



# Implement business strategies from Youtube Analysis.

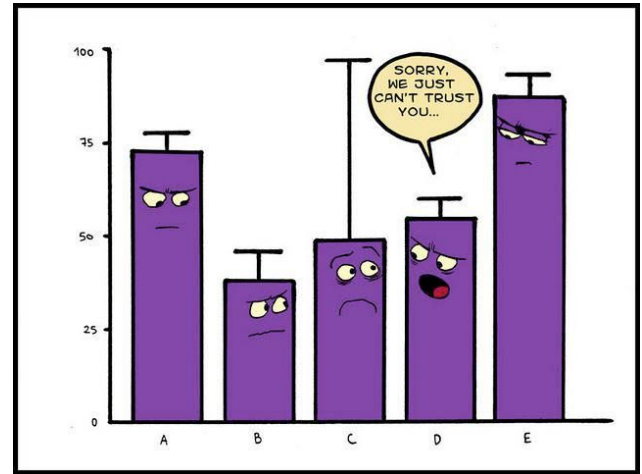
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NYCDSA 11/25



# First things first: Why Youtube?

Social Media is profitable to both content producers and viewers.

Use technical data to develop action items for product marketing.



# About the data:

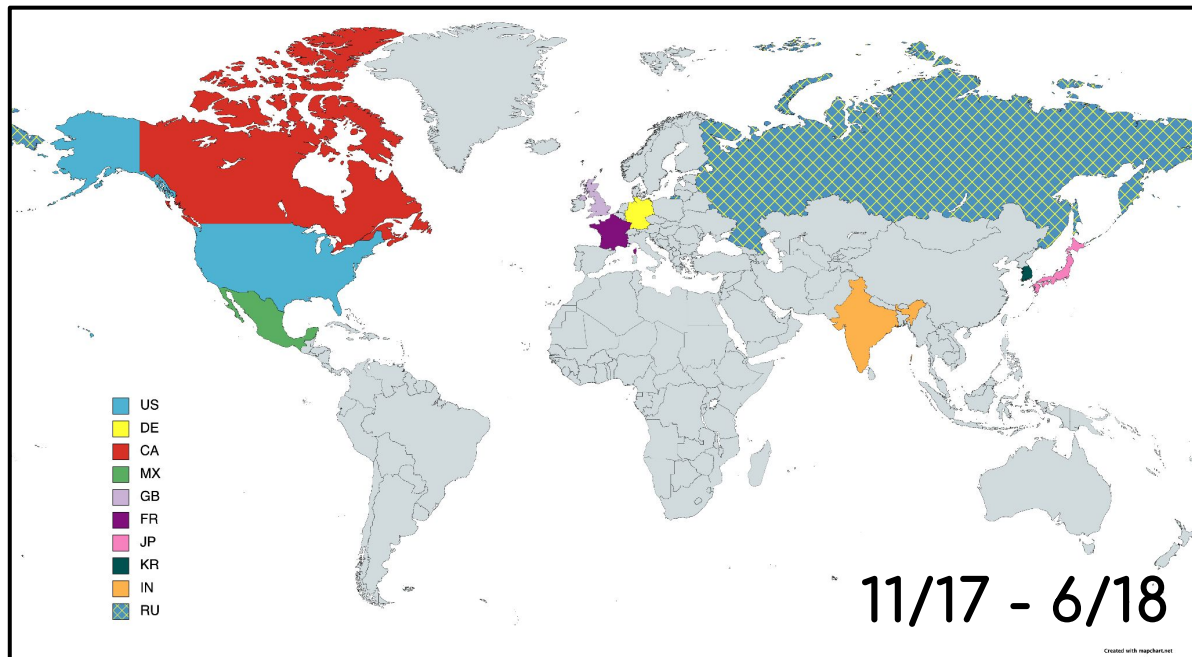
**11 datasets.**

**10 countries.**

**8 months.**

**~400K observations.**

What's trending on Youtube? (by [Kaggle](#))



# Key Objectives

## Effective Marketing

Which region will provide the highest ROI for online advertisements?

What marketing tactic is most effective for consumers with different interests?

