

Introduction

My Name is Bhawna Thakur. I have made a Power BI Project in which I have analyzed the Global YouTube Statistics. I Download the Dataset from Kaggle which shows the YouTube Statistics of 2023. Used SQL to manipulate the data and rank categories by average views

Abstract:

The **Global YouTube Statistics Report** project was developed to analyze and visualize worldwide YouTube performance metrics. Using Power BI, the project provides interactive insights into content categories, top-performing channels, and engagement patterns. The dataset highlights key aspects such as total YouTubers, top categories by views, highest subscribed and viewed channels, and leading earners on the platform.

The objective of this project is to uncover patterns in content popularity, subscriber growth, and revenue generation, helping to understand what drives success on YouTube. Visuals such as pie charts, treemaps, and trend lines have been used to present data in an intuitive manner.

By delivering a consolidated view of YouTube's global landscape, this report can support content creators, marketers, and analysts in identifying trends, benchmarking performance, and making data-driven decisions for growth on digital platforms.

Tools Used:

- 1) I have used SQL to rank categories by average views.
- 2) Used Power Query Editor to clean the Data, remove null values and change the Data types of the Dataset.
- 3) Used Power BI to create the Dashboard to uncover Pattern and Business Insights from the Dataset.

Steps Involved in Building the Report:

- First of all I load the Data to Power BI, Transform it to Power Query Editor to clean the Dataset and to perform some additional DAX Query to retrieve and manipulates Data from a tabular model.
- Then I analyze the data to check if there is any duplicates or null values presented in the dataset. There were so many errors so firstly I changed the type of the Data, then I remove all the unnecessary columns presented in the Dataset.
- Then I replace some null values which were giving errors, like there were "nan" written in some rows which I replace with "0".
- After handling all the errors and null values, our Data is ready for Visualization. So I close the Power Query Editor and apply all the changes and Load the Data to Power BI.
- I perform some measures and make calculated columns to provide dynamic, context aware results in reports and dashboards.

- First I make a calculated column to know the estimated earnings of the Youtuber:
Estimated_Earning = 'Global YouTube Statistics'[video views]*0.01.
- Then Calculate some measures to know about popular category, most subscribed youtube channel, most viewed channel, top earner, total estimate earning, total subscriber, total uploads, total views, youtuber counts and lastly category count.
- Most_Popular_cat = TOPN(1,ALL('Global YouTube Statistics' [category]),[Total_view],DESC).
- Most_Subs_YT = TOPN(1,ALL('Global YouTube Statistics' [Youtuber] , [Total_subs],DESC).
- Most_viewed_YT = TOPN(1,ALL('Global YouTube Statistics' [Youtuber]), [Total_view],DESC).
- Total_EstimatedEarning = SUM('Global YouTube Statistics'[Estimated_Earning]).
- Top_Earner = TOPN(1,ALL('Global YouTube Statistics' [Youtuber]), [Total_EstimatedEarning],DESC).
- Total_subs = SUM('Global YouTube Statistics' [subscribers]).
- Total_uploads = SUM('Global YouTube Statistics'[uploads]).
- Total_views = SUM('Global YouTube Statistics'[video views]).
- Youtuber_counts = DISTINCTCOUNT('Global YouTube Statistics'[Youtuber]).
- Category_count = DISTINCTCOUNT('Global YouTube Statistics '[category]).

After all the calculations I have started to make my Dashboard. Firstly I made some important slicers to explore and analyze specific values and ranges. Then I add a Pie chart to show top 5 categories, line chart to show the trends and time series of top 5 Youtubers on the basis of views, Tree map to visualize hierarchical data of top 5 youtubers by uploads and lastly stacked column chart to compare the top 5 YouTuber on the basis of subscription. After this I made all the formatting and also apply some advanced filtering to make this Dashboard Interactive and clean.

Conclusion:

The Global YouTube Statistics Report successfully provides a comprehensive overview of the YouTube ecosystem, showcasing the dominance of channels such as **T-Series** across views, subscribers, and earnings. The analysis reveals that **Music and Entertainment** remain the most influential content categories, driving billions of views worldwide. Visualizations of top YouTubers by uploads, subscribers, and revenue highlight the diverse strategies that contribute to success on the platform.

This project demonstrates how **data visualization in Power BI** can transform raw statistics into meaningful insights, helping creators, marketers, and businesses understand digital content trends. By identifying key performance drivers, the report emphasizes the importance of consistent content production, category selection, and audience engagement in achieving growth on YouTube.