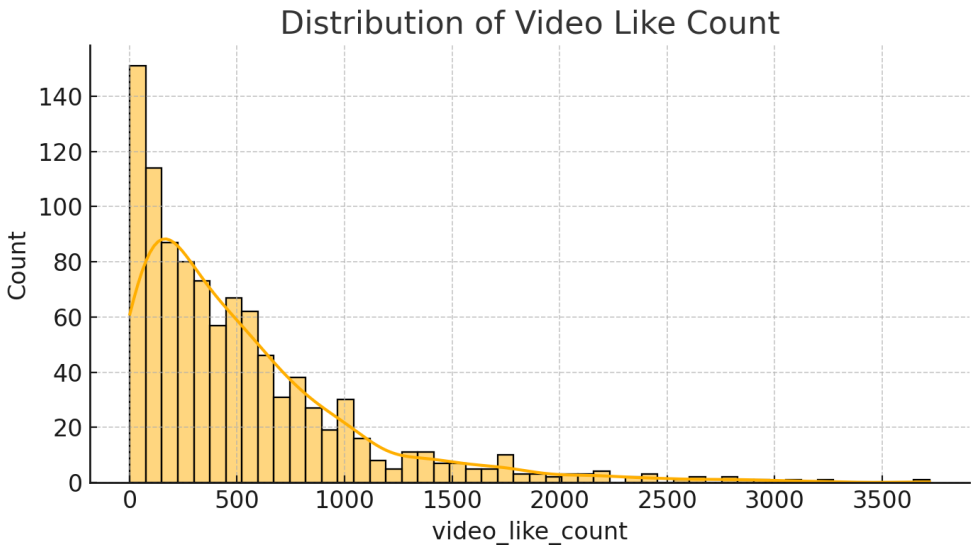
Visualizations & Insights:

Several data visualizations were generated to analyze engagement metrics.

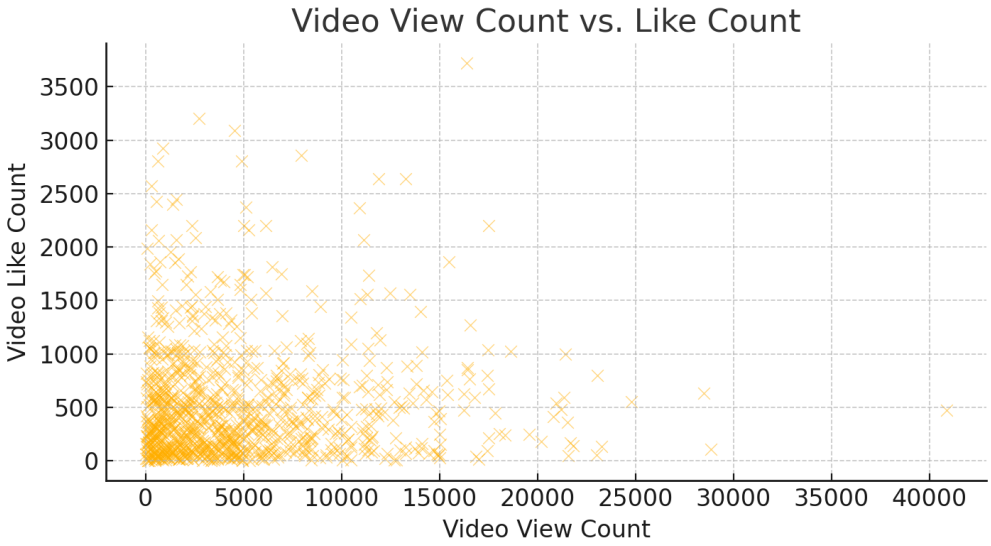
Boxplot - Distribution of Video View Count



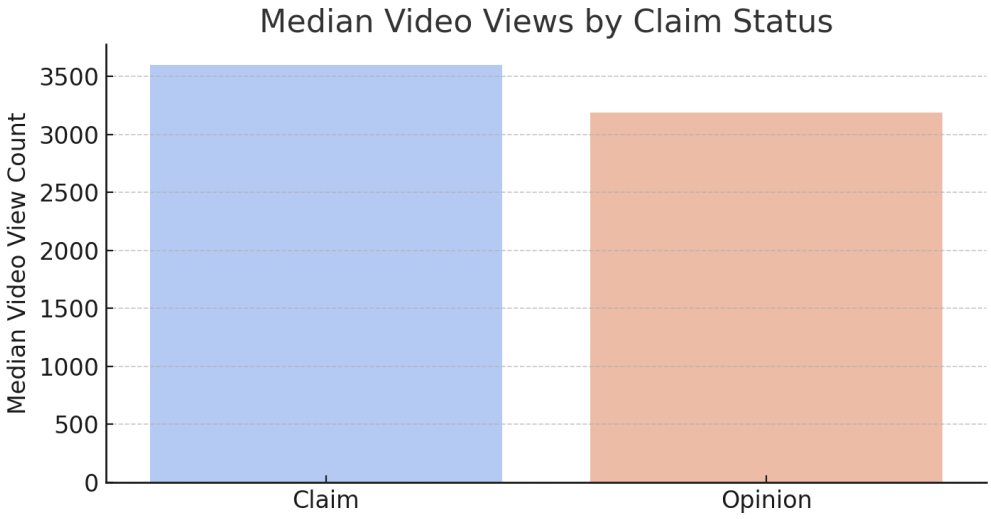
Histogram - Distribution of Video Like Count



Scatterplot - Video View Count vs. Like Count



Bar Chart - Median Video Views by Claim Status



3. Impact

The analysis uncovered key insights about content engagement trends on TikTok:
- Claim videos tend to have higher engagement metrics compared to opinion videos.
- Verified users and active accounts have higher median view counts.
- Banned or under-review authors tend to have lower engagement levels.
- Scatterplots show a strong positive correlation between video views and likes.

These findings can help TikTok's management refine content recommendation algorithms, improve content moderation policies, and enhance user engagement strategies.

4. Conclusion

Conducting exploratory data analysis (EDA) is crucial for understanding social media engagement trends.
The insights from this analysis can be used to:
- Improve content moderation policies by tracking engagement patterns of banned users.
- Optimize recommendation algorithms by identifying factors that drive video virality.
- Develop data-driven strategies to enhance user experience and platform engagement.

Moving forward, additional predictive modeling could be conducted to classify videos as claims or opinions based on engagement metrics.