## Energy Consumption

When are consumers more likely to shop online for products they don't need?

What infrastructure requisites are necessary for data center upkeep?

## Exploratory Analysis

How do we use viral data to predict consumer buying trends?

Which products are consumers are likely to buy based on their interests?

# One last thing...

I'll be using the word *consumer* a lot.

Viewers are consumers.

Content is the product.

Digital currency is ~~bitcoin~~ time.

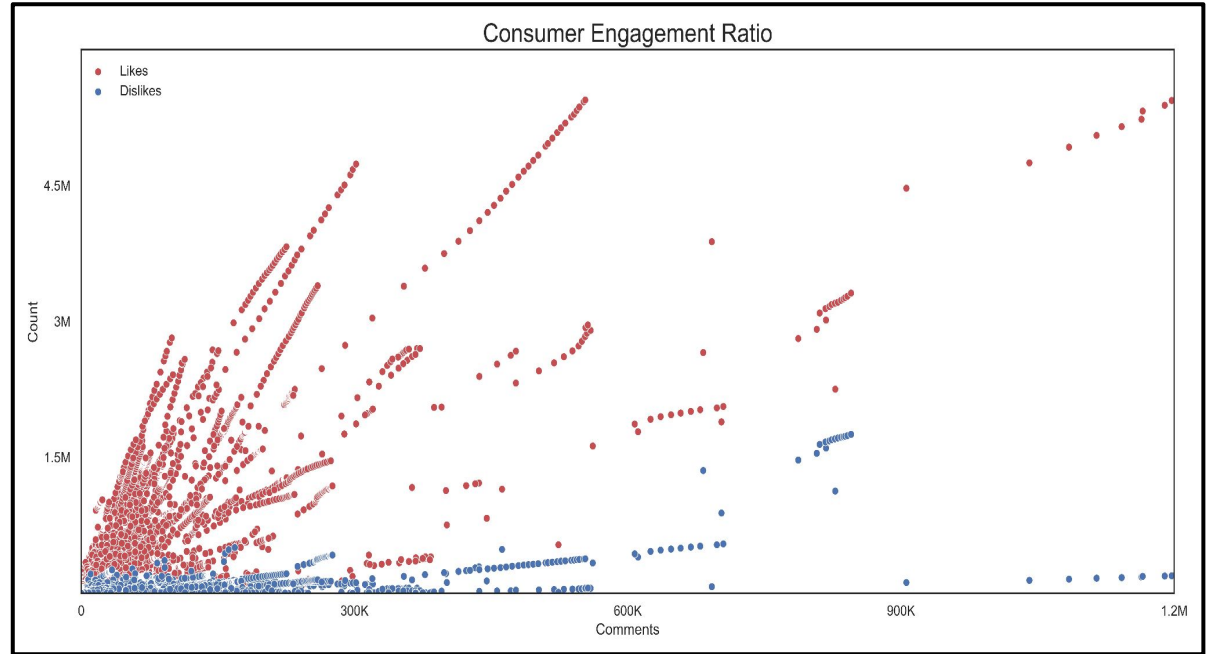


# Effective Marketing:

The opinions of the few.

We can see how often consumers will interact with the products.

Consumers are 20x more vocal for products they like vs. dislike. (*median*)

