# **Engagement Data Analysis**

This report contains the answers to the questions asked. Supporting code, analysis and graphs can be found in the Jupyter Notebook.

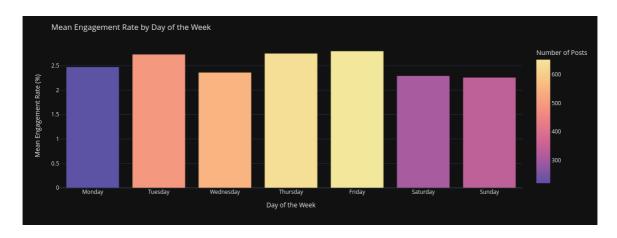
1. What is the typical engagement rate we can expect? What's the likelihood that we can achieve a 15% engagement rate?

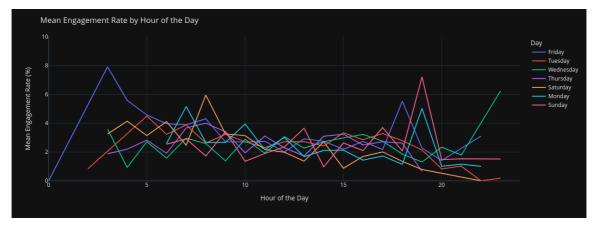
Typical Engagement Rate (excluding outliers) - 2.58%

There is a **6.42% chance that a post will achieve 15% engagement rate**. This is expected when all the data is considered including the posts that have performed exceptionally well, i.e., the outliers.

2. Does day of the week and time of posting affect engagement rates?

Generally, for typical posts the engagement rate is not affected in any significant manner by the day of the week or the time of posting if we consider all the postings at the same time.





But if we dive a little deeper, some interesting points do come up:

- Posts that were posted between 9 10 AM on Saturdays resulted in much higher engagement rate (6%) than the rest of the day (2.3% overall).
- Similarly, posts that were posted between 6 7 PM on Fridays saw a much higher engagement rate than the day's average.
- Saturday, Sunday and Monday see close to average engagement rates (2.29%, 2.26% and 2.47% respectively) despite the number of posts posted on these days being lower than average (304, 337 and 220 respectively as compared to 633 and 652 posts posted on Thursdays and Fridays, the highest performing days).

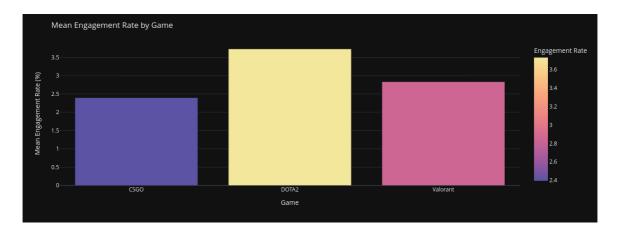
Since the number of posts reduce significantly as we group the dataset by various factors, no concrete relationship can be identified between engagement rates and the time and week of posting.

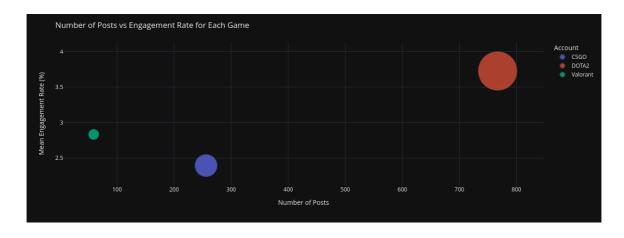
3. How are our game titles doing in terms of social performance? Is there a specific game we should focus more on or less?

