SONGS ANALYSIS

WITH POWER BI

Presented By: Faiza Ansari

OVERVIEW

- Problem Statement
- Dataset Details
- Project Objectives
- Power BI Dashboards
- Recommendations
- Conclusion

PROBLEM STATEMENT

- This 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 song's 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.

DATASET DETAILS

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

PROJECT OBJECTIVES

1

Data Cleaning and Preparation:
- Clean and preprocess the dataset, handling missing values or outliers.
- Convert relevant columns to appropriate data types.

2

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.

3

Content and Channel Analysis:
- Analyze the distribution of videos across different channels.
- Identify popular tags and their correlation with view counts.

4

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

5

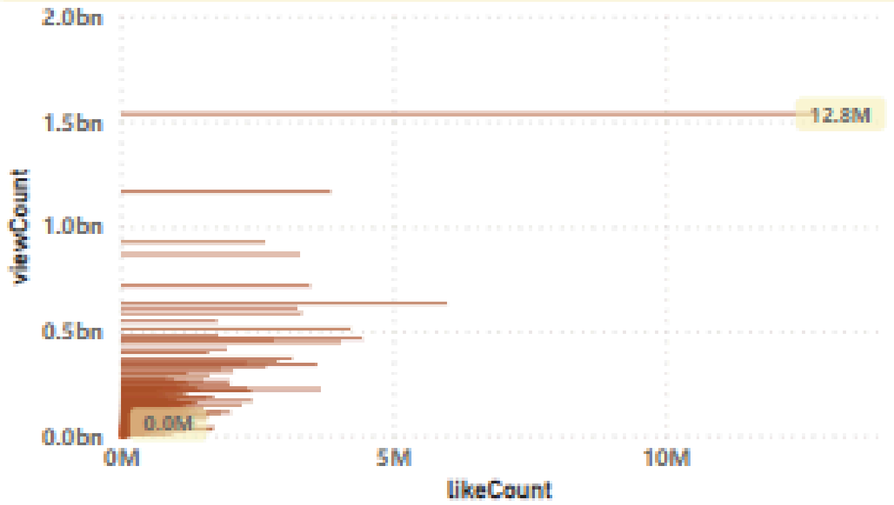
User Engagement Insights:
- Investigate relationships between likes, comments, and views.
- Identify factors influencing user engagement with YouTube song videos.

