

SONG ANALYSIS USING POWER BI

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PROBLEM STATEMENT

This internship project aims to conduct a comprehensive analysis of YouTube songs data using Power BI. The dataset contains key attributes such as video ID, channel title, title, description, tags, published date, view count, like count, favorite count, comment count, video duration, video definition, and caption details. The goal is to utilize Power BI to create insightful visualizations and reports that provide a deeper understanding of YouTube songs' performance, popularity, and user engagement. The analysis aims to uncover trends, preferences, and patterns in the data to aid content creators and stakeholders in optimizing their YouTube song content.





PROJECT OBJECTIVES

▮ Data Cleaning and Preparation:

Clean and preprocess the dataset, handling missing values or outliers. Convert relevant columns to appropriate data types.

▮ Exploratory Data Analysis (EDA):

Explore patterns and distributions in view counts, like counts, and comments. Identify trends in the popularity and engagement of YouTube song videos.

▮ Content and Channel Analysis:

Analyze the distribution of videos across different channels. Identify popular tags and their correlation with view counts.



PROJECT OBJECTIVES

▮ Temporal Trends:

Explore how YouTube song video metrics vary over time. Identify peak publishing times and their impact on engagement.

▮ User Engagement Insights:

Investigate relationships between likes, comments, and views. Identify factors influencing user engagement with YouTube song videos.



DATA DESCRIPTION

- ▮ 1. video_id: Unique identifier for each YouTube video.
- ▮ 2. channelTitle: Title of the YouTube channel publishing the song.
- ▮ 3. title: Title of the YouTube song video.
- ▮ 4. description: Description provided for the YouTube song video.
- ▮ 5. tags: Tags associated with the YouTube song video.
- ▮ 6. publishedAt: Date and time when the YouTube song video was published.
- ▮ 7. viewCount: Number of views received by the YouTube song video.
- ▮ 8. likeCount: Number of likes received by the YouTube song video.
- ▮ 9. favoriteCount: Number of times the YouTube song video has been marked as a favorite.
- ▮ 10. commentCount: Number of comments posted on the YouTube song video.
- ▮ 11. duration: Duration of the YouTube song video.
- ▮ 12. definition: Video definition or quality (e.g., HD, SD).
- ▮ 13. caption: Availability of captions for the YouTube song video.