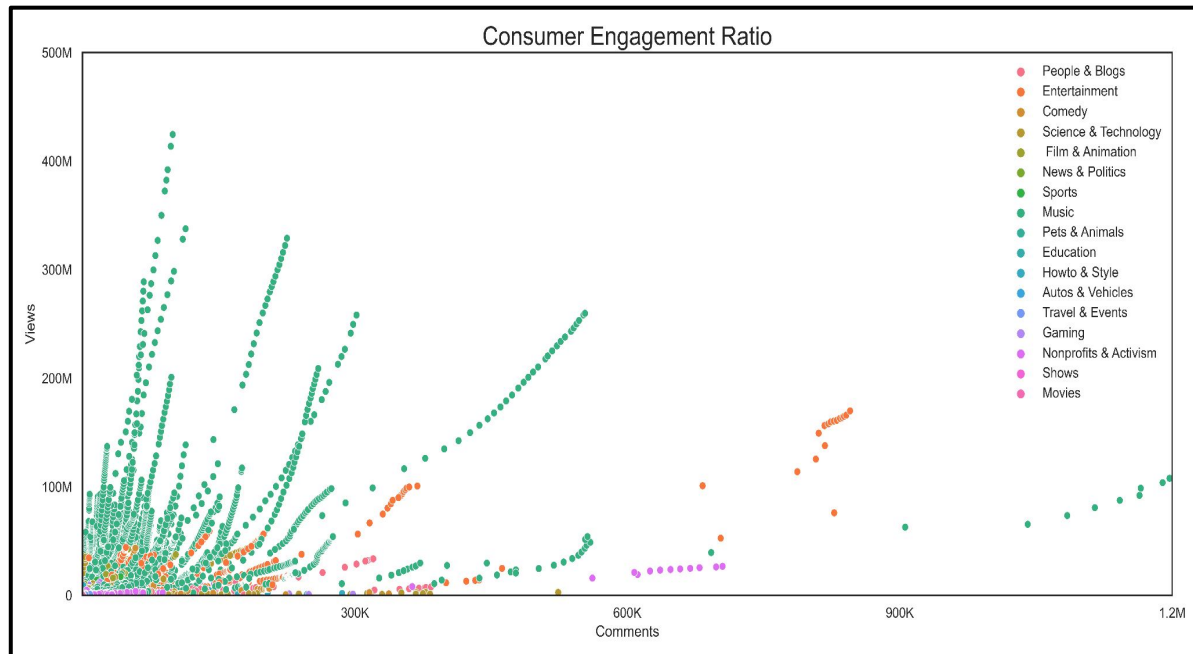


# Effective Marketing:

The voices that power the product.

The ratio here differ as it quantifies the engagement views and categories

The engagement-product ratio is around 0.05%  
- 5% of which are dislikes -



Fun fact:

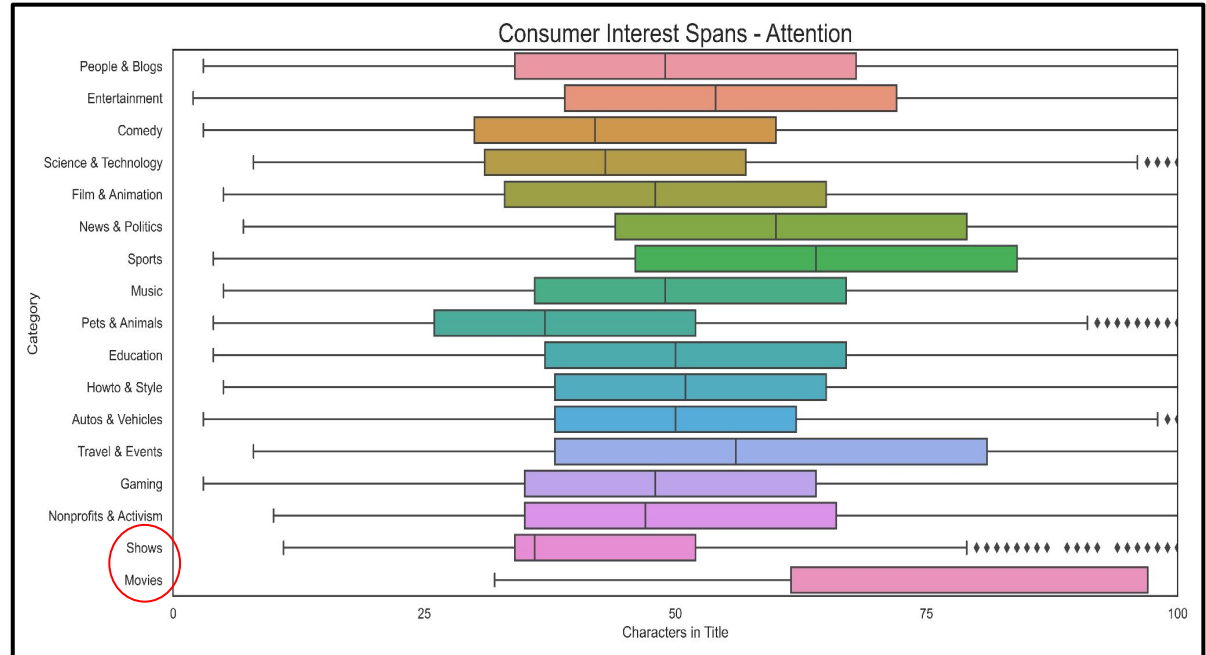
Good product engagement rates vary between 0.04-16%, depending on the platform/product.

