

YouTube Global Statistics Analysis

DATA-DRIVEN INSIGHTS ON CHANNEL GROWTH AND
EARNINGS

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2025

INTRODUCTION

This project unveils the statistics of the most subscribed YouTube channels. It offers a perfect avenue to analyze and gain valuable insights from the luminaries of the platform.

With comprehensive details on top creators' subscriber counts, video views, upload frequency, country of origin, earnings, and more, this treasure trove of information is a must-explore for aspiring content creators, data enthusiasts, and anyone intrigued by the ever-evolving online content landscape.

Problem Statement

- With the massive amount of content on YouTube, it becomes increasingly challenging for creators and businesses to understand what drives engagement and growth.
- This analysis aims to identify the metrics that influence viewership, likes, comments, and overall audience retention.

Goals

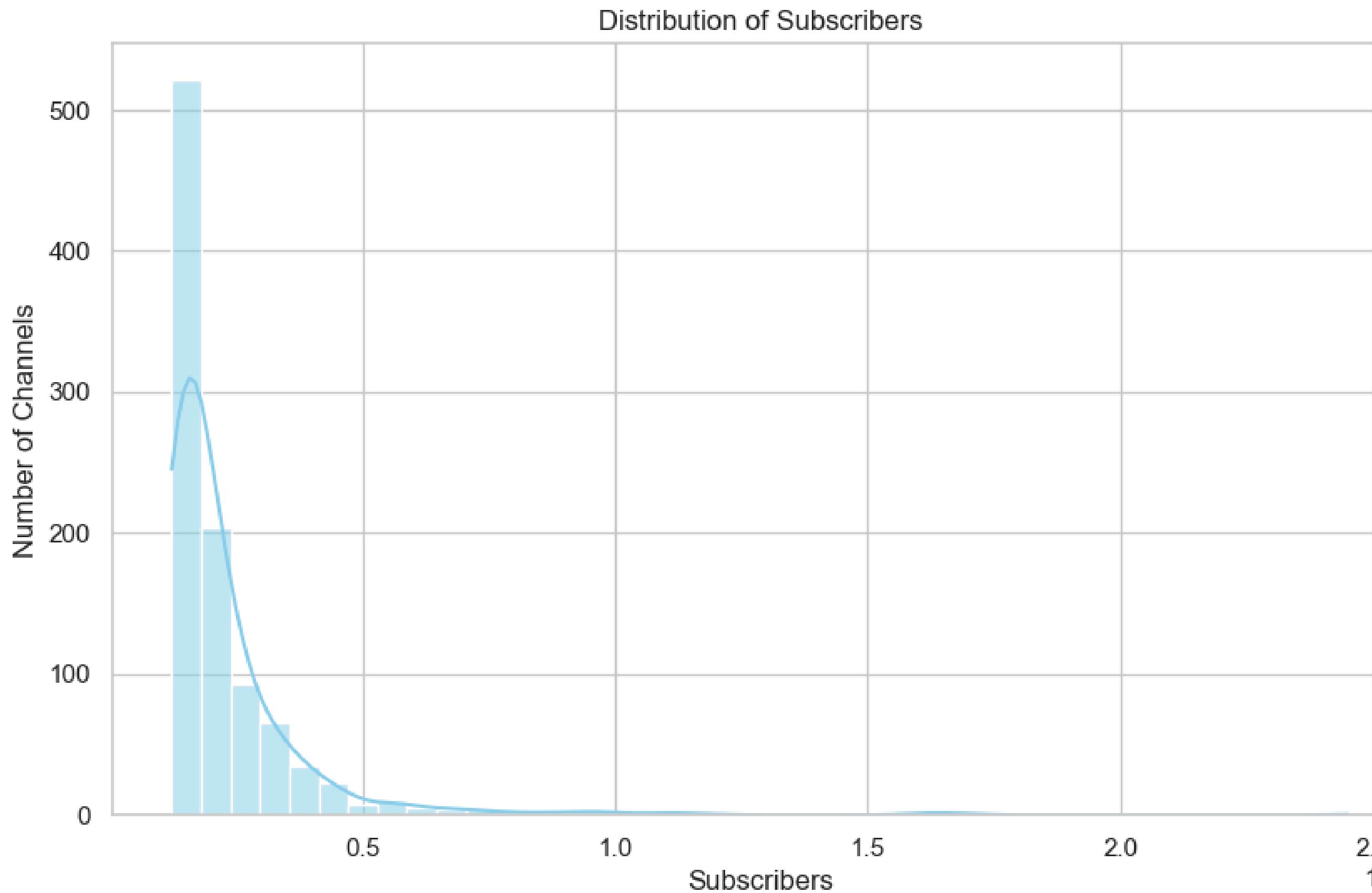
- What factors drive creator success?
- How do uploads, views, subscribers, and earnings relate?
- Which regions and channel types perform best?
- Visualize patterns and trends to understand audience preferences.
- Provide actionable recommendations for improving content strategy.

1	Youtuber	990	non-null	object
2	subscribers	990	non-null	int64
3	video_views	990	non-null	float64
4	category	990	non-null	object
5	Title	990	non-null	object
6	uploads	990	non-null	int64
7	Country	990	non-null	object
8	Abbreviation	990	non-null	object
9	channel_type	990	non-null	object
10	video_views_rank	990	non-null	float64
11	country_rank	990	non-null	float64
12	channel_type_rank	990	non-null	float64
13	video_views_for_the_last_30_days	990	non-null	float64
14	lowest_monthly_earnings	990	non-null	float64
15	highest_monthly_earnings	990	non-null	float64
16	lowest_yearly_earnings	990	non-null	float64
17	highest_yearly_earnings	990	non-null	float64
18	subscribers_for_last_30_days	990	non-null	float64
19	created_year	990	non-null	float64
20	created_month	990	non-null	object
21	created_date	990	non-null	datetime64[ns]
22	continent	990	non-null	object
23	channel_age	990	non-null	float64
24	engagement_rate	990	non-null	float64

UNIVARIATE ANALYSIS

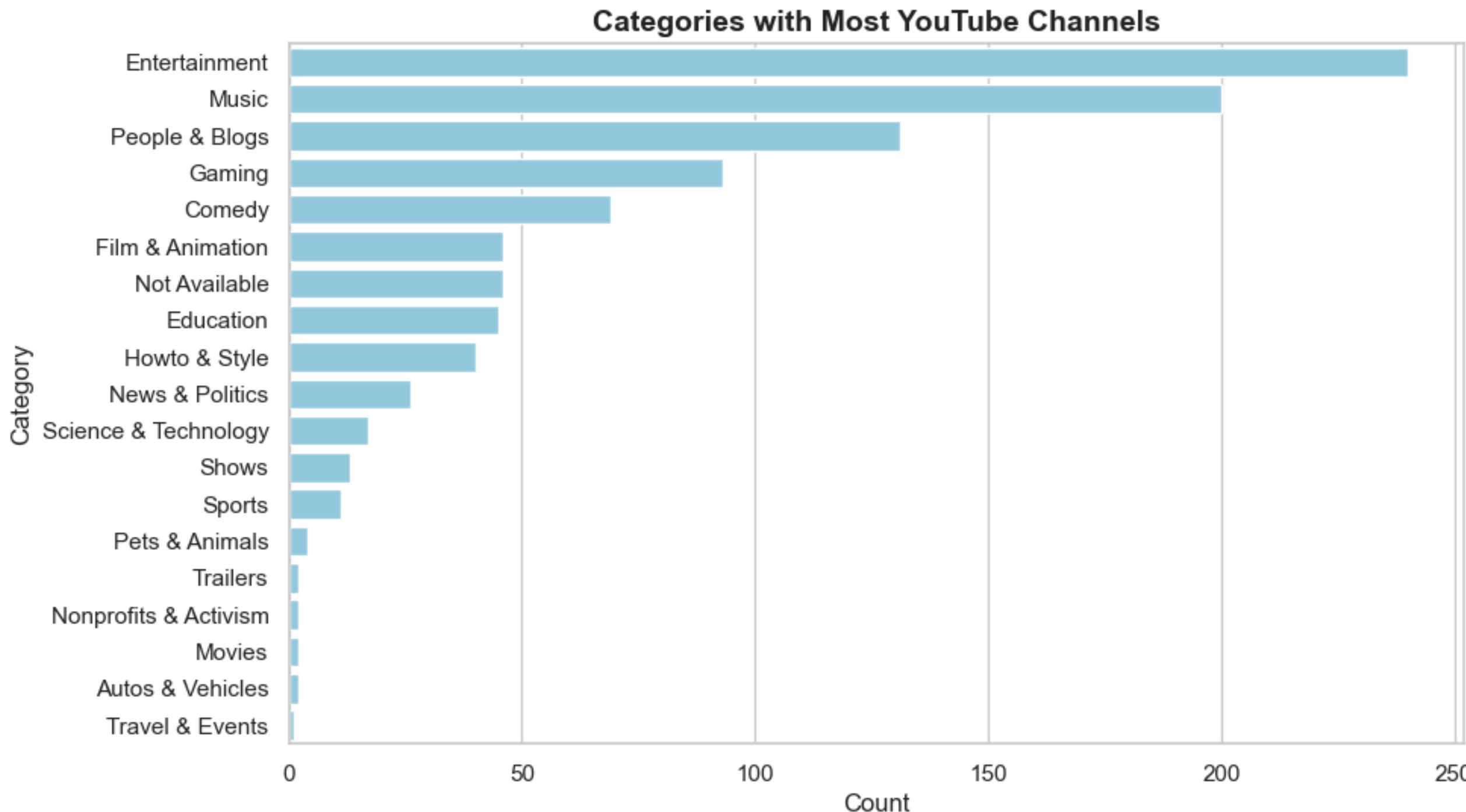
- 1.What is the distribution of subscribers
- 2.Which category have the most YT activity
- 3.What Countries have the highest amount of YT activity
- 4.What continent have the highest amount of YT activity
- 5.What is the distribution of uploads
- 6.What is the distribution of highest yearly earnings