Mean engagement rate for posts related to game titles is **approximately 3%**, which shows that **posts related to games perform better on an average.** 

In terms of social performance for each game title, the rankings are as follows:

Game	Mean Engagement Rate	Number of Posts	
DOTA2	3.73%	767	
Valorant	2.83%	59	
CS GO	2.40%	256	





Let's take a look at the engagement rates with more granularity

Account	Account Type	Media Type	Engagement Rate	Number of Posts
CS GO	Twitter	Link	0.12%	20
		Photo	2.20%	139
		Text	1.50%	62
		Video	6.05%	35
DOTA 2	Twitter	Link	2.65%	7
		Photo	4.425	320
		Text	2.77%	338
		Video	4.95%	94
	YouTube	Video	3.13%	8
Valorant	YouTube	Link	0	2
		Text	0	15
		Video	3.98%	42

The highlighted cells show what kind of posts on the social media platforms are receiving higher engagement. The following key points can be taken from the table:

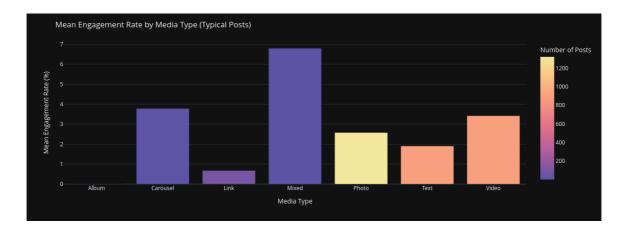
- DOTA 2 is performing well on both YouTube and Twitter
- Valorant is performing well on YouTube
- Even though, CS GO is not performing well overall on twitter, videos posted from the CS GO account on twitter are performing well.

From the number of posts and the engagement rate, it is clear that if more focus is put on valorant posts, the engagement rate for this game and overall engagement rate will increase significantly. Some of the focus can be shifted from DOTA 2 to Valorant in order to have them both performing good on social media.

More Video posts for CS GO on twitter and a decrease in the link and text type posts will result in an increase engagement rate for CS GO as well.

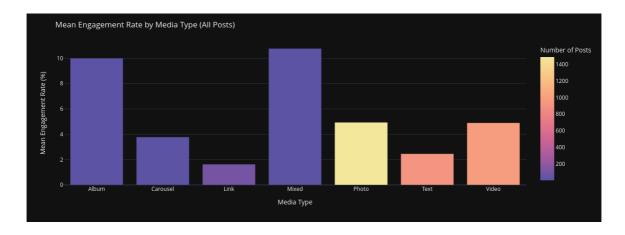
## 4. What media type performs the best?

**Video** is the most performing media type when it comes to typical posts followed by photos. Generally videos perform better when we don't consider outlier posts. When we consider normal posts in combination with the outlier posts, photos and videos are almost neck to neck in terms of the mean engagement rate they can achieve.



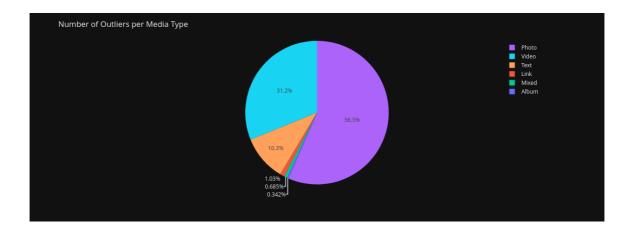
Mixed media type and Carousel have not been considered as they have very less number of posts to measure their performance.

Photos are good in terms of targeted campaigns which usually result in higher engagement rates than normally. Around 57% of the posts that are considered outlier, i.e., those that have performed exceptionally well are Photos with videos being the next best media type.



In this case also Album, Carousel and Mixed media types are not considered as they have very low number of posts to accurately examine their performance.

In case of posts that have exceptionally good engagement rates, their media type is also photo and video.