YouTube Song Analysis

Span

12/23/2010

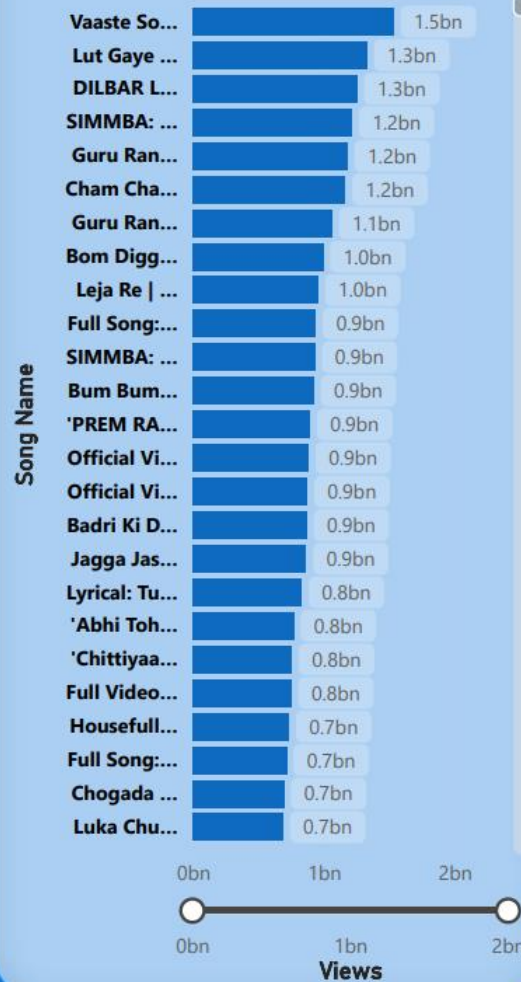
8/20/2023

Basic Insights

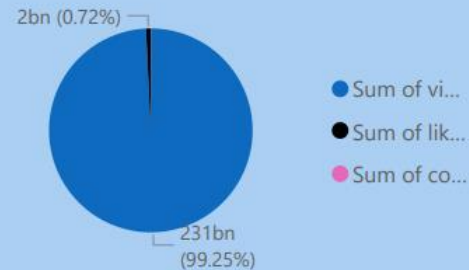
Further Details

Deeper Insights

Popular Songs



Views vs Likes vs Comments

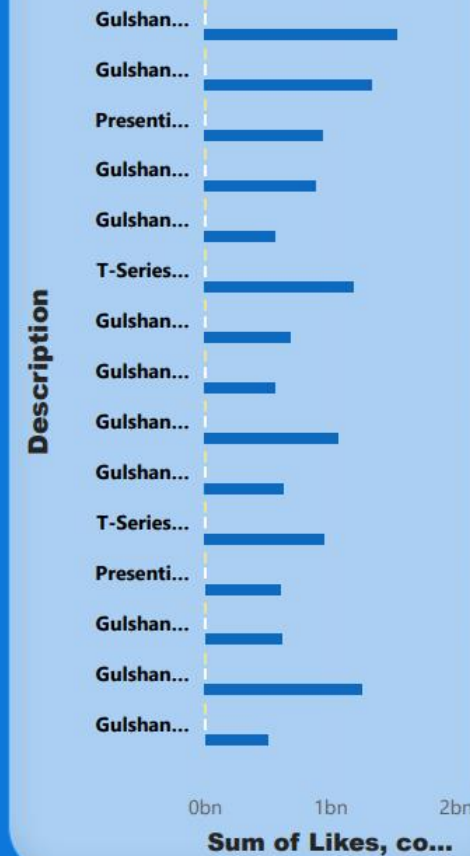


Popular Tags



Sum of likes, comment and view

Sum of like... Sum of c... Sum of vie...



