Evil Geniuses Social Media Performance Assessment

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Abstract

This paper is going to analyze Evil Geniuses' social media performance starting on January 1st and ending on March 31st of the year 2023. The main metric that we will use to gage performance is engagement rate, which is what drives the algorithms of social media platforms to promote it more or not, thus it will always be a good idea to increase engagement rate. Evil Geniuses is currently looking towards increasing their engagements rates, which throughout this notebook we will find out if this is something that can be expected, the chance of reaching 15% engagement rate, and some ideas on how to improve the current engagement rate.

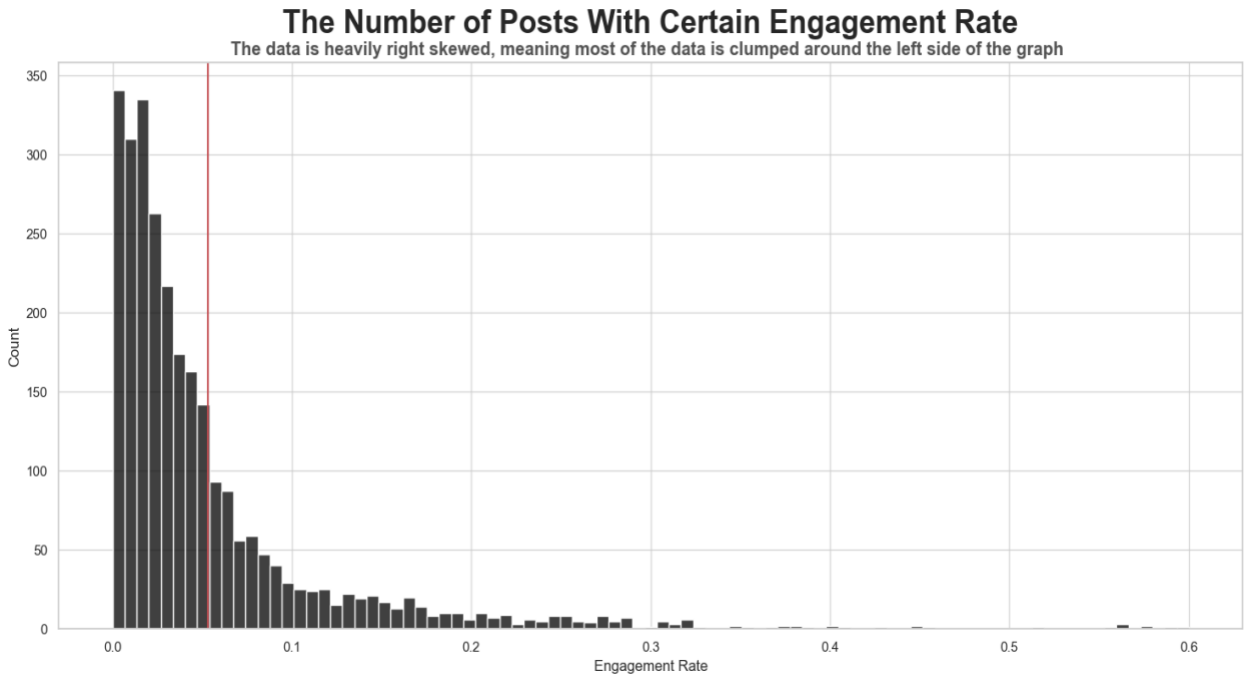
DISCLAIMER: THE DATA I USE HERE IS A MODIFIED VERSION OF THE DATASET PROVIDED IN THE FOLDER AS WELL, IF YOU WOULD LIKE TO SEE HOW I MODIFIED THE DATASET YOU CAN LOOK AT THE CODE

What Is the Typical Engagement Rate? What is the Likelihood for 15% Engagement Rate?

We should first do the easiest way to find if this is a reasonable rate to reach. One way to see if is attainable is to find the average (mean) of the entire dataset and we get:

	Engagement Rate
Mean	5.3126%

With an average of around 5%, we can see that we are quite far from the 15% target that we want to reach. Here is a graph showing the number of posts with a certain engagement rate and see what other conclusions we can get from that.

