Shri Ramswaroop Memorial University
Lucknow Deva Road Uttar Pradesh

Topic :- YouTube Video Performance
Analytics

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(202410101150072)
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Presenter To :-Mrs. Deepika Tiwari
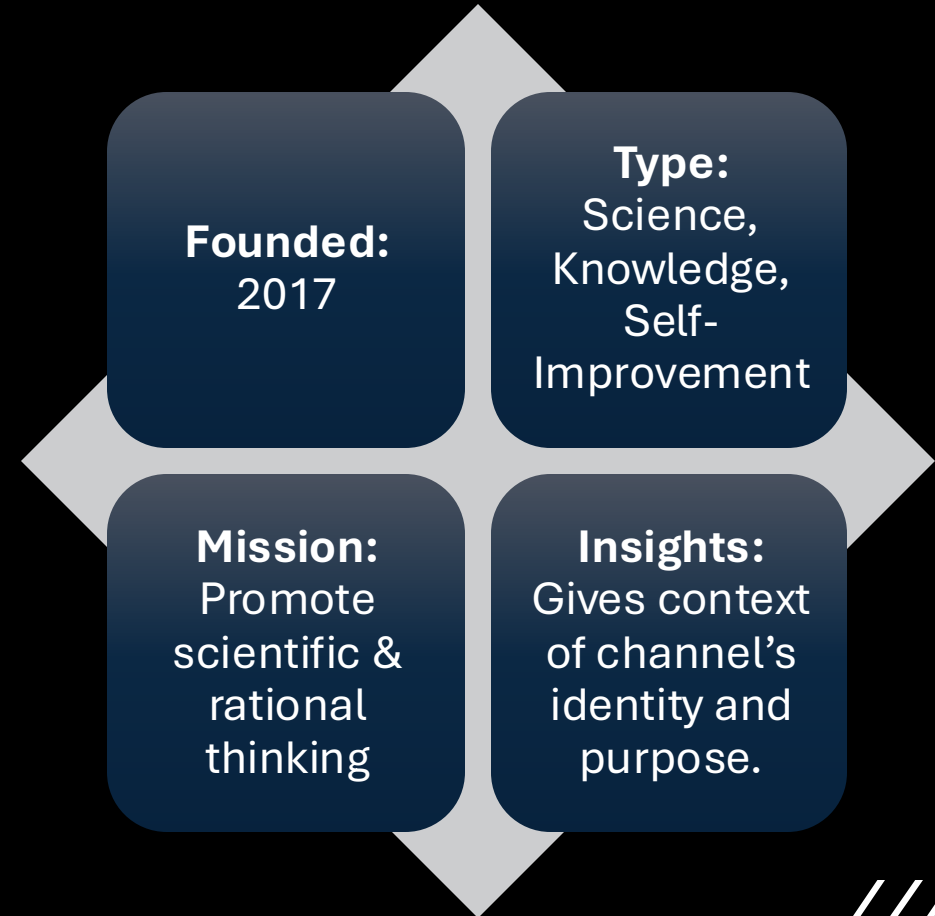Course :-B. tech CS(DS+AI)
Subject :-Data Analytics and Reporting

Title

➢**YouTube Video Performance Analytics**

➢**Channel: -** *GetsetflySCIENCE*

➢**Creator: -** *Gaurav Thakur*

➢**Includes: -** Channel-wide analytics + Deep video analysis

Channel Overview

Founded: 2017

Type: Science, Knowledge, Self-Improvement

Mission: Promote scientific & rational thinking

**Insights:** Gives context of channel's identity and purpose.

EXPLANATION ABOUT THE WORK

➢ Here we use video of channel of **getsetflySCIENCE** for analysis whose creator name is

➢ **Mr. Gaurav Thakur**, from where first we take the channel id from his channel and them by that id we create an API id by the help of **GOOGLE CLOUD CONSOLE** and then by the help of API id and channel id, we find the total number of videos and his likes, comments, views separately of all videos by the help of google colab and the find out, whose video have maximum views and whose video have minimum and so many things like that, which will help us to understand his way of explanation about any topics, how the engaged people and how can we do this through which we can increase our YouTube Video Performance.

