Implement business strategies from Youtube Analysis.
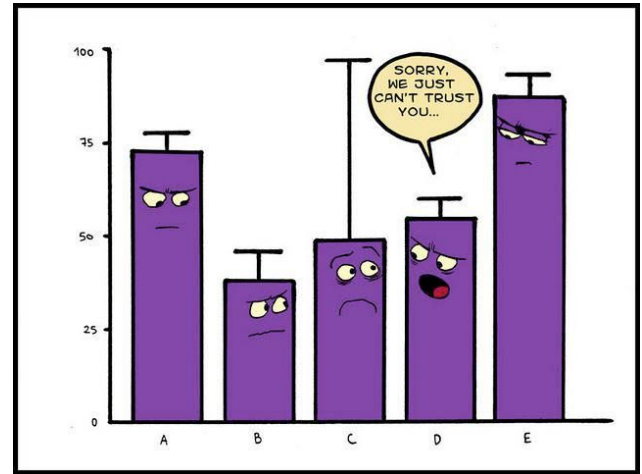
Daniel Setiawan
NYCDSA 12/2

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.
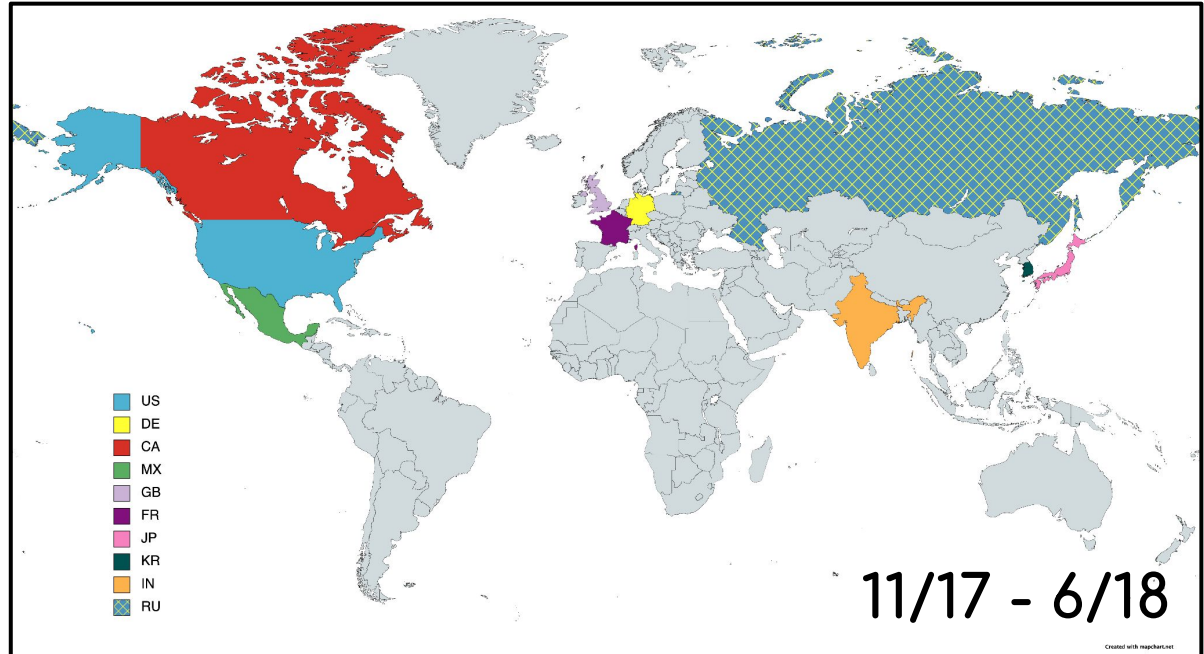
About the data:

What's trending on Youtube?

11 datasets.

10 countries.

8 months.

~400K observations.

US
DE
CA
MX
GB
FR
JP
KR
IN
RU

11/17 – 6/18

Created with mapchart.net

Key Objectives

Effective Marketing

Which region will provide the highest ROI for online advertisements?

