Factors influencing channel growth on Twitch

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What is Twitch?









The Elder Scrolls Online





Halo: The Master Chief C ...

42.7K viewers

120K vigware



Call of Duty: Modern Wa Q./ 5K vigware





Music & Performing Arts IRL Creative



Dota 2 36.3K viewers

#1 Live Streaming Service \$5 billion net worth

As of March 2020:

15 million daily active users **1.44** million concurrent viewers on avg **41,100** Twitch Partners (+\$2.50/subscriber) Highest peak concurrent Twitch viewers: 533,000 Highest followed channel, with 7.8 million followers

If 1% of that person's followers are subscribers... = conservative estimate of \$195,000/month

Why should we care?

Money!

Top streamers can earn \$1,000's of dollars an hour from ad revenue

The number of viewers and followers **DIRECTLY** impacts a streamer's **bottom line**



Why should we care?

Money!

Top streamers calta's important to know how to from ad revenue maximize your viewers to maximize

The number of viewers and followers The number of viewers and followers The impacts a streamer's bottom line in the impacts as the impact as th



Executive Summary:



Time of day is the most important factor to:

- 1. Gain the most followers
- 2. Attract the most viewers



Increase followers gained 5% per hour by streaming between 6:00 pm and 6:00 am

Research Questions

"Time is money"

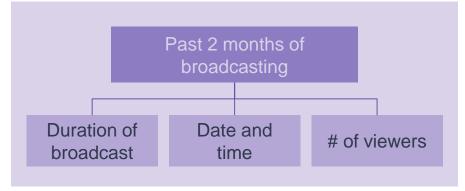
- 1. Do channels tend to gain more followers on weekends or weekdays?
- → H₀: There is no difference between weekends and weekdays for the number of followers gained
- 1. Is there a correlation between longer stream times and the number of views?
- \rightarrow H₀: Longer stream times do not correlate with higher number of views

Data: Followers and Recent Broadcast History

Make API requests to get data directly from Twitch

- <100,000 followers
- English speaking
- Any game

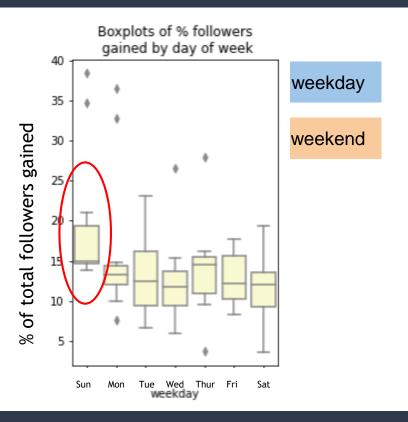




Question 1

Do channels gain more followers on weekends or weekdays?

Q1: Do channels gain more followers on weekends or weekdays?



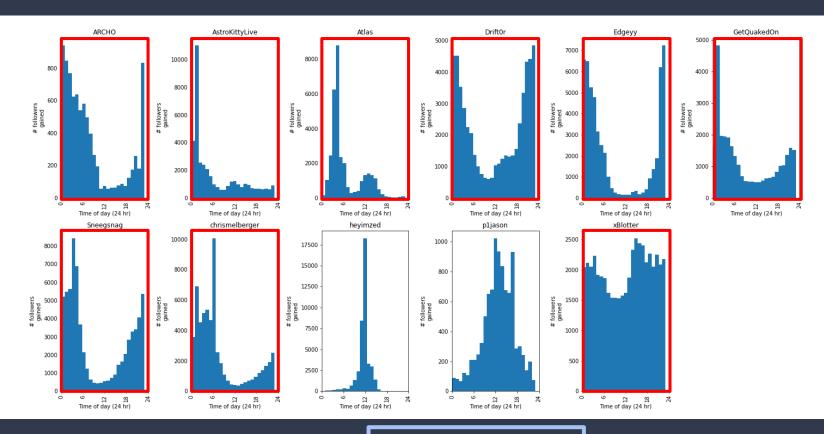
Hypothesis: There is no difference between day of the week and number of followers gained

- No significant difference between the percentage of a channels following gained on weekdays vs weekends
 - Kruskal-Wallis test: p > 0.05
- Sunday is the only day that gains a higher proportion of followers than other days of the week.