➢ After that we take a random video from his channel for analysis that is *"SPACE And TIME Don't Actually Exist"* where he explain about two theory that is **"ABSOLUTISM"** and **"RELATIONALISM"**.
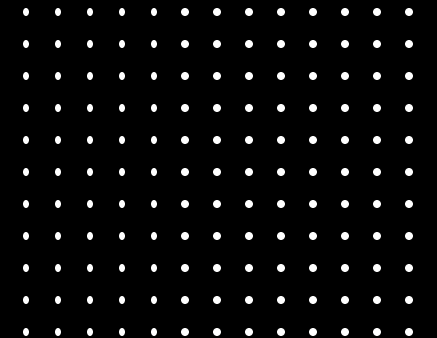
Methodology

➢ We use YouTube Data API v3 to extract data.

➢ **API Key:** AIzaSyDFJ_THPq-MbhyLiQ3nDCUl-Otvy79RAZ8

➢ Channel id: - UC00ifCvU8YOOzbL3RdiSTDw

➢ Store data in CSV or database format for analysis
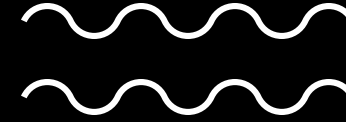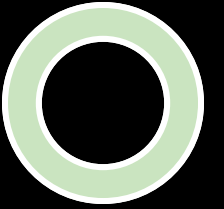
- ➢ **Subscribers:** ~9.6M
- ➢ **Total Videos:** ~503
- ➢ **Total Views:** ~1.4B
- ➢ **Average Engagement Rate:** ~0.37%
- ➢ **Insights:** Shows strong subscriber base and long-term performance.

Channel Key Metrics

Channel Growth Insights

➢ ~40,000 new subscribers monthly

➢ Strong performance in science-curious audience

➢ High search & suggested traffic contribution

➢ **Insights:** Channel is consistently growing due to evergreen science topics.

Top Performing Content Types

- 🪐 Space & Universe videos
- ⚙️ Psychological & self-improvement science
- ⚛️ Quantum & futuristic topics
- 🧠 Human brain & consciousness
- 🎥 **Insights:** Videos with mystery + science attract the largest audience.

Now Video Performance Analytics

➢ From overall channel to **individual video analysis**

➢ **Selected video:** *"SPACE And TIME Don't Actually Exist"*

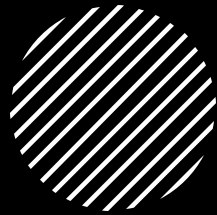➢ **Insights:** Helps viewers shift focus to a deeper case study.

Video Overview

➢ **Title:** SPACE And TIME Don't Actually Exist

➢ **Views:** ~2.43M

➢ **Likes:** ~70K

➢ **Duration:** 12 minute : 11 seconds

Video Key Performance Metrics

➢ Strong CTR

➢ High retention first 1 minute

➢ **Watch time estimated:** high

➢ **Insights:** Good hook and curiosity-driven content.

Video Audience Retention Insights

➤ Drop-offs in complex explanations

➤ Peaks during relatable examples

➤ Smooth mid-video performance

➤ **Insights:** Shows how viewer psychology interacts with scientific content.

Engagement Analysis

➢ **Likes:** 70K

➢ **Comments:** High conversation rate

➢ **Shares:** Good due to curiosity topic

➢ **Insights:** Engagement validates strong viewer interest.

Final Insights

- ➢ **Channel:** Strong growth & loyal audience

- ➢ **Video:** High-performing scientific concept

- ➢ **Combined:** Science + narrative = success formula

- ➢ **Insights:** Channel should replicate structure of top-performing videos.

Conclusion

YouTube video performance analytics helps clearly understand **what truly works on your channel and why.** By analyzing metrics such as views, watch time, audience retention, click-through rate (CTR), engagement, and traffic sources, creators can identify their best-performing content patterns. These insights reveal which topics attract viewers, which formats hold attention, and which videos drive subscriber growth.

THANK YOU