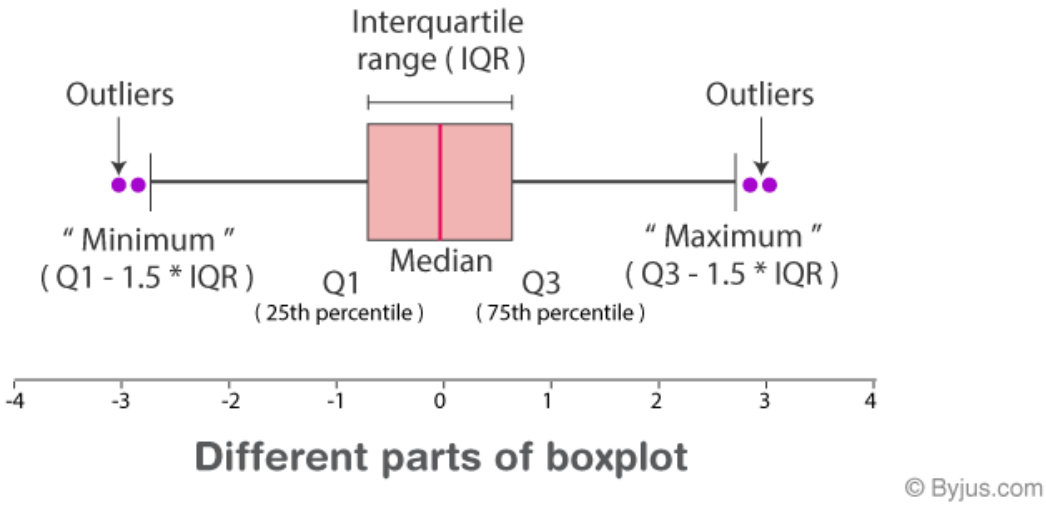


With the red line noting where the average is, we can see that there are a lot of posts that greatly exceed median and even the 15% target. This tells us that this dataset has a decent number of outliers meaning that using the average here is a poor metric to use. Instead, we will

use the median of the dataset, or if the engagement rate was ordered from lowest to highest, the exact value in the middle. Using this new metric, we get:

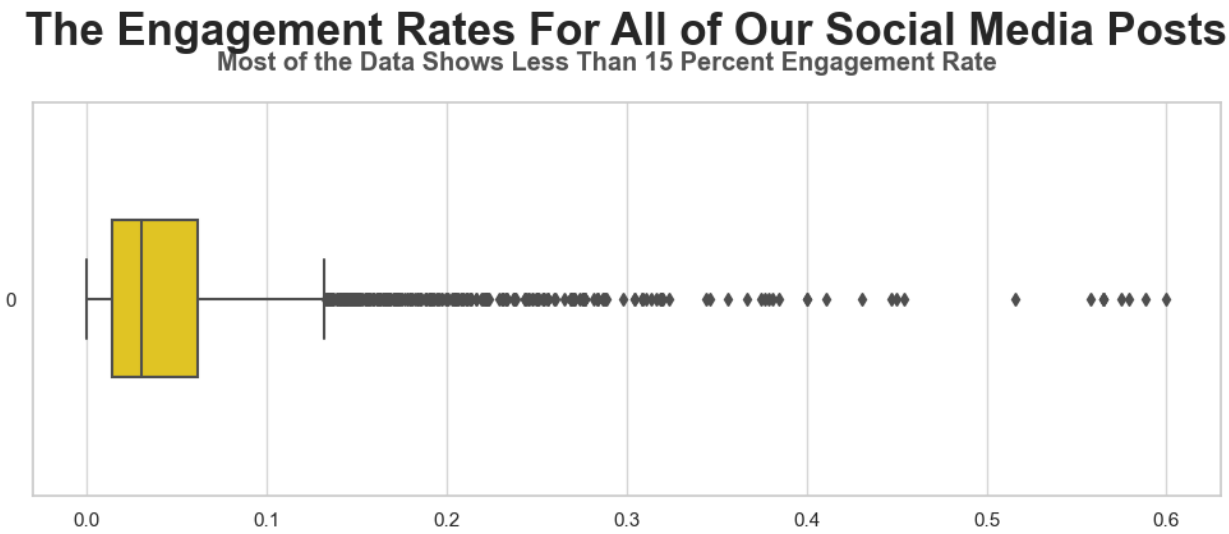
	Engagement Rate
Minimum	**0%**
25%	**1.4249%**
50% (Median)	**3.0780%**
75%	**6.1535%**
Maximum	**60%**

From the new table we can expect a new post to get around 3% engagement rate. Also with this new table, we are going to use a new visualization that displays the information on the table known as a boxplot. This visualization is a little bit more complex, so the picture below explains the visualization.