# Effective Marketing:

The instant gratification dilemma.

Steal the consumer's attention by analyzing their interest spans.

*Consumers have higher attention spans for Movies than TV Shows.*

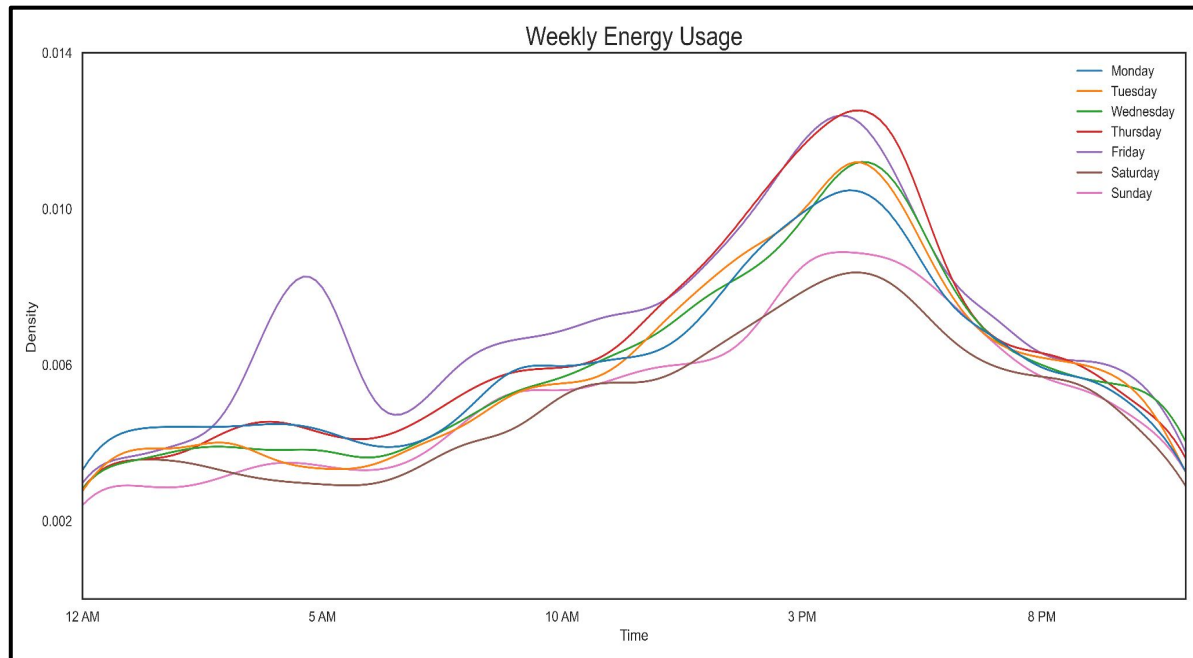




# Energy Consumption: Keep calm and carry on.

Consumers watching trending videos are more likely to be in a *relaxed* state

Ads are only as effective as its impact. Calm the consumer to boost.