POWER BI DASHBOARDS

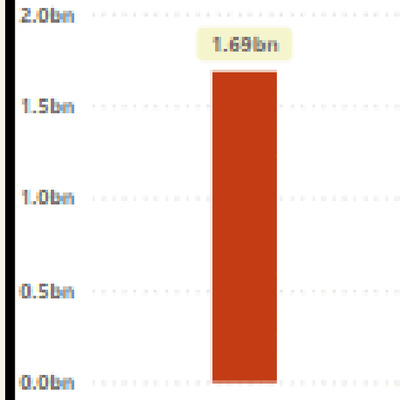
Exploratory Data Analysis

Total Views	Total Likes	Total Comments
231bn	2bn	51M

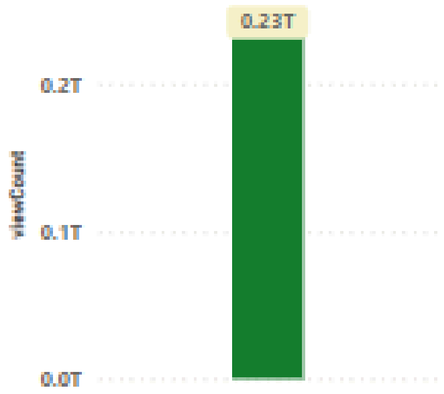
LikeCount by ViewCount



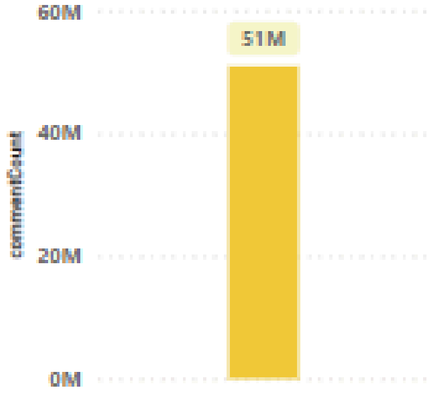
um of likeCount



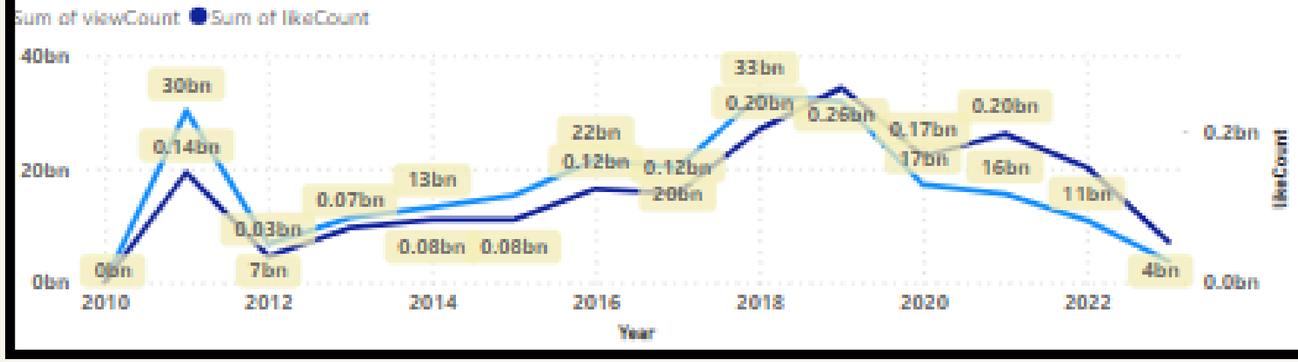
Sum of viewCount



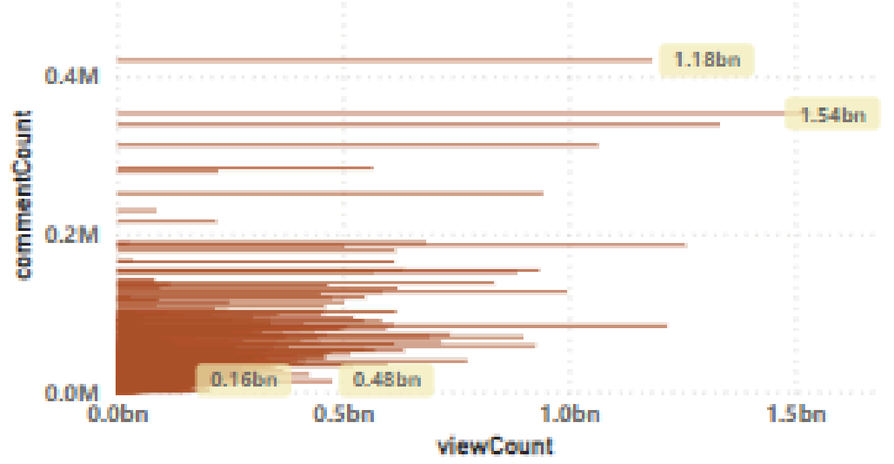
Sum of commentCount



Total Views & Likes by Year



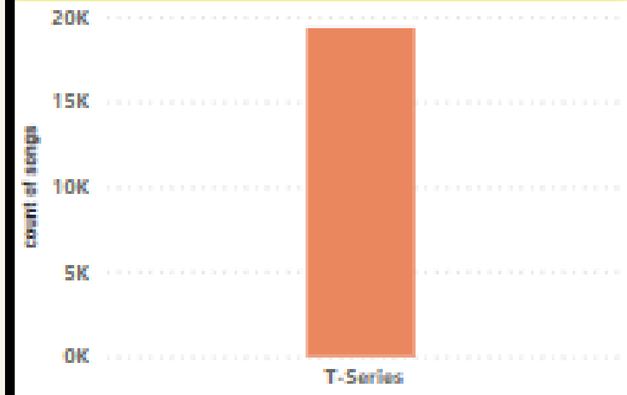
ViewCount by CommentCount



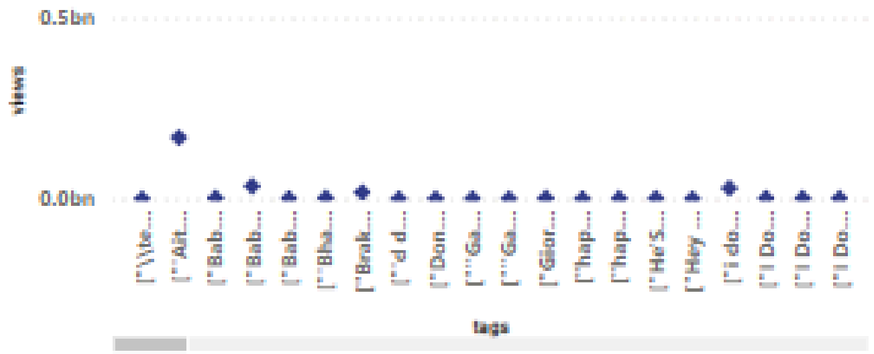
Content Channel & Temporal Trends Analysis