YouTube Song Analysis

Span

12/23/2010



8/20/2023

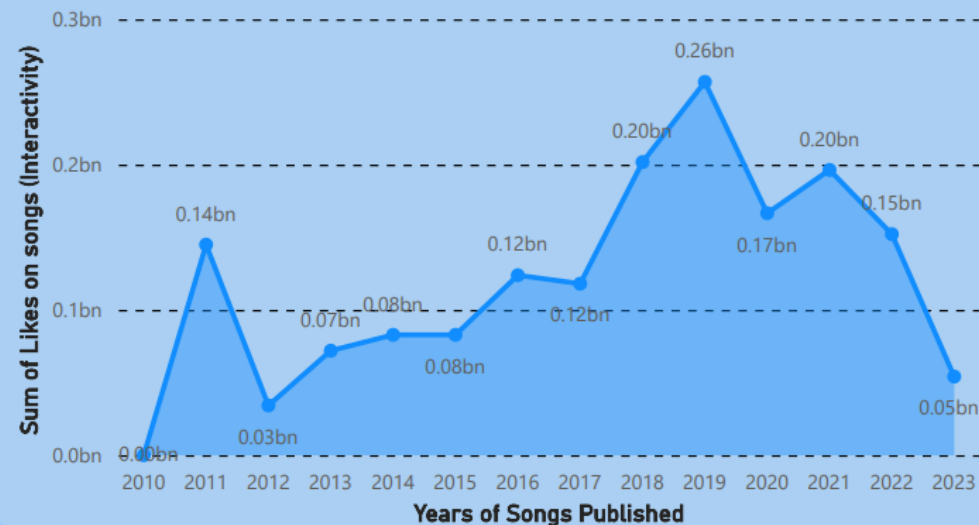


Basic Insights

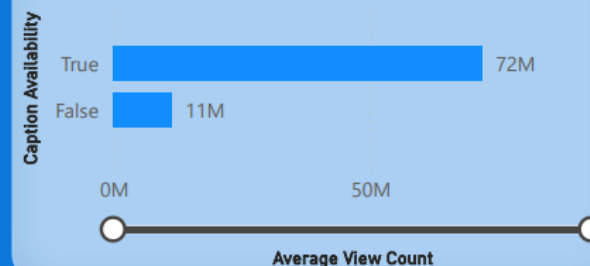
Further Details

Deeper Insights

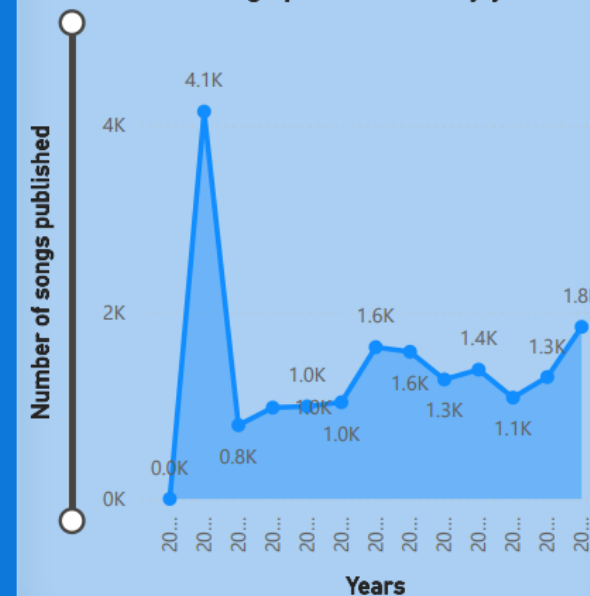
Likes engagement metrics each year



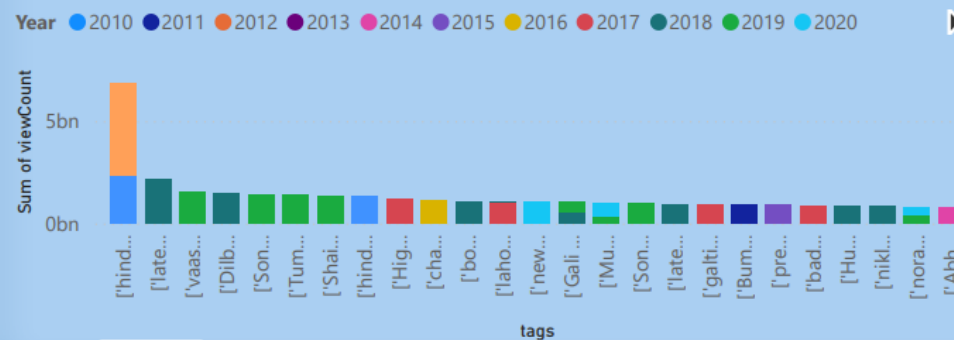
Average of viewCount by caption



Number songs published every year



Views by Tags



YouTube Song Analysis

Span

12/23/2010

8/20/2023

Basic Insights

Further Details

Deeper Insights

11.94M

Average of viewCount

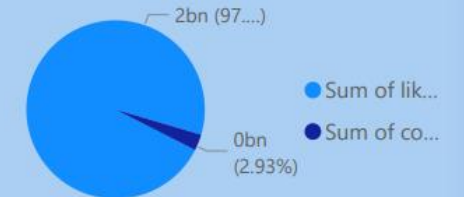
87.18...

Average of likeCount

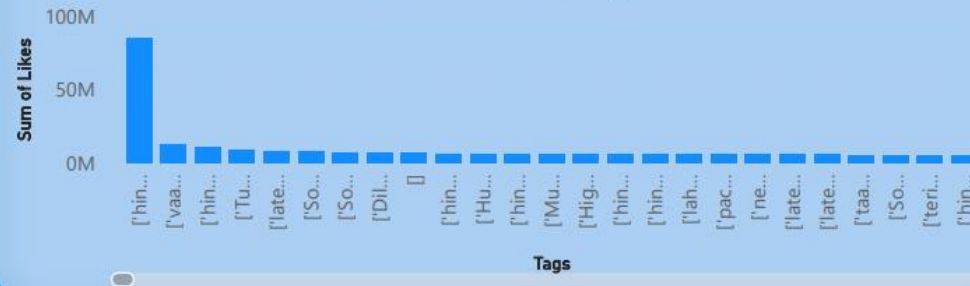
2.64K

Average of comment...

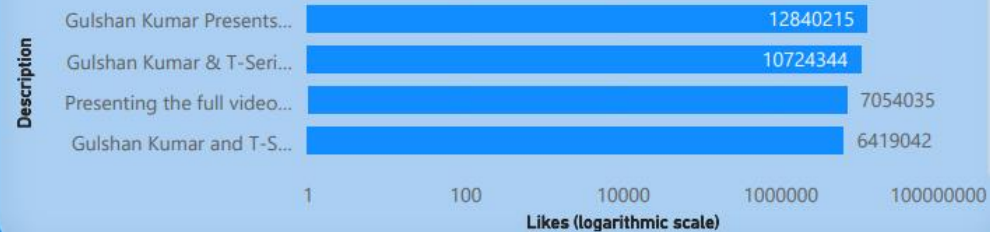
Sum of Likes and Sum of Comments



Sum of Likes by tags



Sum of Likes by Description



Recommendations:

Creators should focus more on tags and description in order to gain more interactive audience.

Songs of particular tags should be released more often.

There should be more releases of songs from every category, as the interactivity is increase but quantity released is decreased that's why releasing more songs are having potential to grab more interactive audience.



RECOMMENDATIONS

- ❑ Enhance titles and descriptions with targeted keywords.
- ❑ Foster viewer engagement through comments and discussions.
- ❑ Apply relevant tags to boost search visibility.
- ❑ Promote videos on social media platforms.
- ❑ Stick to a regular posting schedule.
- ❑ Design attractive thumbnails.
- ❑ Partner with other content creators.
- ❑ Regularly review and analyze performance metrics.
- ❑ Use playlists to extend watch time.
- ❑ Encourage viewers to subscribe for updates.





THANK YOU