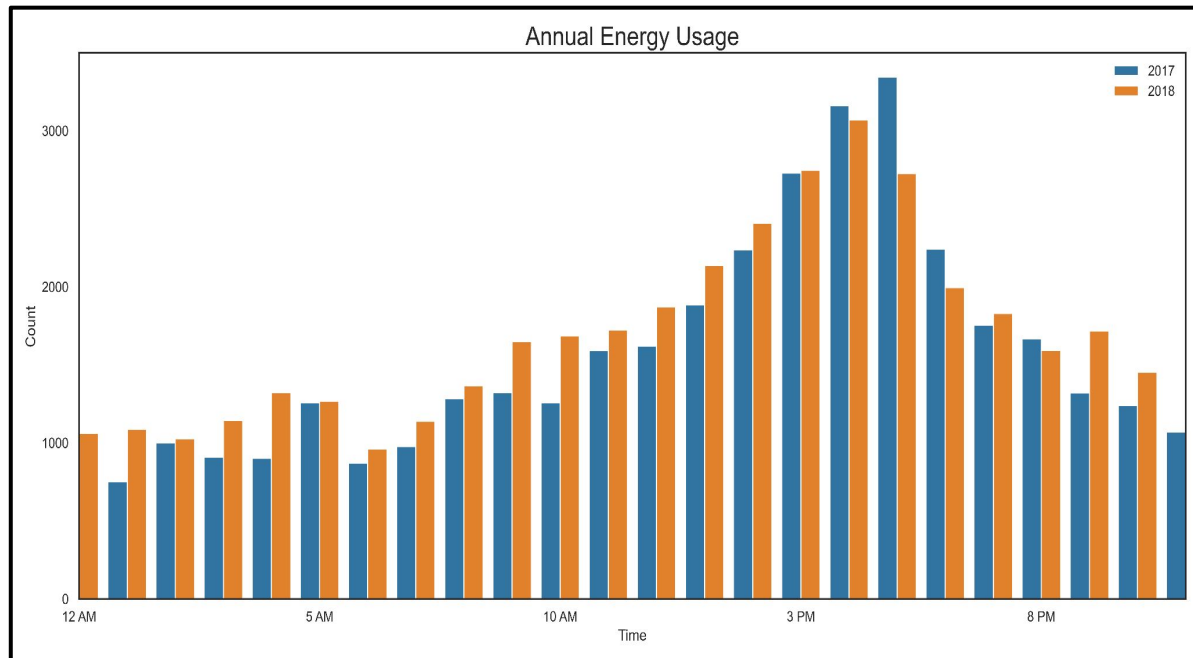
Fun fact:

*Relaxed consumers are 12% more likely to spend money on products.*

# Energy Consumption: Let's use data to make data.

In 2018, energy consumption is higher from 10PM - 2AM

Consumers have less distractions as they *wind-down* (relaxed).



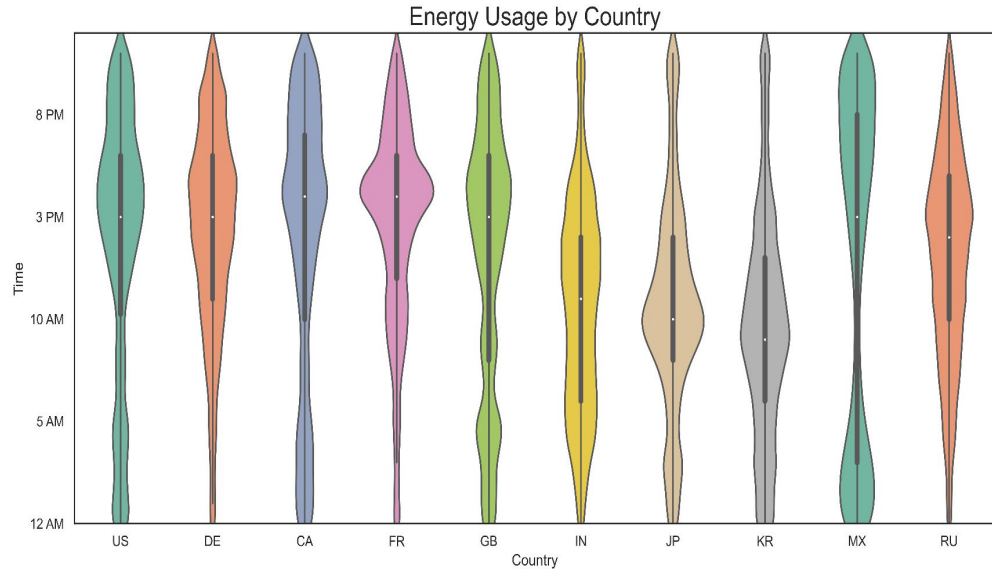
\*\* Data is normalized to reflect the number of months

Fun fact:  
*Consumer engagement behavior is more influential at night.*

# Energy Consumption: The music is nothing if the audience is deaf.

Know your target audience. Their buying habits vary globally.