What marketing 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.
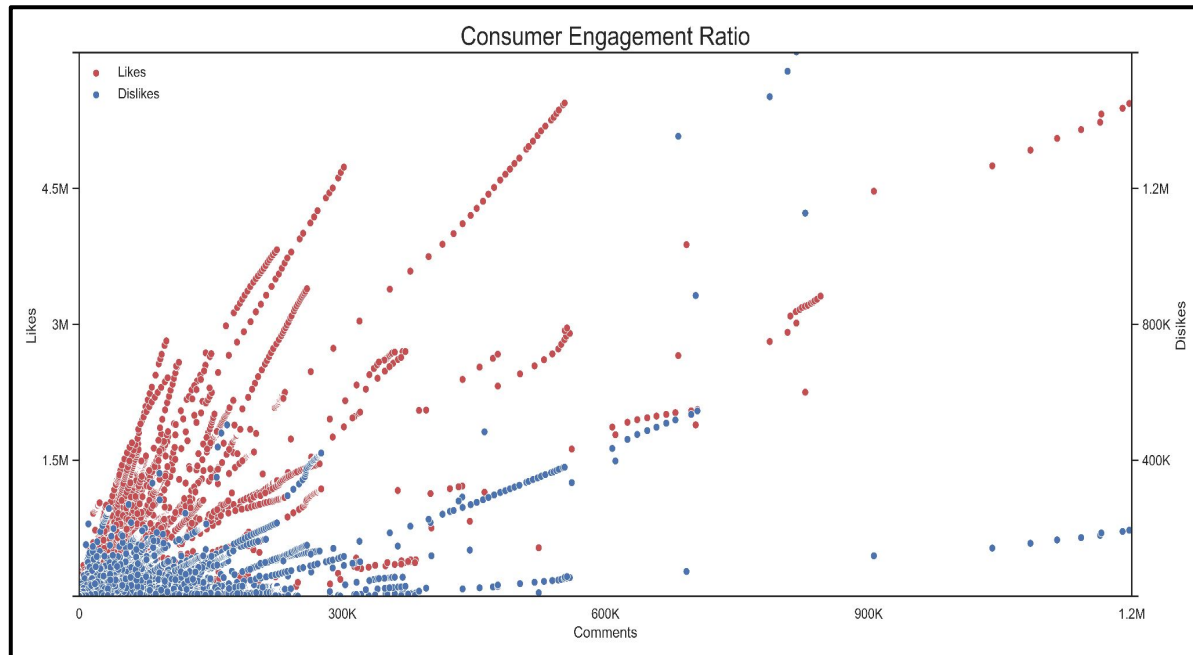
Content is the product.

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 3x more vocal for products they like vs. dislike.

Consumer Engagement Ratio

Understanding the Voice-of-the-customer will increase ROI by 13%.

Effective Marketing:

The voices that power the product.

The ratio here differ as it quantifies the engagement by views and country.

The engagement-product ratio is 0.15%; 0.05% of which are dislikes.

Consumer Engagement Ratio

Views

Comments

US
DE
CA
FR
GB
IN
JP
KR
MX
RU
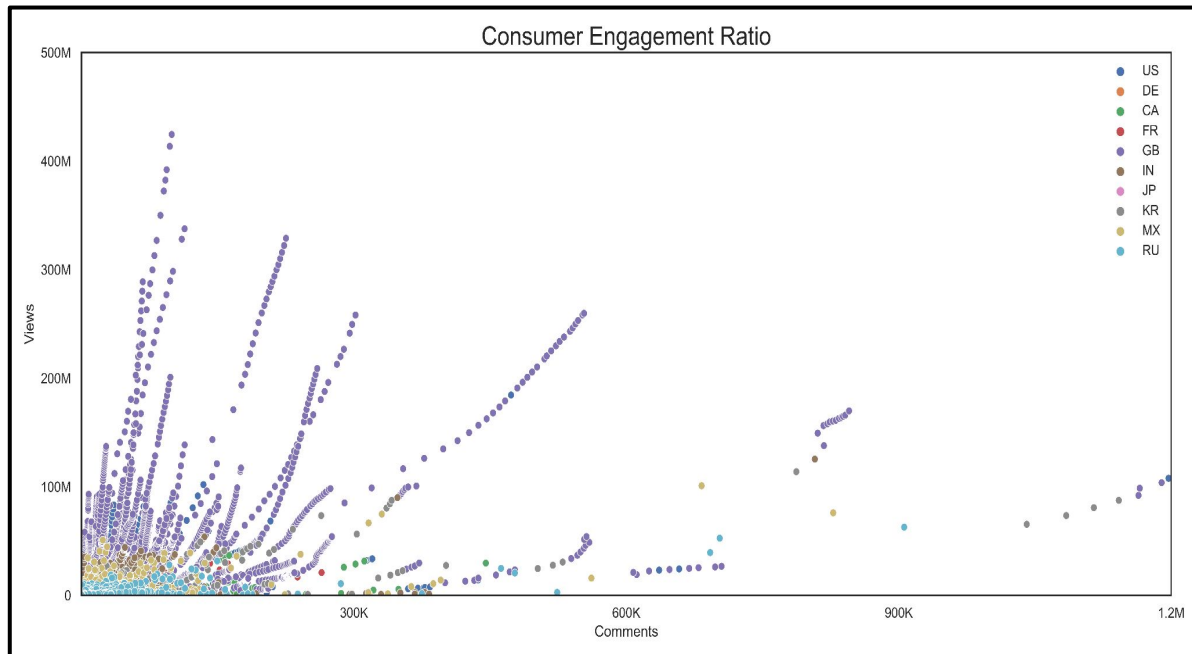
Good product engagement rates vary between 0.04-16%, depending on the platform/product.

