**Global YouTube Statistics**

**PROJECT BY**

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**Introduction**

This project focuses on analyzing YouTube data to explore the relationship between various metrics such as subscribers, video views, and uploads. By leveraging a comprehensive dataset of popular YouTube channels, the analysis aims to uncover trends and insights that can be used to optimize video content and improve audience engagement.

**Objective**

The main objective of this project is to identify key factors influencing YouTube channel performance. This includes understanding how metrics like subscribers, video views, uploads, and earnings correlate with each other. The insights derived will help content creators and marketers make data-driven decisions to optimize their content strategy.

**Scope of Work**

1. **Data Collection**: Use YouTube data, including statistics on subscribers, video views, uploads, and earnings.
2. **Data Cleaning**: Handle missing values, duplicates, and prepare the data for analysis.
3. **Exploratory Data Analysis (EDA)**: Analyze trends and patterns using visualizations (e.g., pie charts, bar charts, scatter plots).
4. **Correlation Analysis**: Investigate the relationship between subscribers, video views, uploads, and earnings.
5. **Reporting**: Provide actionable insights and recommendations based on data analysis.

**Methodology**

1. **Data Preprocessing**:
   * Merge datasets on 'youtuber\_rank' for unified analysis.
   * Handle missing values and duplicates.
2. **Exploratory Data Analysis (EDA)**:
   * Use descriptive statistics and visualizations (heatmaps, scatter plots, bar charts) to understand the distribution of data.
   * Analyze the correlations between numerical variables.
3. **Visualization**:
   * Visualize relationships between subscribers, video views, uploads, and earnings.
   * Use pie charts to represent the distribution of YouTube categories and countries.
4. **Insights & Recommendations**:
   * Summarize key trends and provide suggestions for improving YouTube channel performance.

**Expected Outcomes**

1. Clear visualization of how YouTube channels are distributed across categories and countries.
2. Understanding the correlation between subscribers, video views, uploads, and earnings.
3. Identification of top-performing YouTube channels and factors that contribute to their success.
4. Actionable recommendations for content creators to boost engagement and optimize channel growth.

**Conclusion**

This analysis highlights the critical factors driving YouTube channel success. By understanding correlations between metrics such as subscribers, video views, and uploads, the project provides insights that content creators can use to enhance their performance. The use of data-driven strategies is essential for optimizing video content and engaging with a larger audience.