Source: https://cdn1.byjus.com/wp-content/uploads/2020/10/Box-Plot-and-Whisker-Plot-1.png

Here is a boxplot with our current dataset:



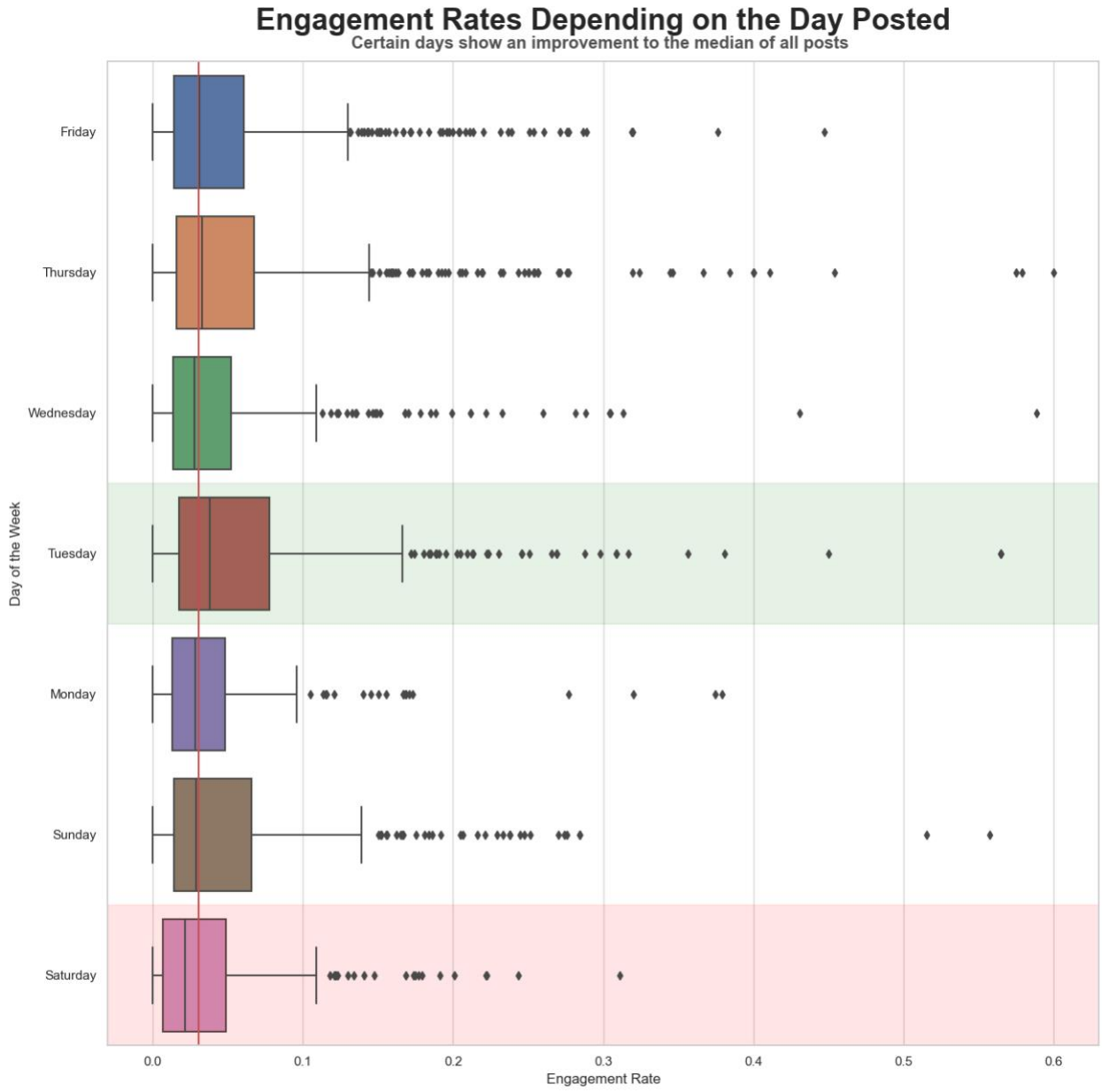
The second question asks us what the likelihood is of getting a post with 15% engagement rate, which is rather simple all we need is the number of posts with a 15% or above engagement rate and divide it by the total number of posts in the dataset. This leaves us with around an 8% to have a post with an engagement rate 15% or above.