Effective Marketing:

The instant gratification dilemma.

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

Consumers have varying levels of attentiveness based on their interests.

Consumer Interest Spans - Attention
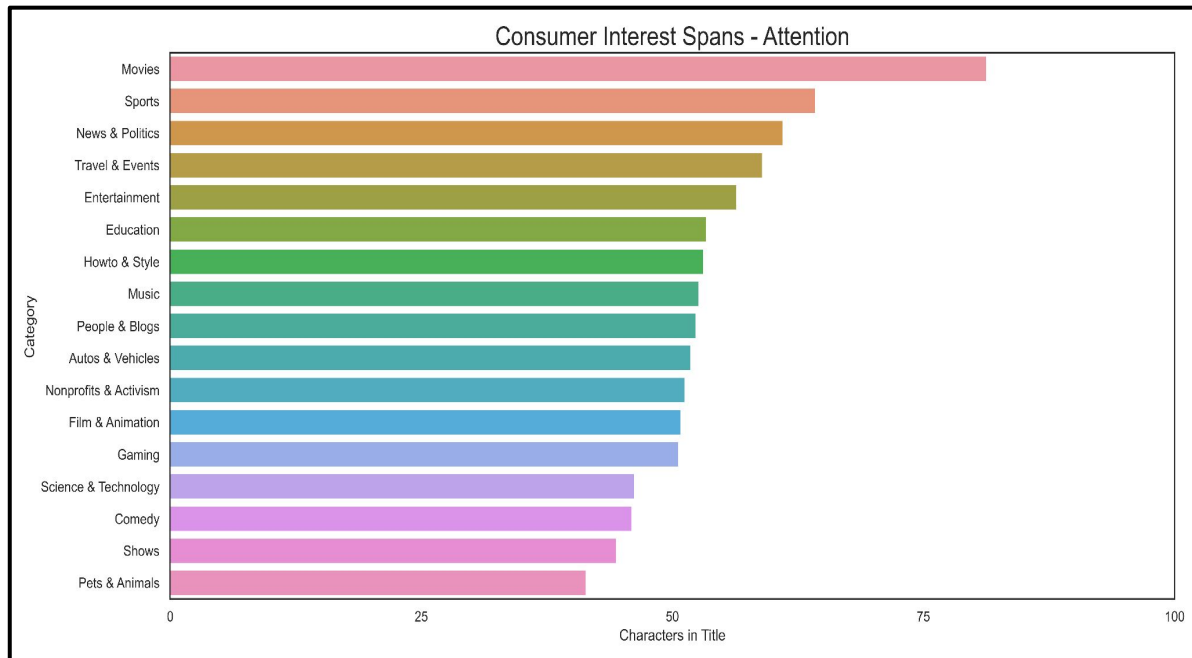
You have 8 seconds to grab a consumers attention and retain it.

Effective Marketing:

The goldilocks of product marketing.

Retain attention by using follow-up words that are *just right* in length.