WHAT IS THE DISTRIBUTION OF SUBSCIBERS



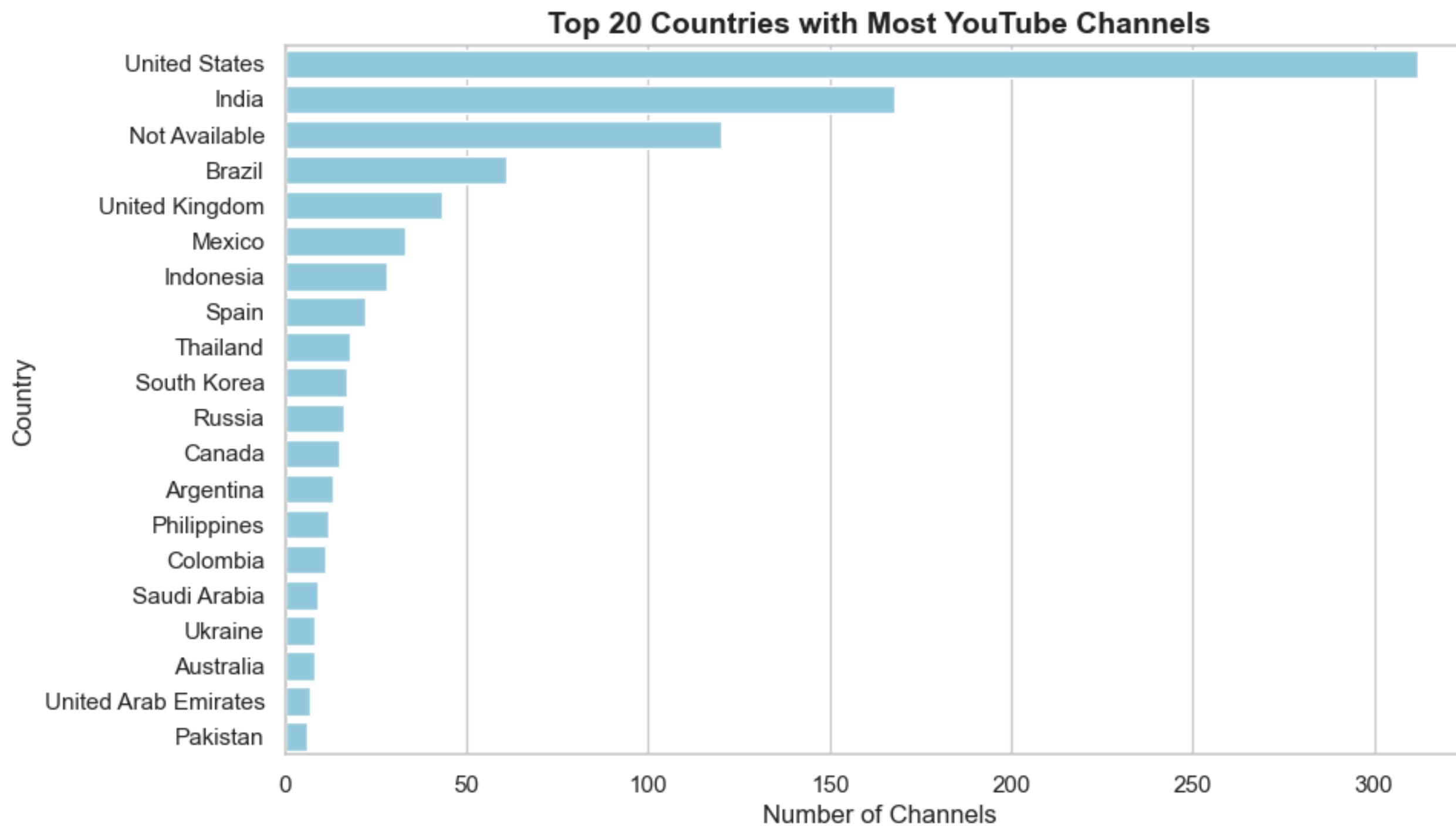
Most channels have low to moderate subscriber counts, while a few have extremely high subscribers. This shows YouTube popularity "is concentrated among a small number of top creators --right-skewed distribution

WHICH CATEGORY HAVE THE MOST YOUTUBE ACTIVITY



Entertainment and Music, are the most common types, showing YouTube's focus on fun, creativity, and engagement.

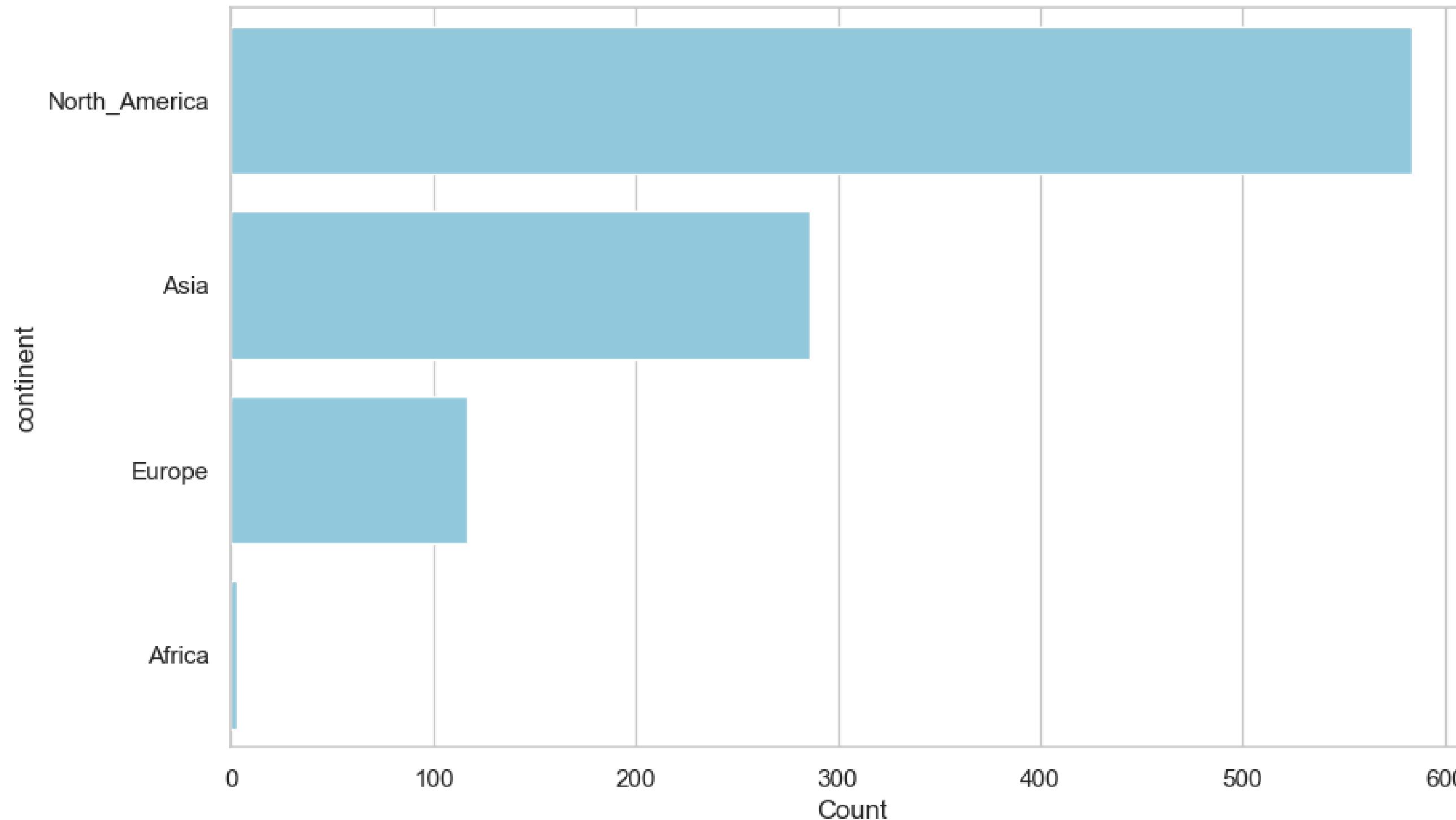
WHAT COUNTRIES HAVE THE HIGHEST AMOUNT OF YT ACTIVITY



Countries like the USA, India, and Brazil appear at the top, indicating large user bases and high number of content creators there.

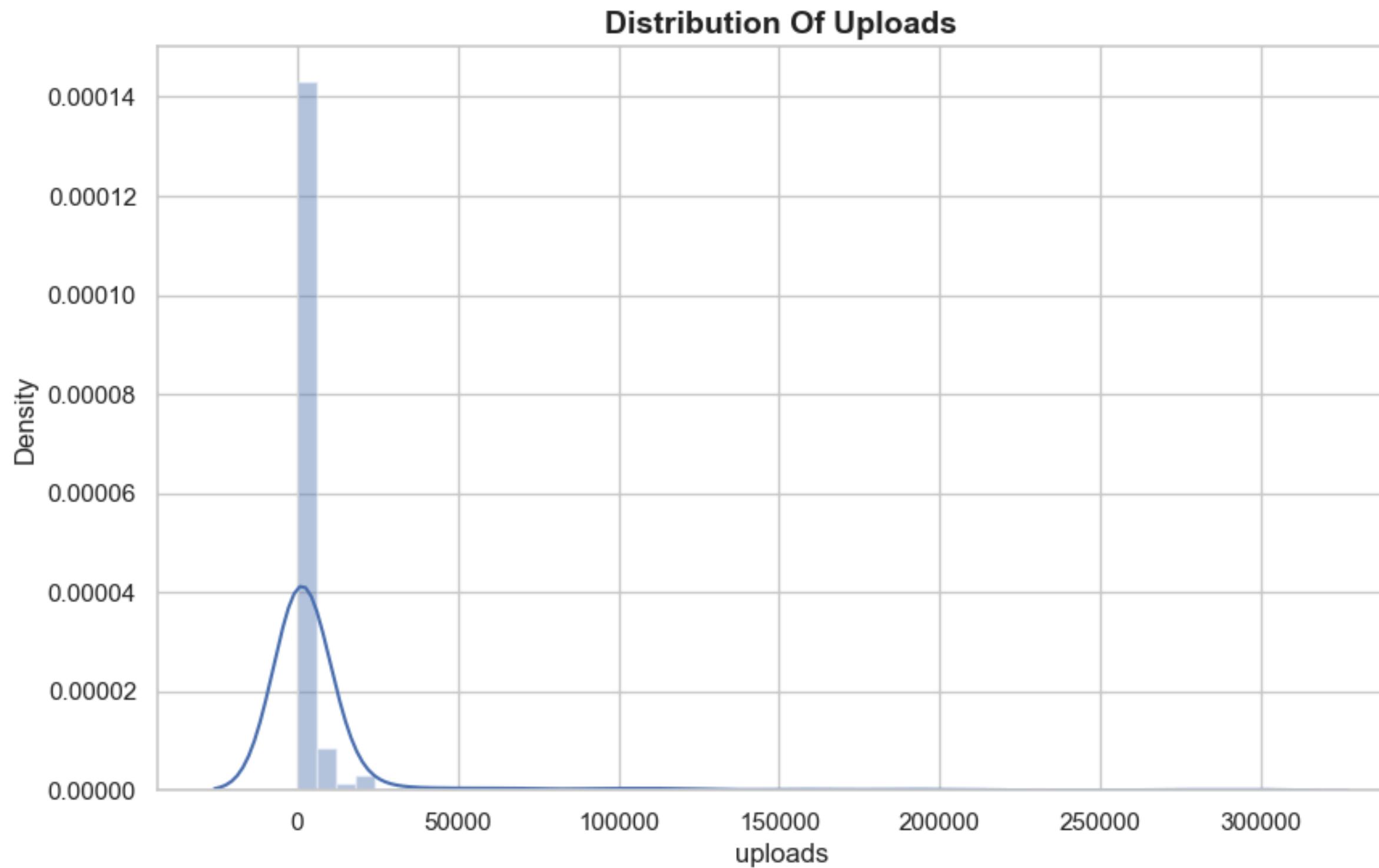
WHAT CONTINENT HAVE THE HIGHEST AMOUNT OF YT ACTIVITY