*Companies can charge a higher cost for ads running within this time window.*

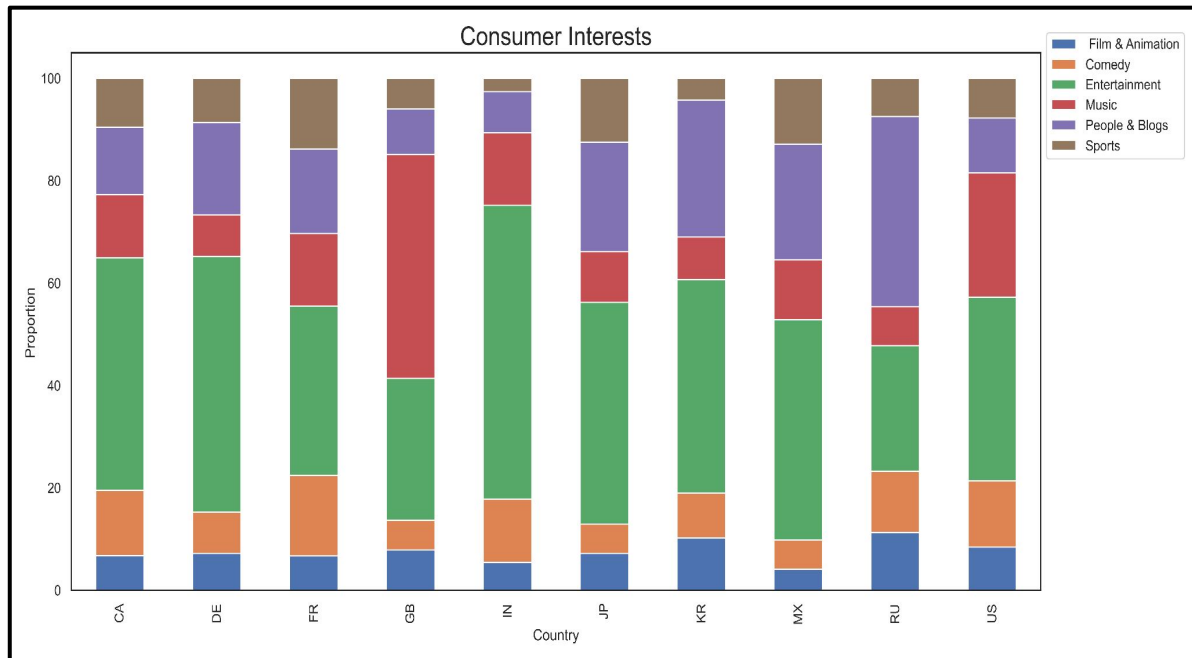


# Exploratory Analysis:

In search for the perfect element.

Analyzing regional interests can help predict consumer demand.