With consistent consumer retention, we'll expect product sales to increase.

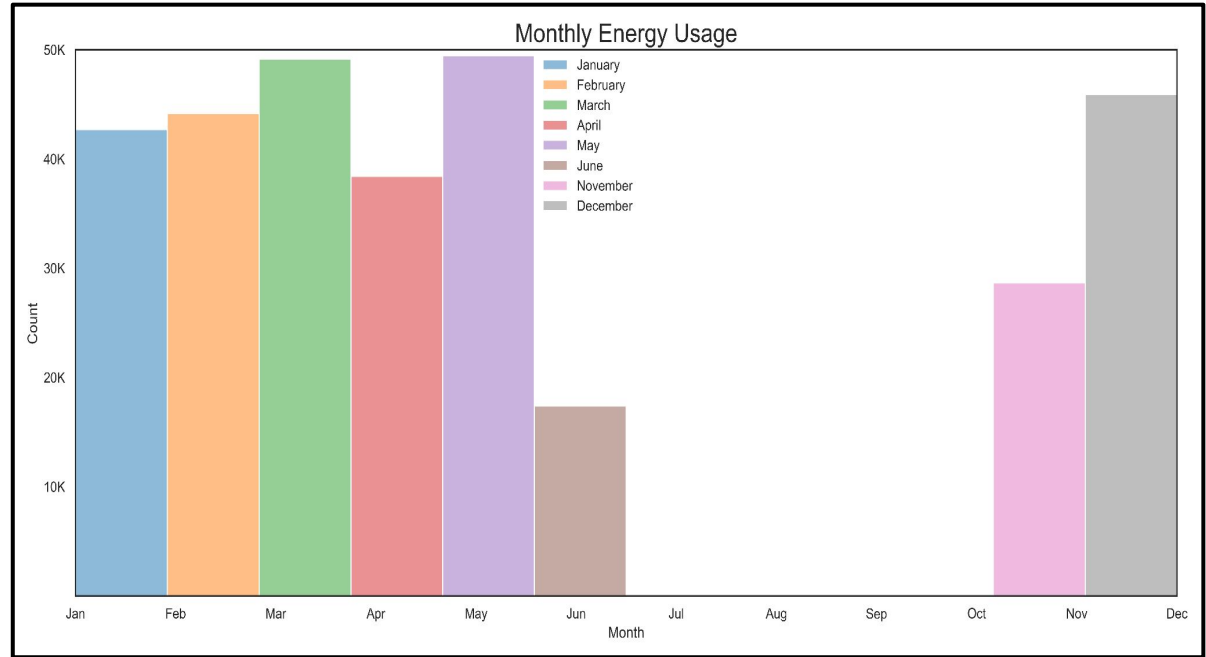Consumer Interest Spans - Retention
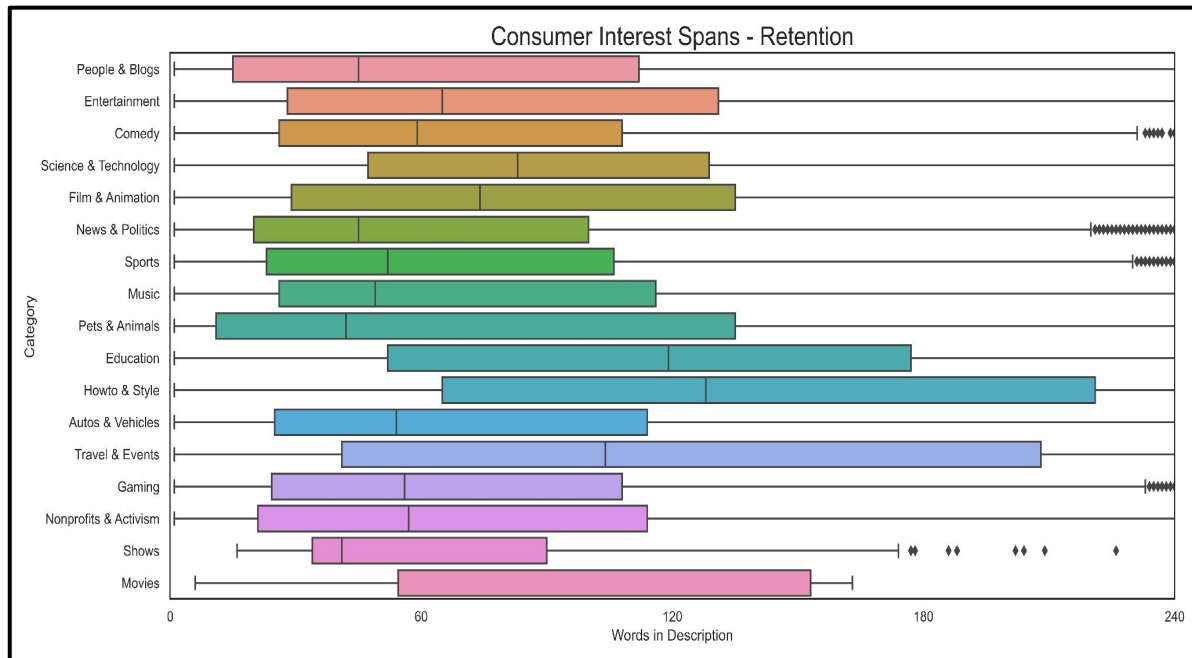
*Pairing data with non-trending videos could allow us to gauge how consumers react to certain categories