Continents with Most YouTube Channels



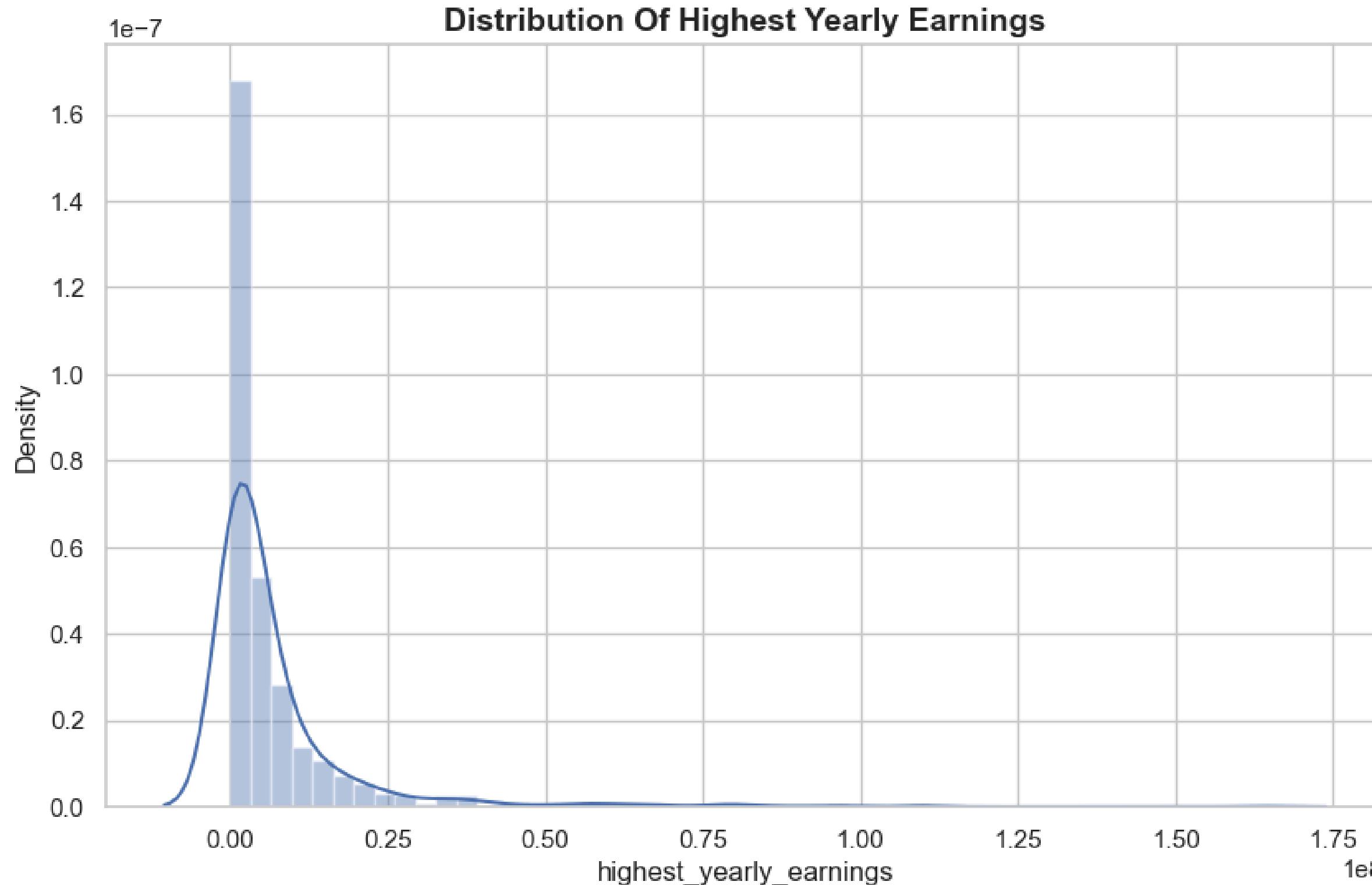
North America and Asia tend to dominate, reflecting high internet penetration and content creation in these regions.

WHAT IS THE DISTRIBUTION OF UPLOADS



Most values cluster at the low end, meaning most channels upload fewer videos, while a few are highly active. This helps to understand creator consistency and output levels.

WHAT IS THE DISTRIBUTION OF HIGHEST YEARLY EARNINGS



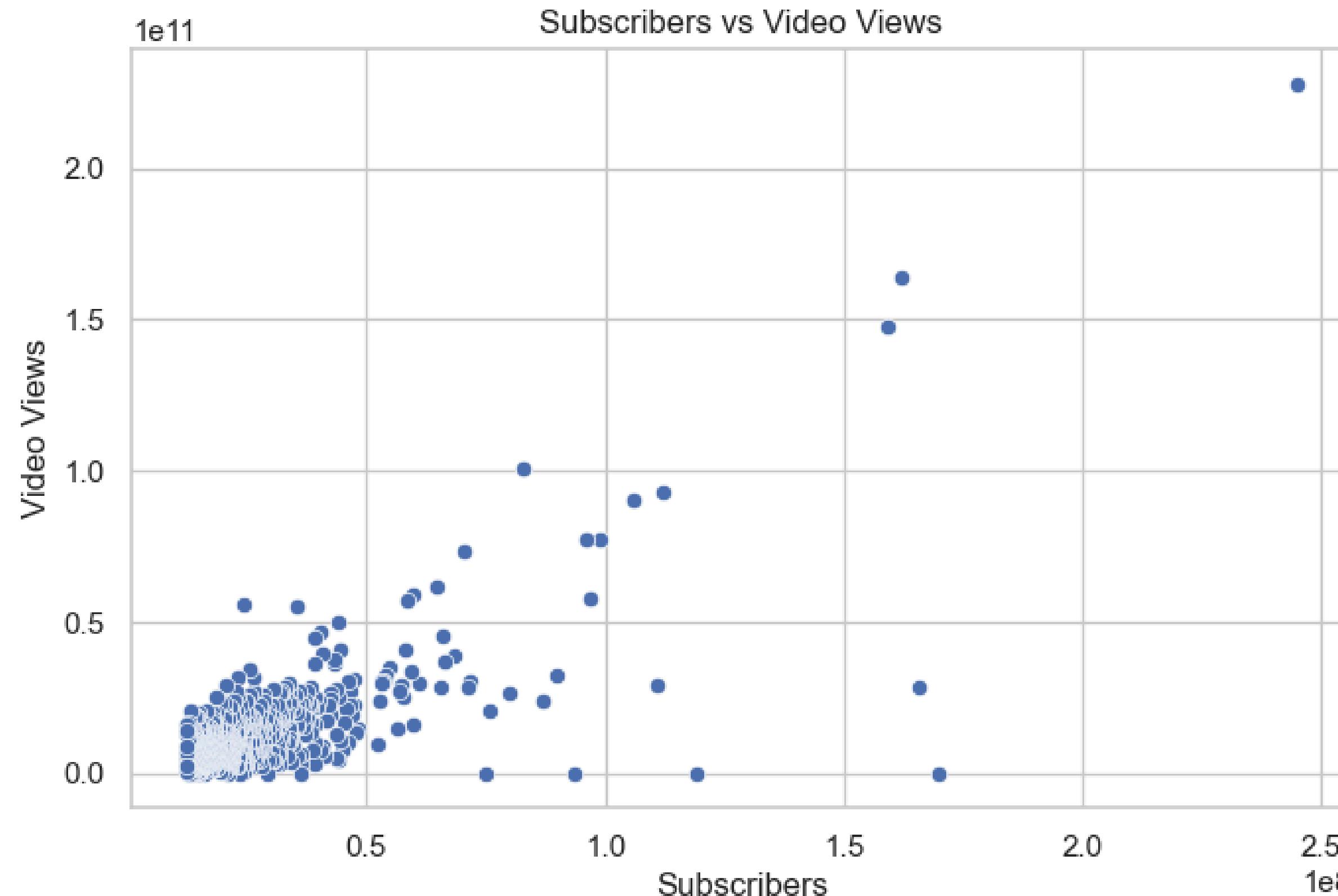
Highlights a strong income inequality among YouTubers — the majority earn little compared to a few highly successful creators.

This insight underscores the power-law nature of digital platforms, where visibility and revenue are concentrated among top performers.