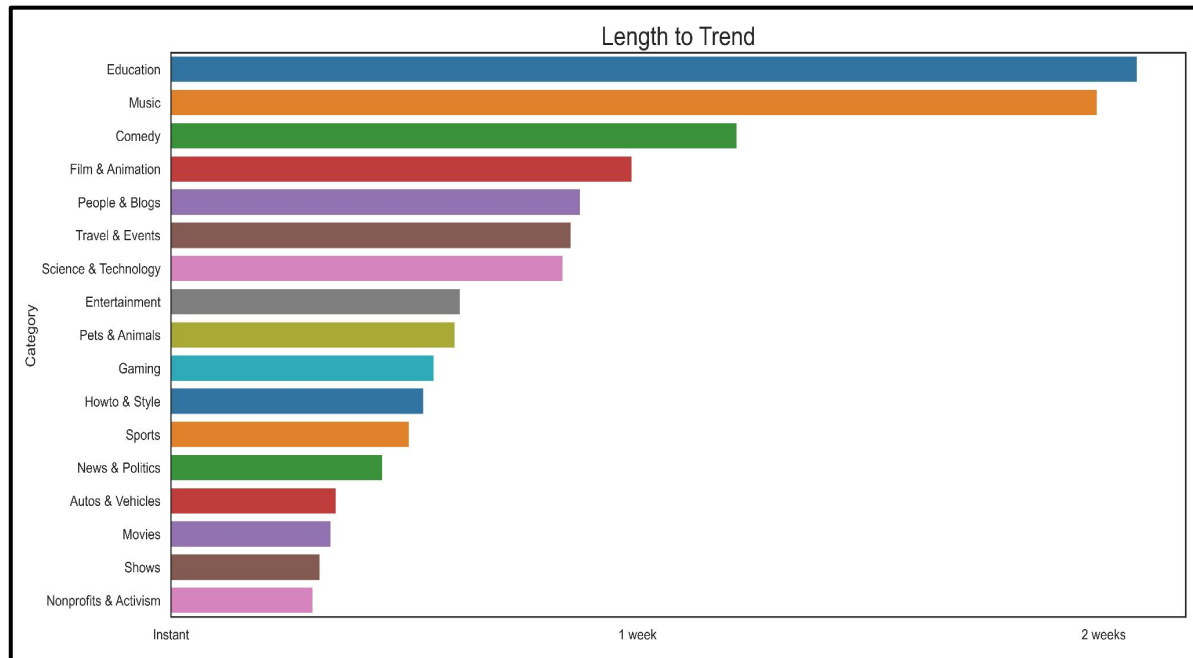
*eg. what's the demand for movies / sports, comedy shows?*



# Exploratory Analysis: The power of *word-of-mouth*.

Information travel  
differently based on  
consumer interests

*Products in movies, shows  
are more talked about than  
learning & development.*



Fun fact:

*Consumers are more likely to purchase products recommended by word-of-mouth.*

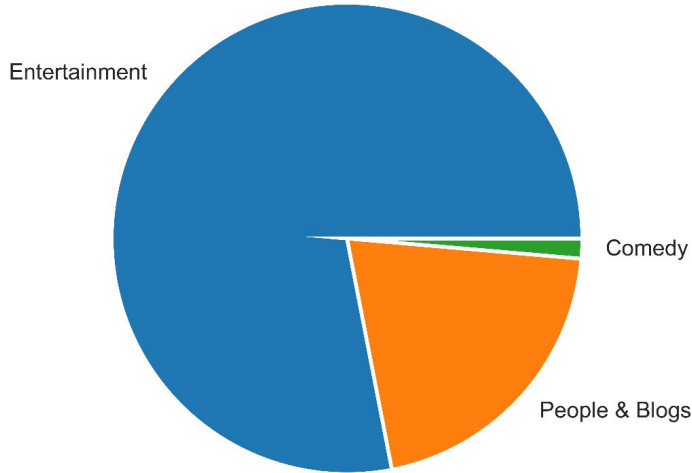
# Exploratory Analysis:

Deconstructing consumer spending habits.

*Word-of-mouth* travel most dominantly in the Entertainment sector

Companies can help boost sales by partnering with people in entertainment.

Affiliate Marketing Partners: Amazon



## Scraped ~10K links

Extracted category of each product

50% electronics,  
17% home goods,  
8% Beauty,  
8% DIY

*Fun fact:*  
**Technology is a top performer in affiliate marketing.**

# Conclusion:

That's all, folks!

## Effective Marketing

### WHAT

Analyze consumer interactions to understand ***what*** they want.

## Energy Consumption

### WHEN

Evaluate ***when*** the consumer is most likely to purchase a specific product.

## Exploratory Analysis

### HOW

Optimize ***how*** ROI and product margin can increase annually.

# If I had more time...

- Find other datasets/observations to support trend hypothesis. See usage impact of CoVID-19.
- Scrape more than just Amazon links: find out which categories are most advertised.
- Compare trends from parallel social media platforms, including TikTok and Instagram.

**What impact did CoVID have in consumer demand?**

**What's the dominating marketplace platform for each category?**

**How do interests vary across platforms and age groups?**