	Engagement Rate
Rate of Posts With 15% or More	8.12889%

In summary, the typical engagement rate for any post will be around 3%. While the likelihood for a post to get 15% or above is around 8%.

Does Day of the Week or Time Posted Affect Engagement Rates?

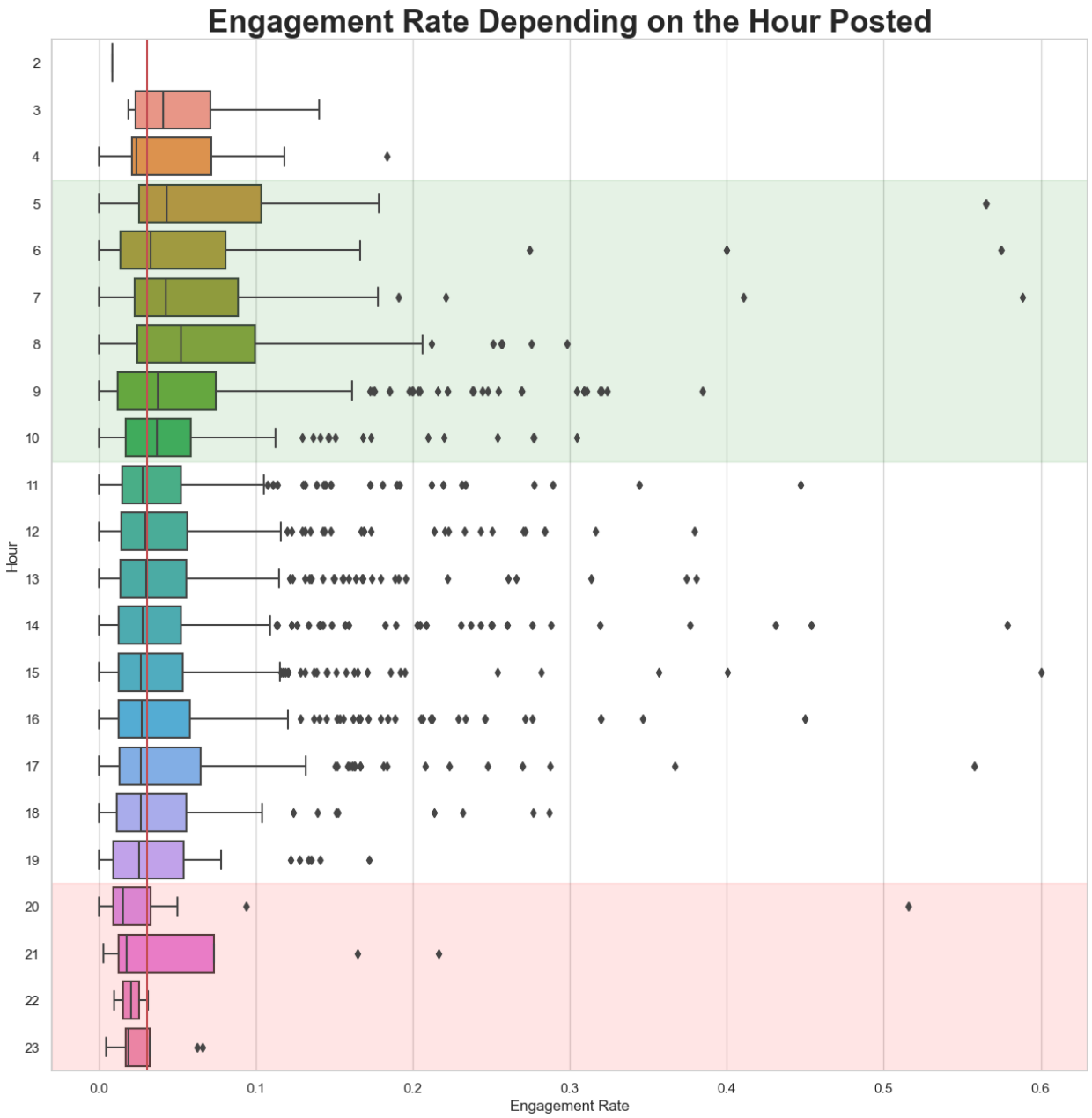
This first part of the questions asks if the day of the week has an effect on the engagement rate.