BIVARIATE ANALYSIS

- 1.What is the relationship between Subscribers and Video Views
- 2.What is the relationship between Uploads and Subscribers
- 3.What is the relationship between Uploads and Highest Yearly earnings
- 4.What is the relationship between Subscribers and Highest Yearly earnings
- 5.What is the relationship between Video Views and Highest Yearly earnings
- 6.What are the average Subscribers in the different Channel types
- 7.Video views by Channel Type
- 8.Top 10 Countries by Video views

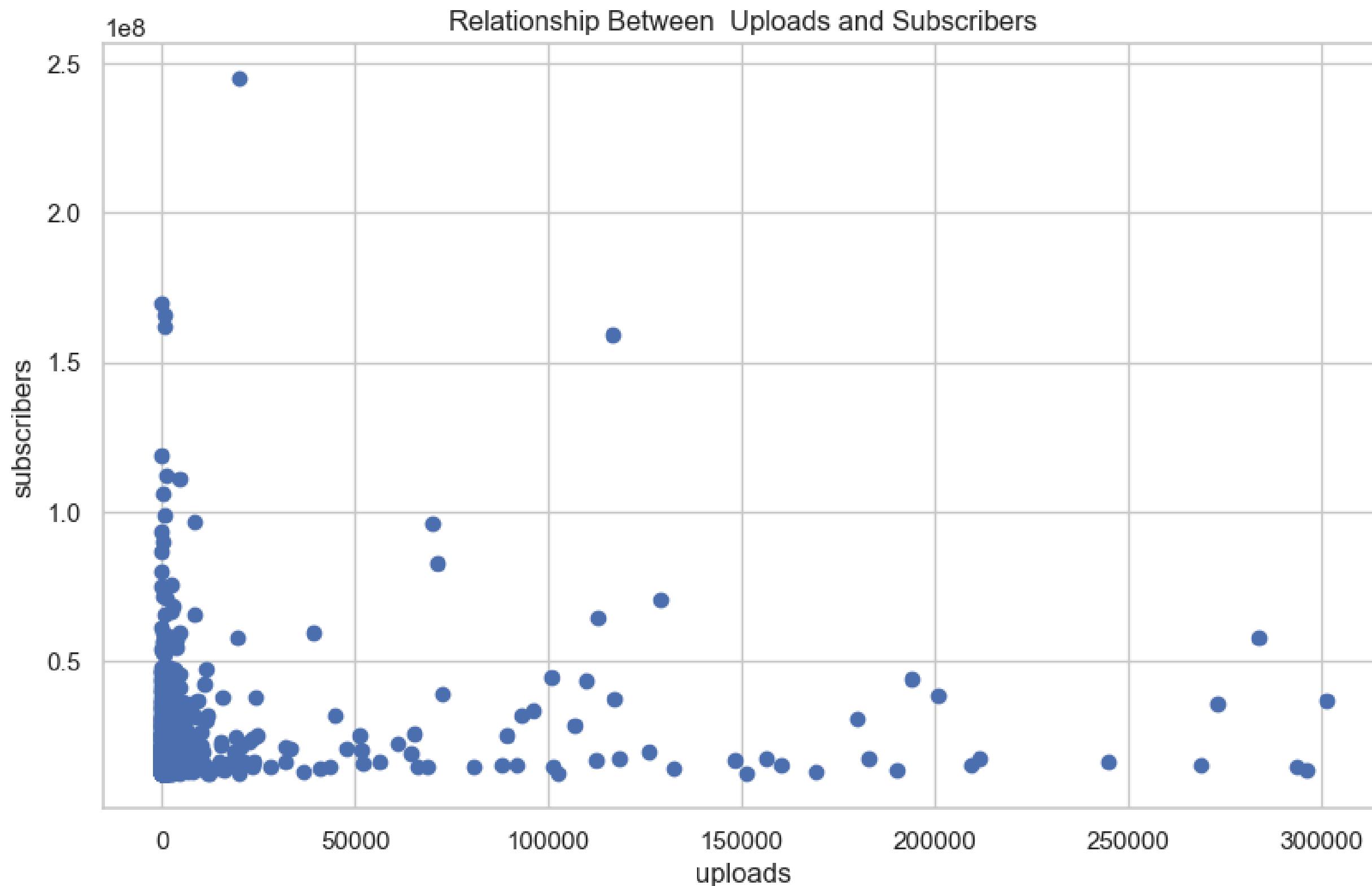
WHAT IS THE RELATIONSHIP BETWEEN SUBSCRIBERS AND VIDEO VIEWS



A positive correlation — channels with more subscribers have more views.

Outliers indicate viral channels with high views despite fewer subscribers.

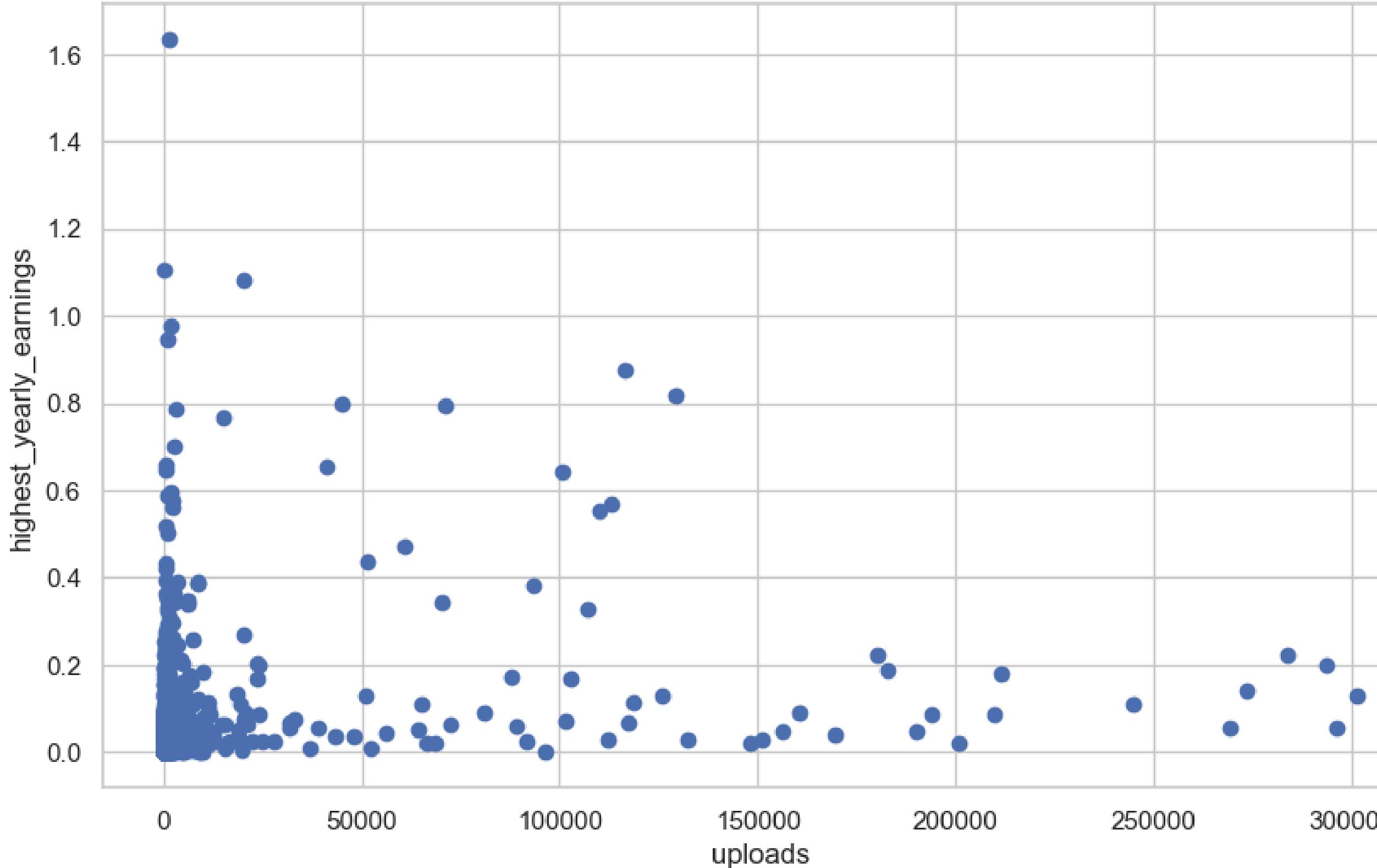
WHAT IS THE RELATIONSHIP BETWEEN UPLOADS AND SUBSCRIBERS



Frequent posting is not linked to higher subscriber counts.

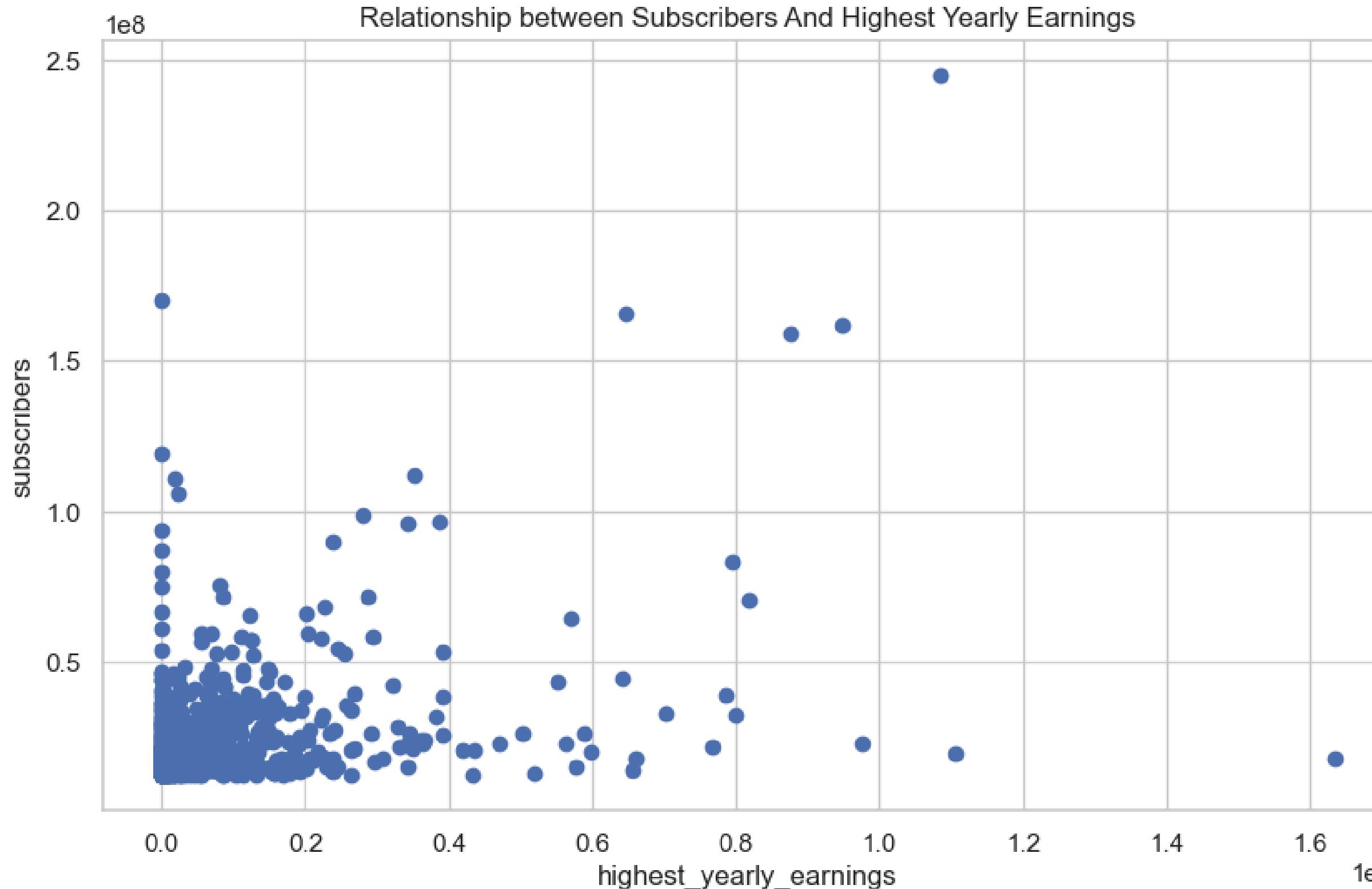
The weak correlation suggests that quality or niche may matter more than quantity.