The marketing rule of 7: Consumers will buy products after seeing – 7 ads.

Energy Consumption: Take advantage of consumer habits.

Monthly usage can help determine when spending will be most frequent.

Decrease product cost during times of low energy consumption.

Monthly Energy Usage

Legend:
- January
- February
- March
- April
- May
- June
- November
- December

X-axis: Month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)
Y-axis: Count (10K, 20K, 30K, 40K, 50K)

* July - October Data unavailable

Price optimization increase product margins by 300x.

Energy Consumption: Keep calm and carry on.

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

Target consumers when they are more likely to be *relaxed*.

Weekly Energy Usage
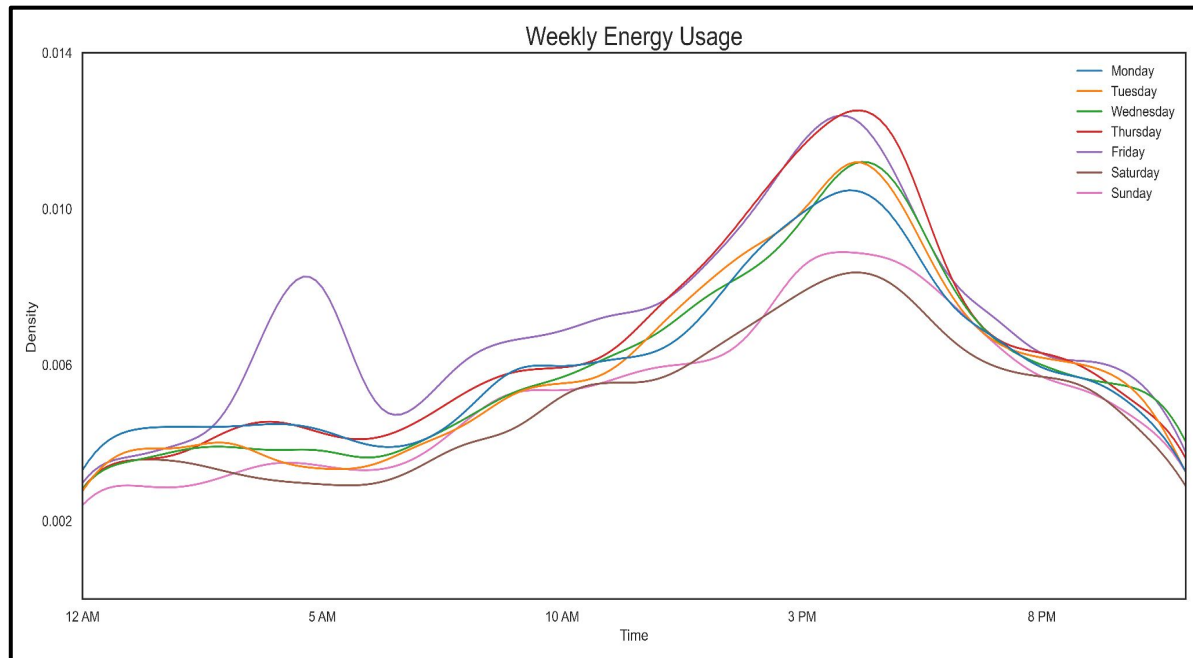
Relaxed consumers are 12% more likely to spend money on products.