Total Songs	Total Views	Total Likes	Total Duration	Total Comments
19.35K	231bn	2bn	66.47	51M

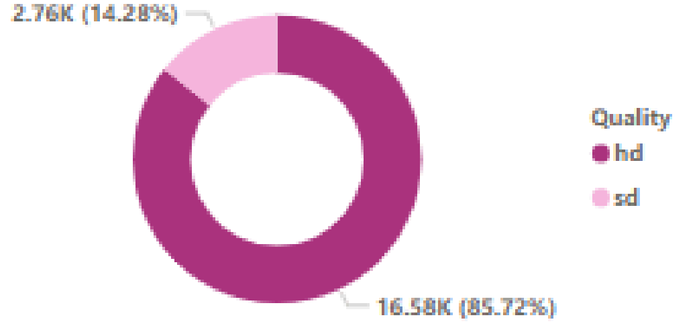
Songs by Channel



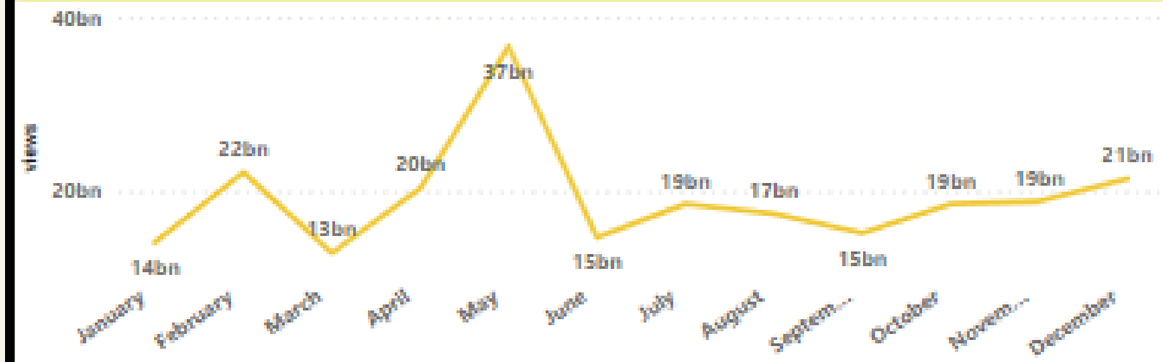
Total Views by Tags



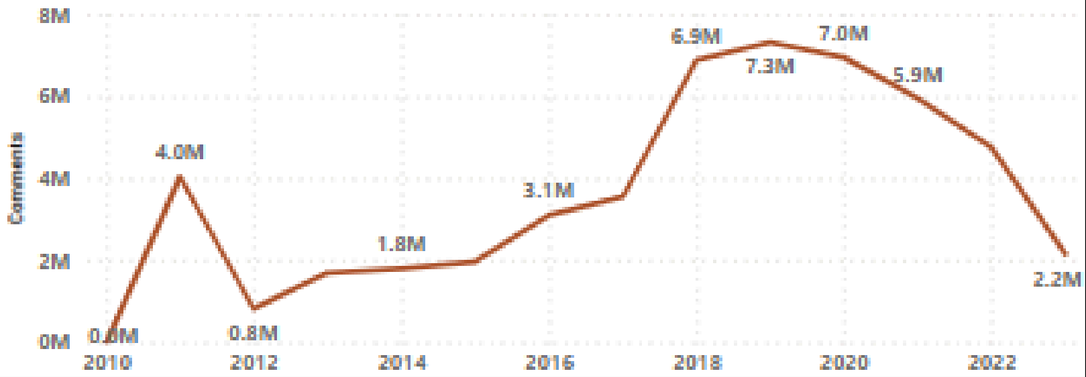
Songs by Quality



Views by Month



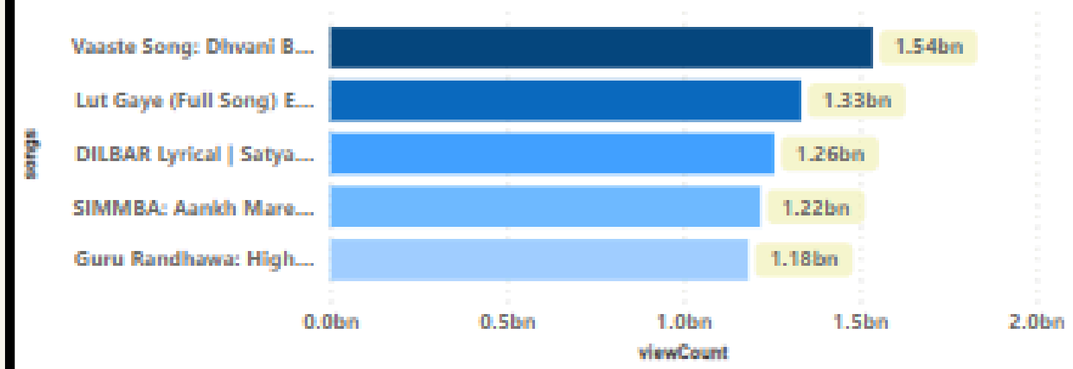
Total Comments by Year



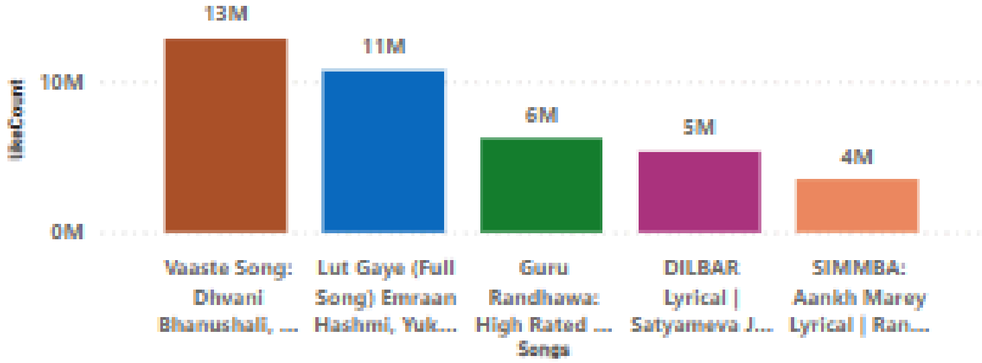
User Engagement Insights

Total Songs	Total Views	Total Likes	Total Duration	Total Comments
19.35K	231bn	2bn	66.47	51M

Top 5 songs by Views



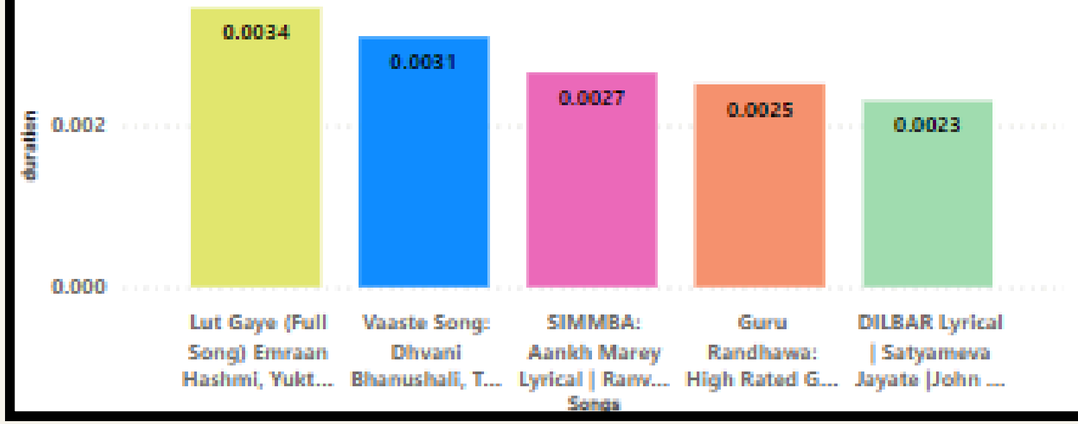
Top 5 songs by Likes



Year

- [ ] 2010
- [ ] 2011
- [ ] 2012
- [ ] 2013
- [ ] 2014
- [ ] 2015
- [ ] 2016

Top 5 songs by Duration



Songs by Year

RECOMMENDATIONS

- **Recommendation 1**

  Publish videos during peak times when users are most active.

- **Recommendation 2**

  Maintain a consistent publishing schedule to build a loyal audience who expects new content at specific times.

- **Recommendation 3**

  Actively engage with viewers by responding to their comments.

Recommendation 4

Design visually appealing thumbnails that attract viewer's attention.

Recommendation 5

Use popular and relevant tags identified in the analysis to increase the discoverability of videos.

Recommendation 6

Partner with other YouTubers or influencers to cross-promote each other's content.

CONCLUSION

This project helped me with hands-on experience in leveraging Power BI for meaningful analysis in the dynamic domain of YouTube songs, contributing insights to optimize content strategy and engagement.

THANK YOU

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