WHAT IS THE RELATIONSHIP BETWEEN UPLOADS AND HIGHEST YEARLY EARNINGS



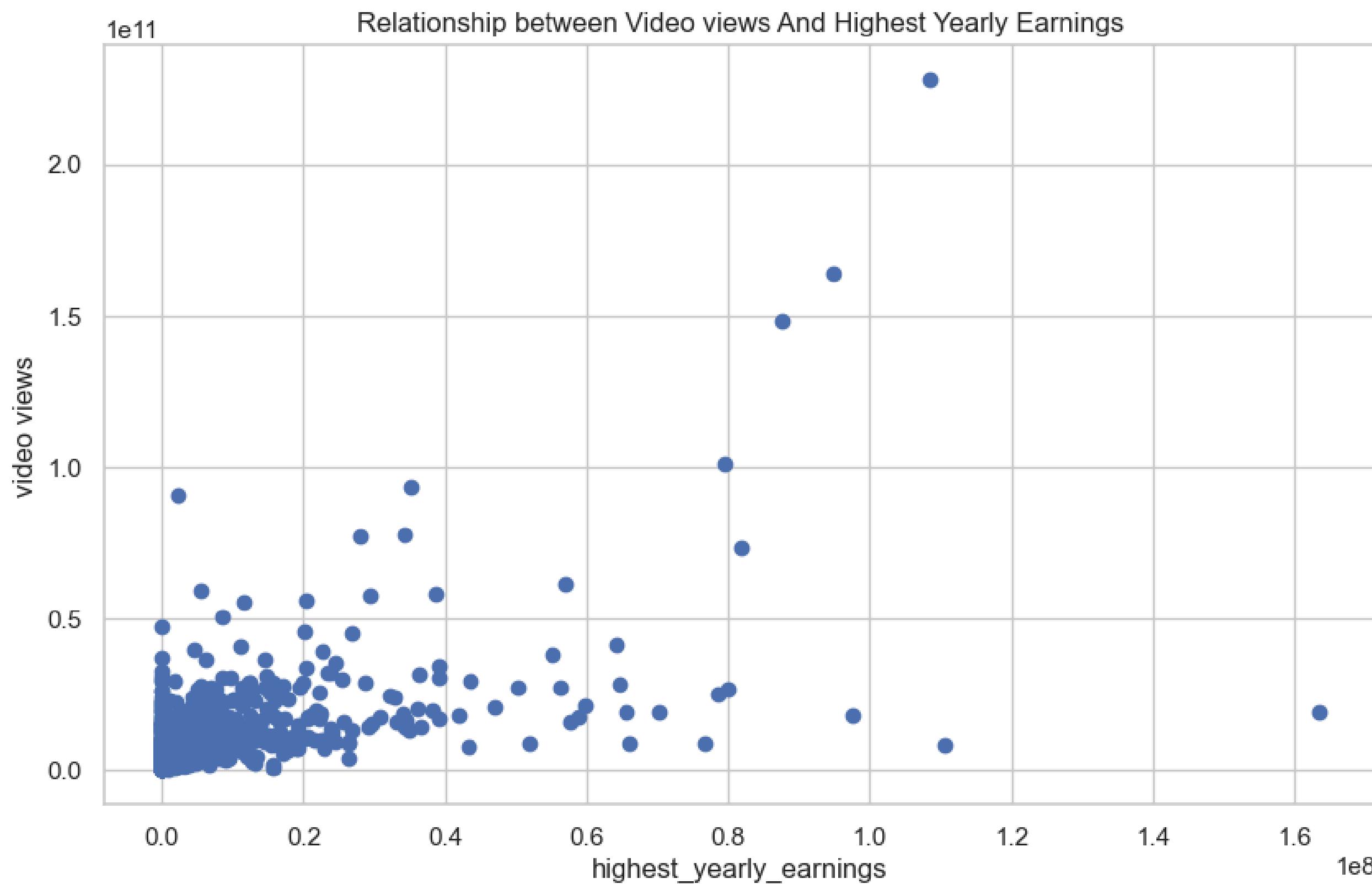
Earnings depend more on
viewership quality than
upload count

WHAT IS THE RELATIONSHIP BETWEEN SUBSCRIBERS AND HIGHEST YEARLY EARNINGS



Typically positive — more subscribers → higher yearly earnings.
However, outliers show some small channels still earn highly, possibly due to niche sponsorships or monetization efficiency.

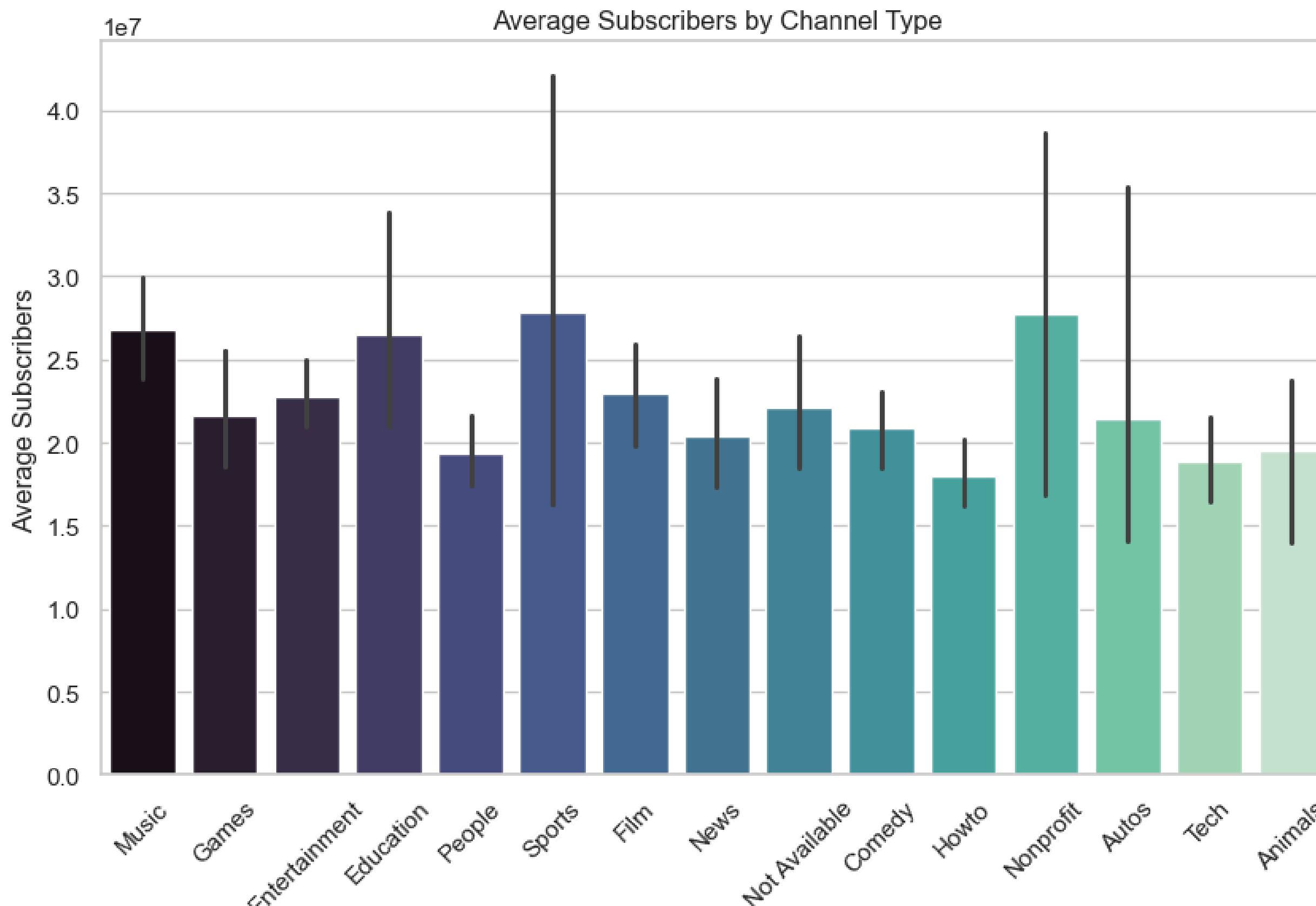
WHAT IS THE RELATIONSHIP BETWEEN VIDEO VIEWS AND HIGHEST YEARLY EARNINGS



Interpretation:

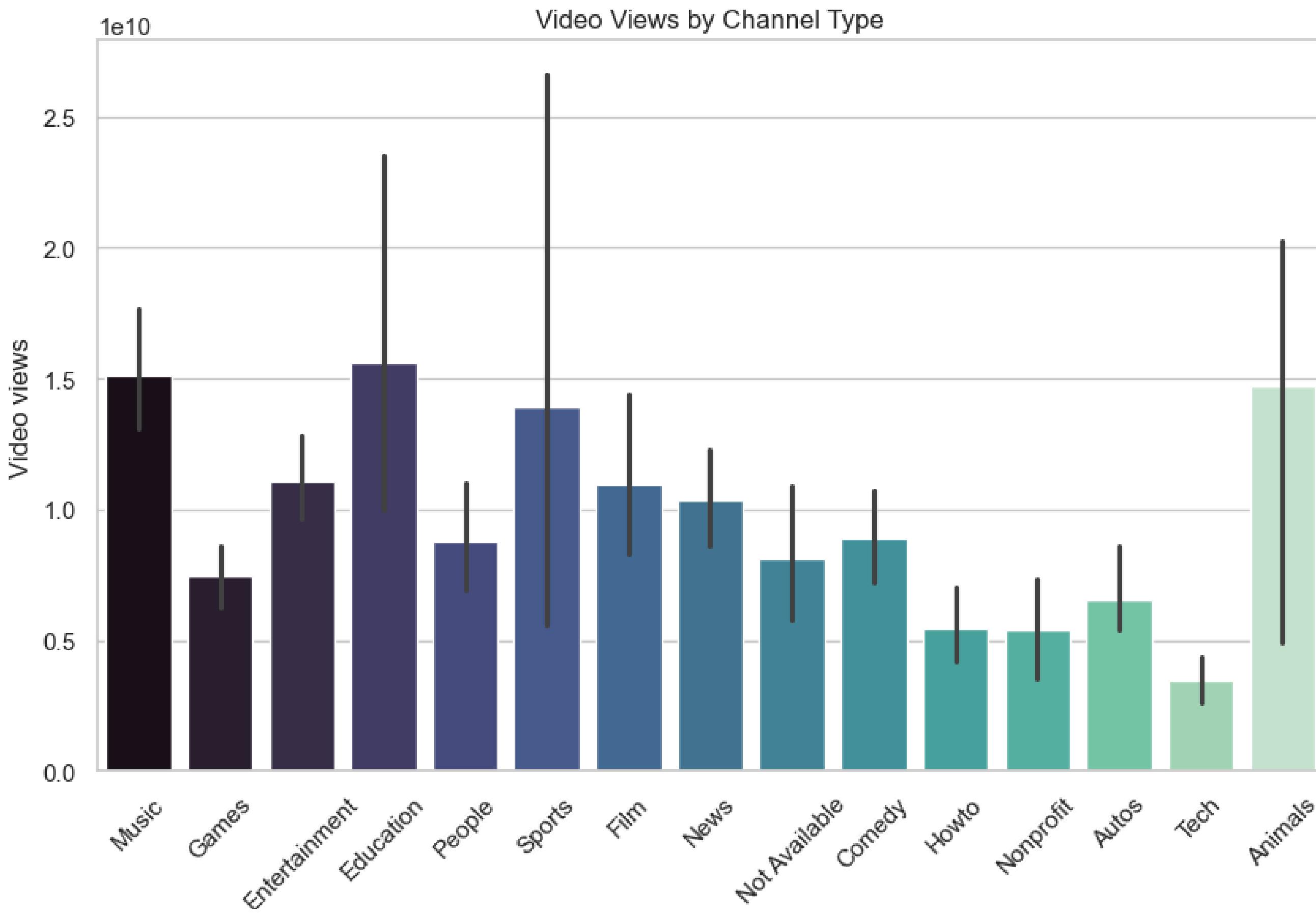
- As video views increase, earnings also tend to rise.
- However, the relationship is not perfectly linear; there are many channels with moderate views but low earnings, indicating other influencing factors such as ad engagement, audience geography, or monetization strategies.
- A few outliers (top-right points) show channels with extremely high views and correspondingly high yearly earnings — likely top global creators or brand-backed channels.
- The dense cluster at the bottom left suggests that most YouTube channels have relatively low views and earnings, reflecting the competitive nature of the platform.

6. WHAT IS ARE THE AVERAGE SUBSCRIBERS IN THE DIFFERENT CHANNEL TYPES



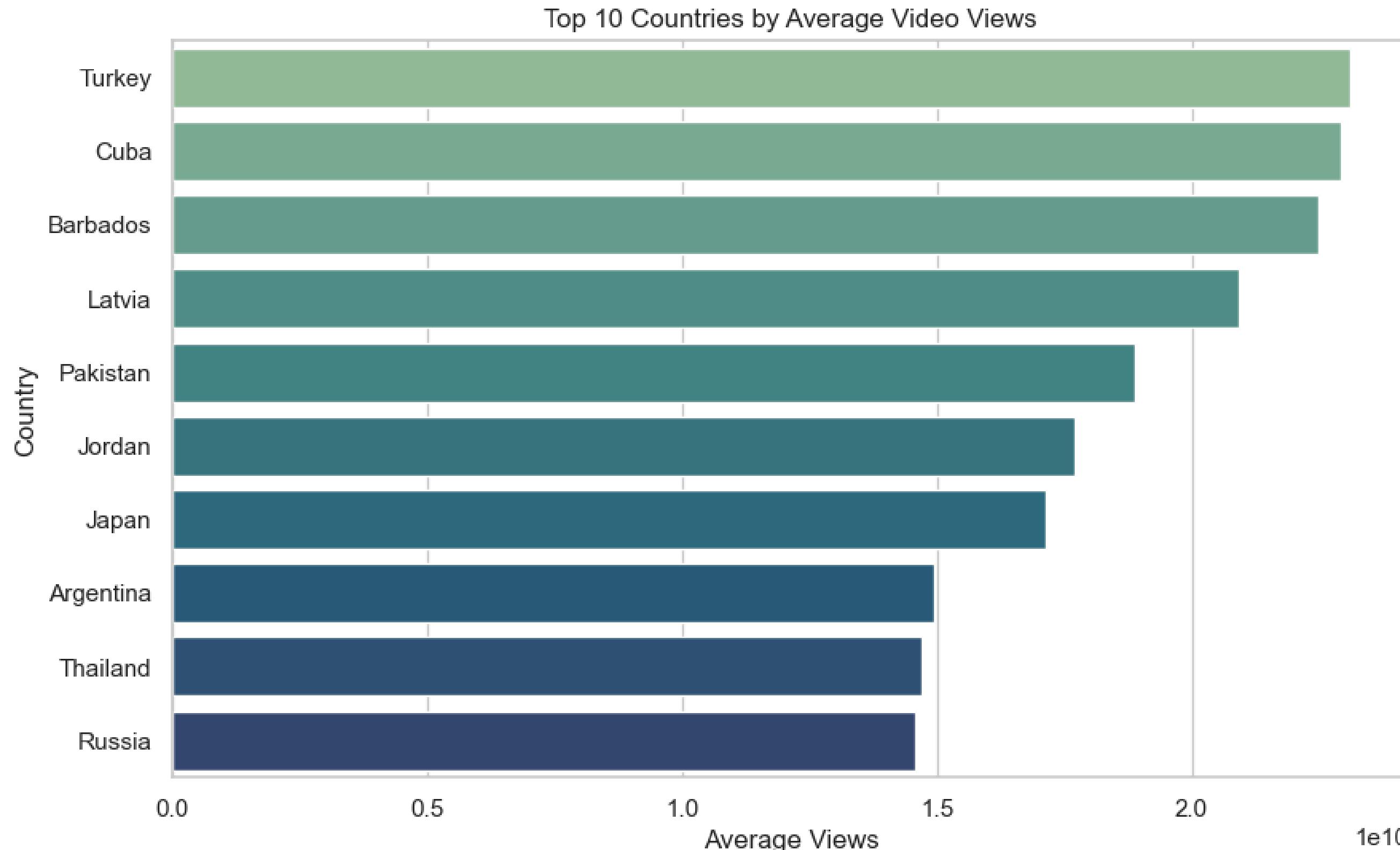
- Sports, Music, and Nonprofit channels record the highest average subscribers, indicating broad appeal and strong audience loyalty.
- People, Howto, Tech and Animals channels show lower subscriber averages, possibly due to niche audiences or less frequent uploads.
- The error bars (black vertical lines) represent variability — some categories like Sports and Nonprofit have wide variation, meaning a few channels in these categories are much larger than the rest.
- Entertainment and Film also perform well, highlighting consistent audience engagement and mainstream content appeal.
- Channel type influences audience type

VIDEO VIEWS BY CHANNEL TYPE



- Music, Education and Animals have a lot of video views
- Even with fewer uploads, music channels accumulate massive lifetime views due to replay value and viral potential.
- Educational channels accumulate steady, long-term view growth driven by consistent search demand and algorithm favorability for informative content.
- Animal channels have a broad audience base: Appeals to all age groups — kids, families, and even pet owners — ensuring repeat views and also Animal videos evoke strong emotions (cute, funny, heartwarming), leading to high engagement and shares.

TOP 10 COUNTRIES BY VIDEO VIEWS



- Turkey and Cuba are leading in average views, reflecting large audiences and strong digital presence in those regions.