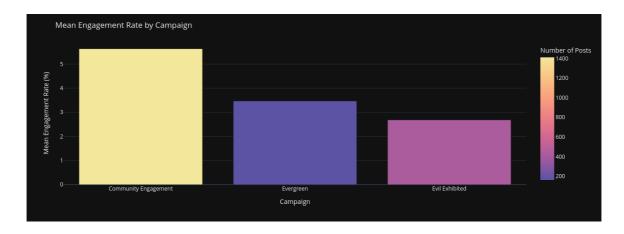


## 5. What is our best performing campaign?

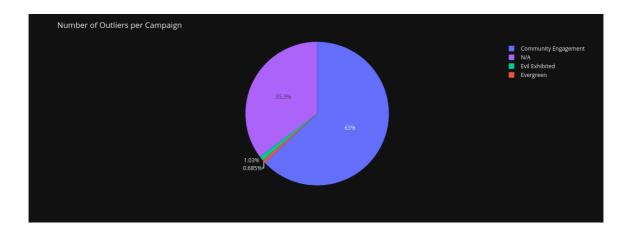
## **Community Engagement**

Since the basic task of a campaign is to find targeted audience and increase engagement, we have included the posts that have been considered as outliers in the analysis as well and based on the that data, the campaigns have been ranked as follows:

- 1. Community Engagement
- 2. Evergreen
- 3. Evil Exhibited



And as per expectation most of the outlier posts also belong to this campaign: Community Engagement.



## 6. Define out a posting strategy for our social channels based on your discoveries?

- Post high volumes of engaging media types, i.e., Photo and Video content during evenings of Friday, from about 7 P.M. to 12 AM and mornings of Saturdays, from about 9 AM to 12 PM while keeping the volume consistently moderate throughout the week.
- Cut down the number of posts that are textual in nature, i.e., links and pure text posts. They don't garner much engagement. Link type content should be kept limited to important links only that cannot be combined by any other engaging media type.
- Since gaming posts attract more engagement than non-gaming posts, keep a
  ratio of at least 60:40 between non-gaming and gaming content with more focus
  on increasing gaming content.
- In the gaming related posts, focus more on posting video content for Valorant and CS GO and less on DOTA 2. Again a ratio of 60:40 should suffice with 40% content being high quality/engaging Valorant videos and the rest of 60% being divided between DOTA 2 and CS GO.
- Apart from photo/video content, post a number of mixed type posts on both
  Twitter and Instagram. Mixed type content tends to perform much better on
  these platforms especially Carousels on Instagram. At least 2% of posts should
  be of these type.
- Overall increase the number of video posts for all platforms and all accounts.
- 7. What suggestions would you give to the social media team if they want to expand their social media presence (e.g. if our CSGO youtube channel is doing well should we expand to TikTok)?

#### DOTA 2

DOTA 2 is already the most performing game title on Social media channels, specifically twitter and YouTube. Video related content for this game title is the most engagement garnering content. Also video related content posted from General account on both Facebook and Tiktok gains high engagement, hence DOTA 2 should be expanded to both these platforms. Posting short video type content on these three platforms, i.e., Twitter, TikTok and Facebook will lead to a bigger social media presence and higher overall engagement.

#### **Valorant**

As of now Valorant account is active only on YouTube and has a significantly less number of posts than the other two games. Even after this, video type content for Valorant attracts much engagement from the users. Hence expanding it to Twitter should be the next move. Given the performance of other game titles on Twitter, Valorant should perform well there. Once a stable engagement for Valorant account has been achieved on Twitter, it can be expanded to both TikTok and Facebook. Given the engagement Valorant posts have garnered even with their lesses posts and social media accounts indicates that it has the most potential to grow and increase overall engagement rates.

## CS GO

Only video type content related to CS GO seems to be doing good, that too only on twitter. In order to expand the social media presence of CS GO, the safest bet is to increase the number of video related posts on Twitter and expand to TikTok, which offers similar platform for short video type content. CS GO is the least performing game title out of all the three, hence it's expansion should be slow and steady. Once CS GO has reached the desired engagement on TikTok, only then it should be expanded to YouTube first and then to Facebook. In order to increase the engagement for CS GO focus should be on posting video type content on platforms that have videos as their primary media type, i.e., YouTube and TikTok.