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

Know your target audience. Their buying habits vary globally.

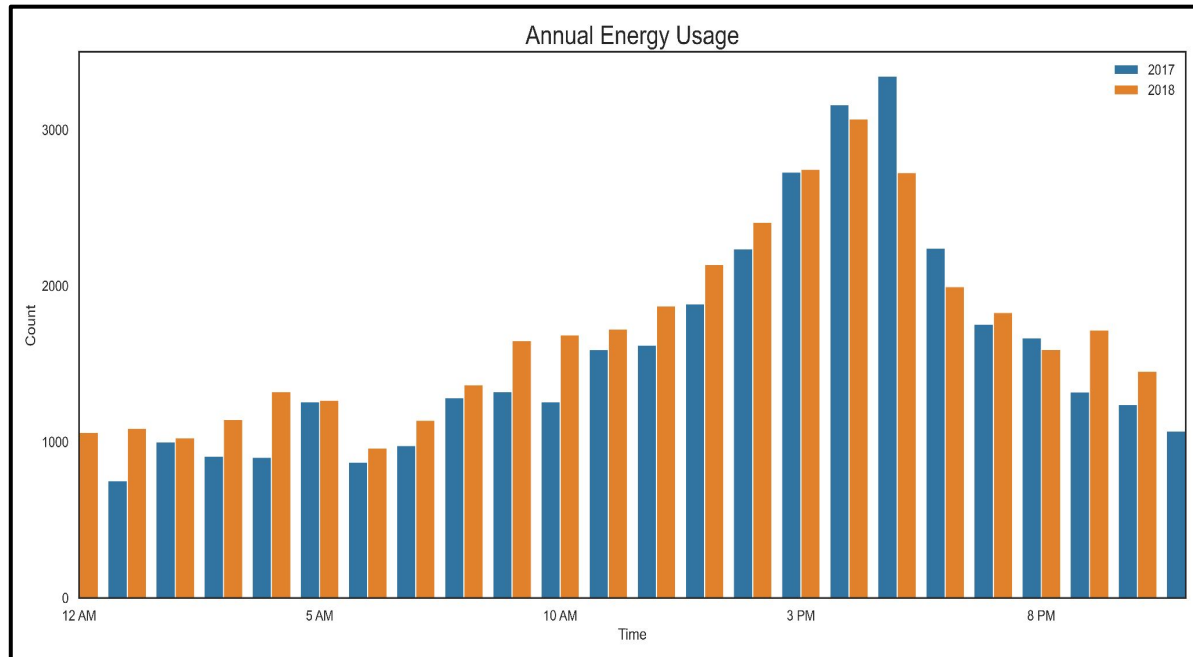Increase advertisement frequency during times of high region activity.

Energy Usage by Country
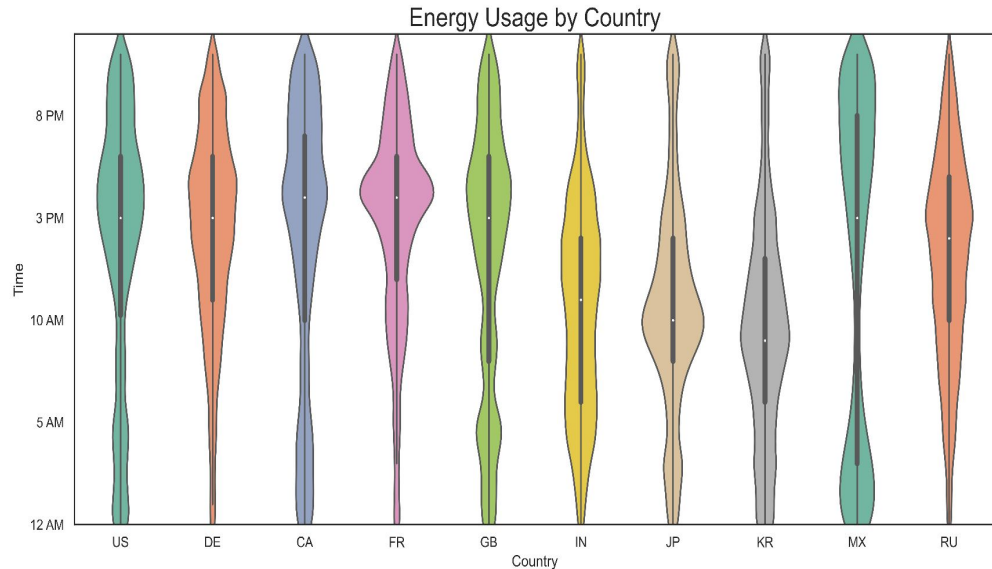
Global E-commerce has increased to 22% after CoVID-19.