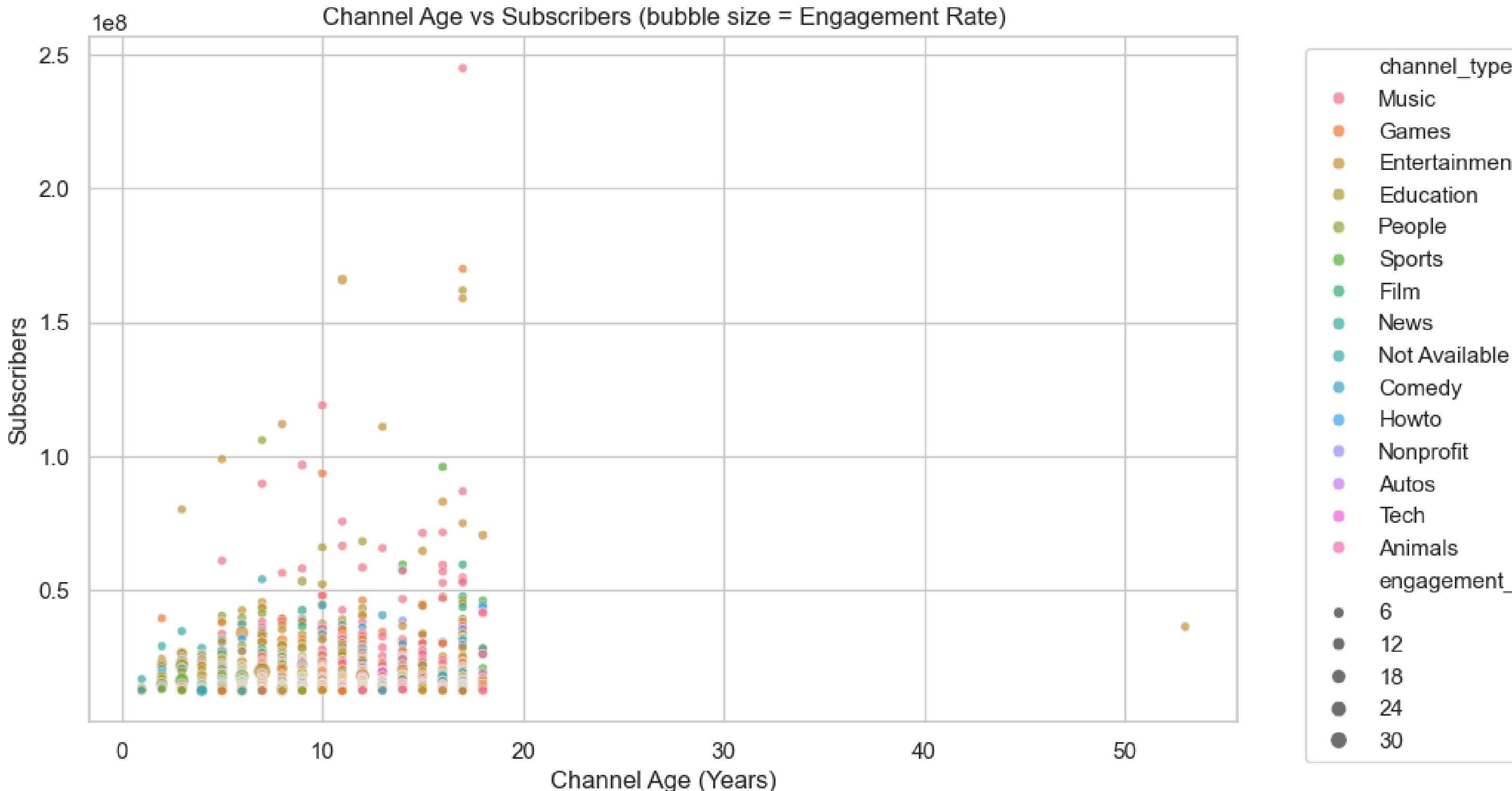
Turkey leads due to diverse, high-quality content and a large, engaged audience both locally and globally. Turkish dramas and songs attract both local and international audiences.

Cuba leads due to its global cultural reach and high viewer loyalty despite lower internet access

MULTIVARIATE ANALYSIS

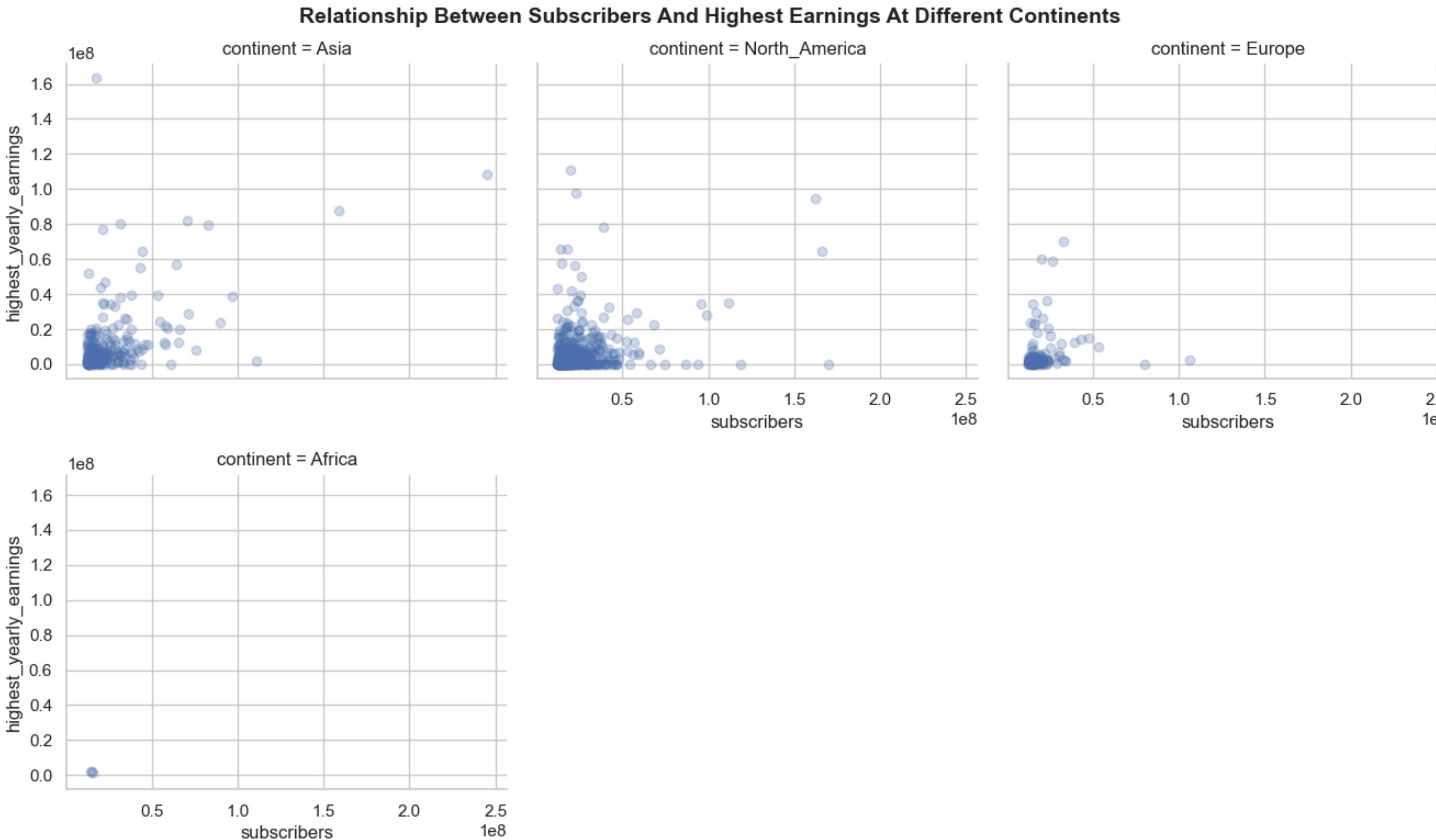
- 1.What is the relationship between Channel Age vs Subscribers vs Engagement Rate
- 2.What is the relationship between Subscribers and highest earnings at different continents
- 3.What is the relationship between Subscribers vs Video Views by Channel Type
- 4.What is the relationship between Subscribers vs Video Views by Continent

WHAT IS THE RELATIONSHIP BETWEEN CHANNEL AGE VS SUBSCRIBERS VS ENGAGEMENT RATE



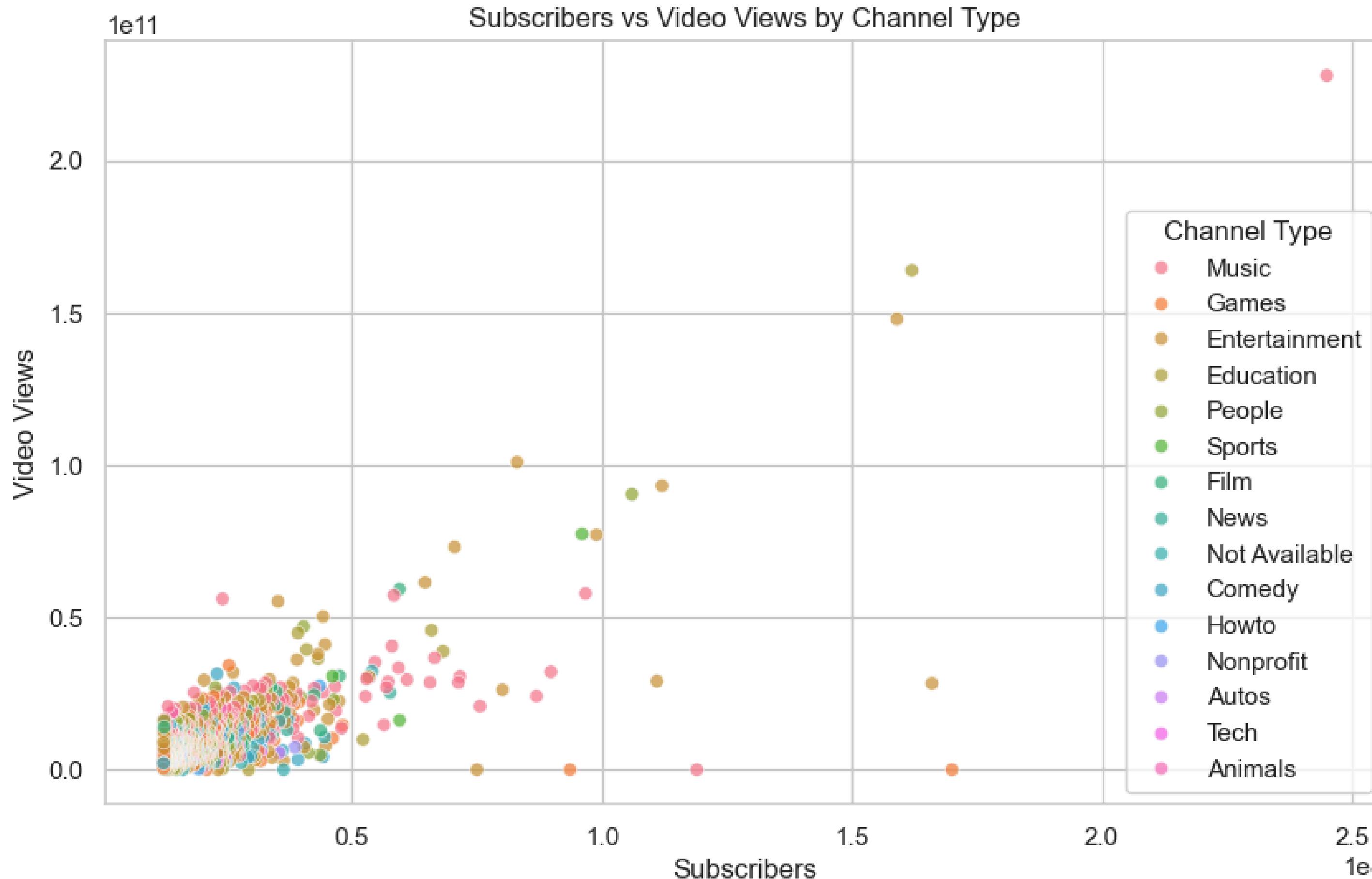
- Older channels generally have more subscribers, but some newer channels "show high engagement, meaning consistent, interactive content can help rapid growth.