Does time of day matter?

Followers gained by time of day (hour)

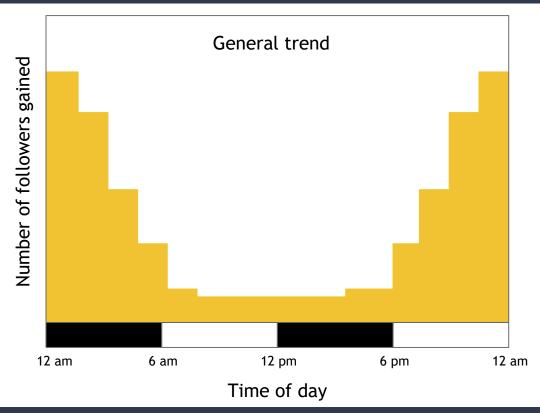
Data



Overview

Channels tend to gain more followers in the evening

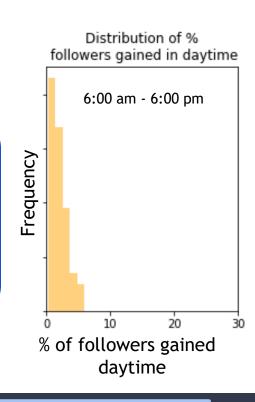
- Significantly more followers are gained in the evening
- Before 6:00 am
- After 6:00 pm

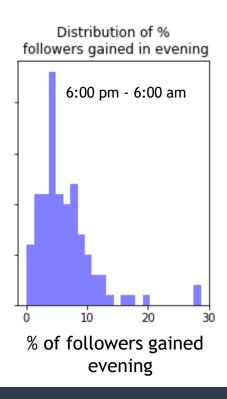


Compare evening vs daytime

 Channels gain <5% of their following during daytime hours

By streaming in the **evening** compared to daytime, channels are likely to increase the number of followers they gain anywhere between 3.4% and 5.3% per hour





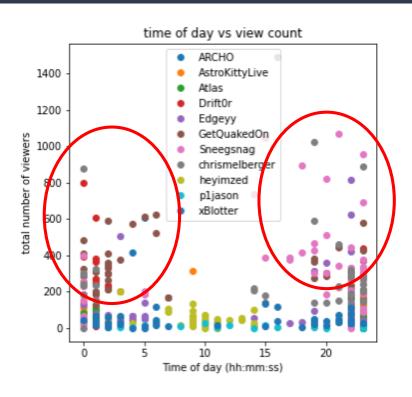
Methods & Results

Recommendations

Question 2

Does duration of a stream affect the number of viewers?

Q2: Does the duration of a broadcast matter?



Hypothesis: streaming for a longer period of time might result in more viewers

- Weak correlation between number of viewers and duration of stream.
- Correlation coefficient = 0.27
- However, time of day does seem to have some correlation with a higher number of views!

Summary:



Time of day is the most important factor to:

- 1. Gain the most followers
- 2. Attract the most viewers

Sunday may be optimal day of the week, but **no significant difference** between other days





Increase followers gained 5% per hour by streaming between 6:00 pm and 6:00 am

Longer streams ≠ more viewers



Future work

A/B test

- Randomly select 240 channels
- Channels must be equal size
- Channels must play the same game
- Limit when they can stream to 1 hour blocks beginning at the same time every day
 - o 10 channels for each hour of the day
- Run experiment for 2 weeks

	Time slot	Followers gained week 1	Followers gained week 2
Channel 1	3 am - 4 am	15	16
Channel 2	12 pm - 1 pm	10	15
Channel 3	7 pm - 8 pm	20	22

Hypothesis

→ There will be no significant difference in the number of followers gained by allotted time of day

Questions?