Exploratory Analysis: Let's use data to make data.

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

This is the optimal time slot / window for marketing the product.

Annual Energy Usage

** Data is normalized to reflect the number of months

Smartphone usage rises 4% year-over-year (YOY). That's 4 hours/day/person.
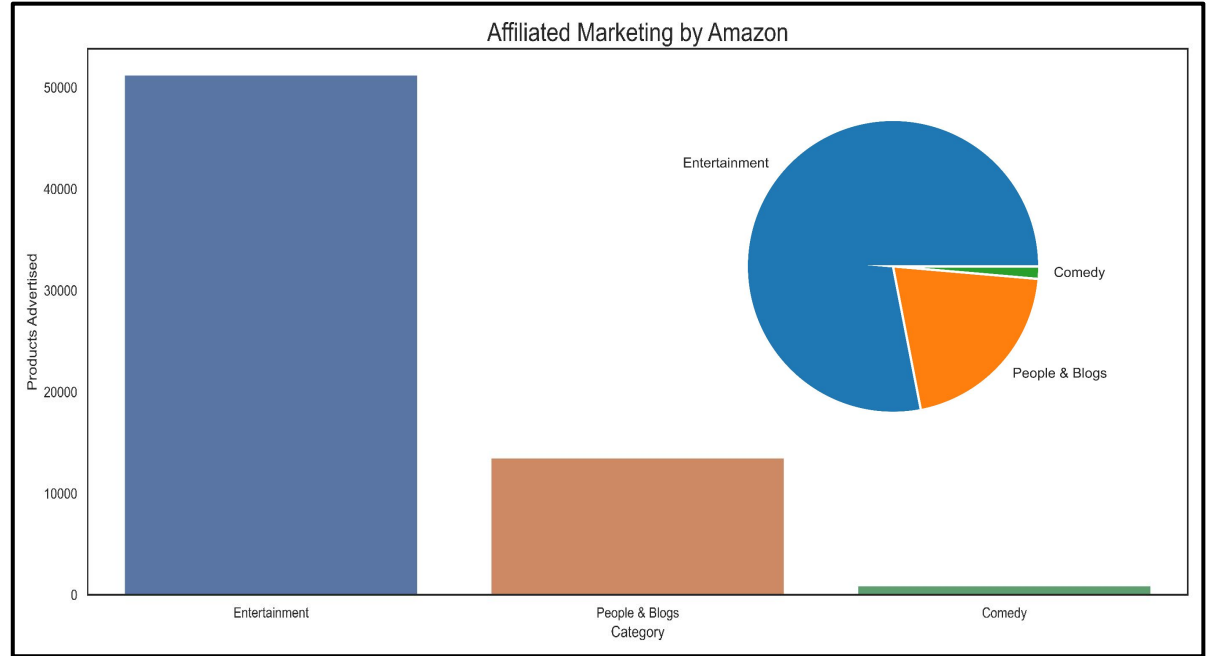
Exploratory Analysis: Let's deconstruct their spending habits.

Entertainment is most likely to market / review products on Amazon.

Scraped Amazon Links:

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

Affiliated Marketing by Amazon

Technology is a top performer in affiliated marketing.

Conclusion:

That's all, folks!

Effective Marketing	**Energy Consumption**	**Exploratory Analysis**
WHAT	**WHEN**	**HOW**
Analyze consumer interactions to understand **what** they want.	Evaluate **when** the consumer is most likely to purchase a specific product.	Optimize **how** the 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?