

YouTube Analytics Dashboard Report

1. Introduction

The YouTube Analytics Dashboard was developed to provide a comprehensive overview of channel and video performance across multiple dimensions. The objective of this dashboard is to enable better decision-making by analyzing subscribers, views, video durations, and engagement patterns. It allows stakeholders to quickly assess performance metrics, identify trends, and evaluate content strategies.

2. Dataset Overview

The dataset used in this dashboard contains video-level details from multiple YouTube channels. The key columns included:

- **channel_id** – Unique identifier for channels
- **channel_name** – Name of the channel
- **subscriber_count** – Number of subscribers per channel
- **view_count** – Total views of a video
- **duration_sec** – Video length in seconds
- **title** – Video title
- **published_date** – Upload date of video

Derived/Calculated Columns & Measures

To enrich analysis, several calculated columns and measures were created:

1. Video Size

```
Video Size = IF ( 'mst_all_languages_videos'[duration_sec] <= 60, "Short",  
                IF ( 'mst_all_languages_videos'[duration_sec] <= 900, "Medium", "Long"))
```

2. Views per Subscriber

```
Views per Subscriber = DIVIDE( SUM(mst_all_languages_videos[view_count]),  
                               SUM(video_summary_uat[subscribercount]))
```

3. Avg Video Duration (Min)

```
Avg Video Duration (Min) = AVERAGEX( mst_all_languages_videos,  
                                     DIVIDE(mst_all_languages_videos[duration_sec], 60))
```

4. Views per Minute

```
Views per Minute = DIVIDE(SUM(mst_all_languages_videos[view_count]),  
                           SUM(mst_all_languages_videos[duration_sec]) / 60)
```

5. Average Views per Video

```
Avg Views per Video = DIVIDE(SUM(mst_all_languages_videos[view_count]),  
                              COUNTROWS(mst_all_languages_videos))
```

6. Views Share %

```
Views Share % = DIVIDE( SUM(mst_all_languages_videos[view_count]),  
                        CALCULATE(SUM(mst_all_languages_videos[view_count]),
```

`ALL(mst_all_languages_videos)))`

7. Video Duration (Min Rounded)

Video Duration (Min Rounded) = `ROUNDUP(mst_all_languages_videos[duration_sec] / 60, 0)`

This calculates each video/channel's contribution to the overall views.

3. Visualizations in Dashboard

The dashboard includes a mix of Cards, Tables, Pie Charts, and Bar Charts for quick insights.

Cards (KPIs)

- **Total Channels** – Number of unique channels analyzed.
- **Total Subscribers** – Combined subscriber base.
- **Total Views** – Aggregate views across all channels/videos.
- **Views per Subscriber** – Efficiency metric showing engagement per subscriber.
- **Average Video Duration** – Average length of content uploaded.
- **Views per Minute** – Indicates how much attention each minute of video receives.

These cards serve as **high-level KPIs**, instantly highlighting the scale and efficiency of YouTube performance.

Bar Chart

- **Channel vs Total Views / Subscribers**
Helps compare performance between channels. Large bars indicate dominance in views or subscribers, enabling stakeholders to identify top-performing creators.

Pie Chart

- **Video Size Distribution (Short / Medium / Long)**
Shows how creators are balancing short-form vs long-form content. Useful for strategy: e.g., if Shorts dominate but views per minute are low, the strategy may need adjustment.

Table with Tooltips

- Detailed table including: Video Title, Duration, Views, Subscribers, and clickable **YouTube link** (with tooltip: *"Click here to watch on YouTube"*).
- Provides drill-down for detailed inspection and navigation directly to content.

5. Key Insights

- Channels with higher subscriber counts don't always yield higher views → engagement quality matters.

- Short videos are common, but long-form videos contribute significantly to watch time.
- Views per Minute metric highlights which content type maximizes audience attention.

6. Conclusion

This YouTube Analytics Dashboard provides a structured and interactive way to evaluate YouTube performance across multiple channels and video types. By combining KPIs, comparative visualizations, and detailed drill-down tables, the dashboard equips stakeholders with actionable insights for content planning, audience engagement, and growth strategy.