WHAT IS THE RELATIONSHIP BETWEEN SUBSCRIBERS AND HIGHEST EARNINGS AT DIFFERENT CONTINENTS



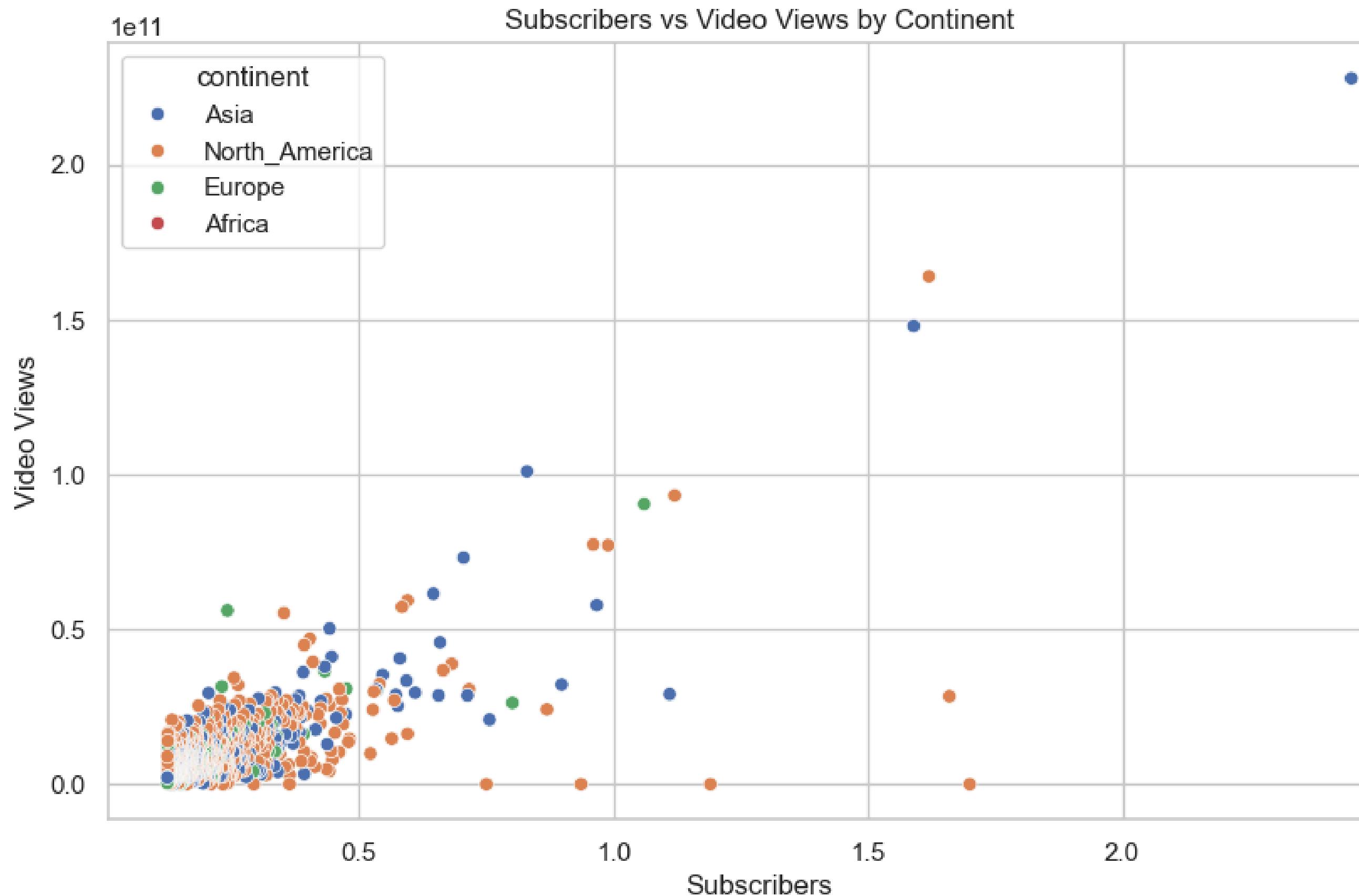
- North America & Europe: Strong upward trend — creators here monetize more effectively due to higher ad rates and brand deals.
- Asia: High variation — some creators earn exceptionally high income with moderate subscribers, showing diverse monetization models and large regional audiences.
- Africa: Weaker relationship — even popular channels may earn less due to lower CPM rates and limited sponsorship opportunities.
- Outliers: Some small channels earn high from viral or niche content.

WHAT IS THE RELATIONSHIP BETWEEN SUBSCRIBERS VS VIDEO VIEWS BY CHANNEL TYPE



- While subscriber count strongly predicts total video views, channel type plays a major moderating role. Genres like Music and Entertainment dominate in both reach and engagement, whereas educational and niche channels attract smaller but more targeted audiences. This emphasizes that content type significantly influences growth potential on YouTube.

4. WHAT IS THE RELATIONSHIP BETWEEN SUBSCRIBERS VS VIDEO VIEWS BY CONTINENT



- Positive relationship between subscribers and video views, while also revealing that regional differences affect scale and engagement.
- Channels from North America, Europe, and parts of Asia dominate the top performance tier, reflecting stronger infrastructure, audience size, and monetization opportunities compared to developing regions.

Recommendations

For Creators:

- 1)- Focus on consistent, high-quality uploads.
- 2) Choose high-engagement categories.
- 3) Focus on content categories with high audience retention.
- 4) Optimize video titles and thumbnails for better click-through rates.
- 5). Upload videos consistently during peak viewing times.
- 6) Use viewer engagement feedback to refine future content.
- 7). Collaborate with other creators to increase reach and exposure.

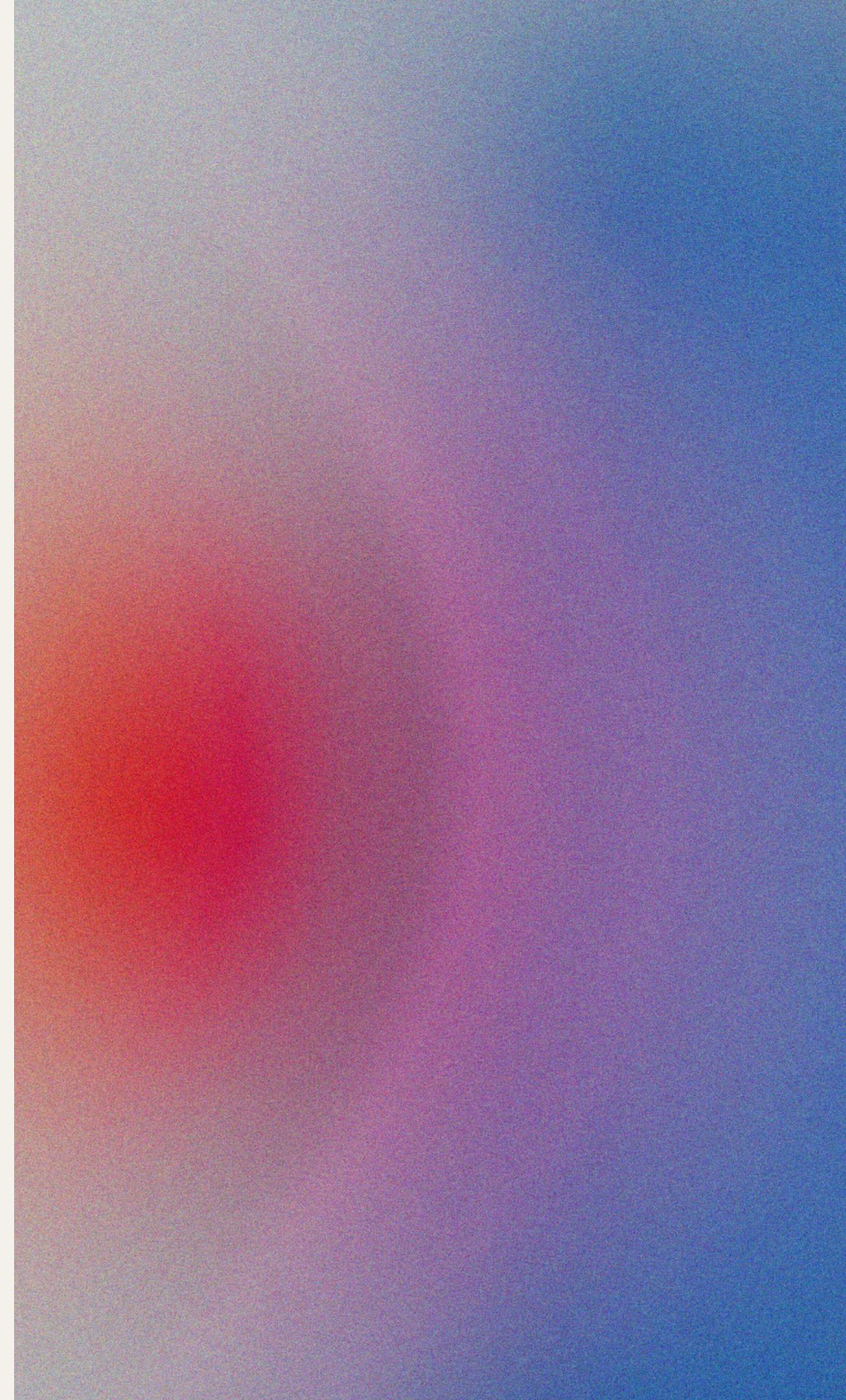
Recommendations

For Marketers:

- Target regions and niches with high viewer loyalty.

For Platforms:

- Support creators in emerging regions.



Thank you