With the red line noting the dataset median, from the graph above we can see that most days say close to the median. However, there are two days that show a decent amount of

deviation away from the median. Tuesday showing an increase from the dataset median, while Saturday shows a decrease from the dataset median. Meaning that while most days do not seem to be affected, there are **SOME** days that do affect the engagement rate.

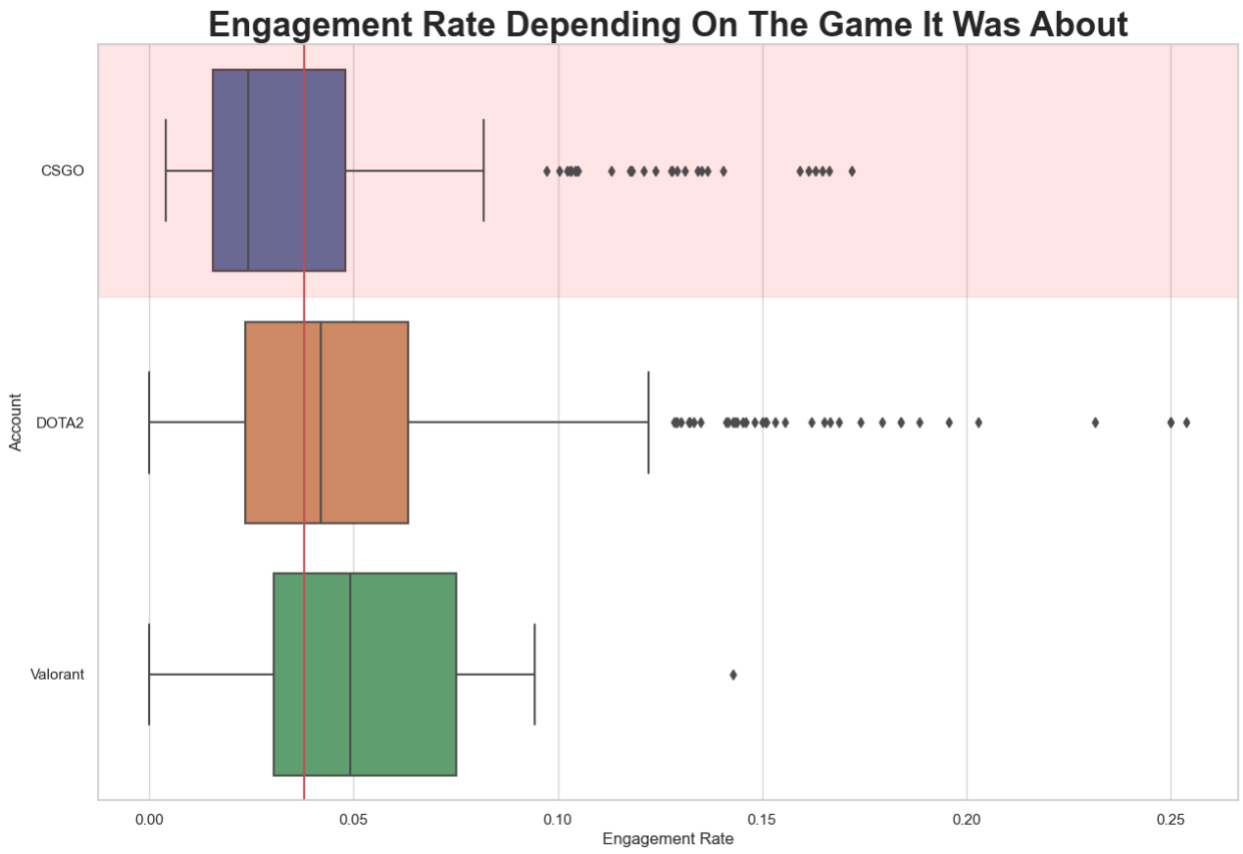
The second part of the question asks if the time the post is published affects the engagement rate, for the time I used the hour it was posted.



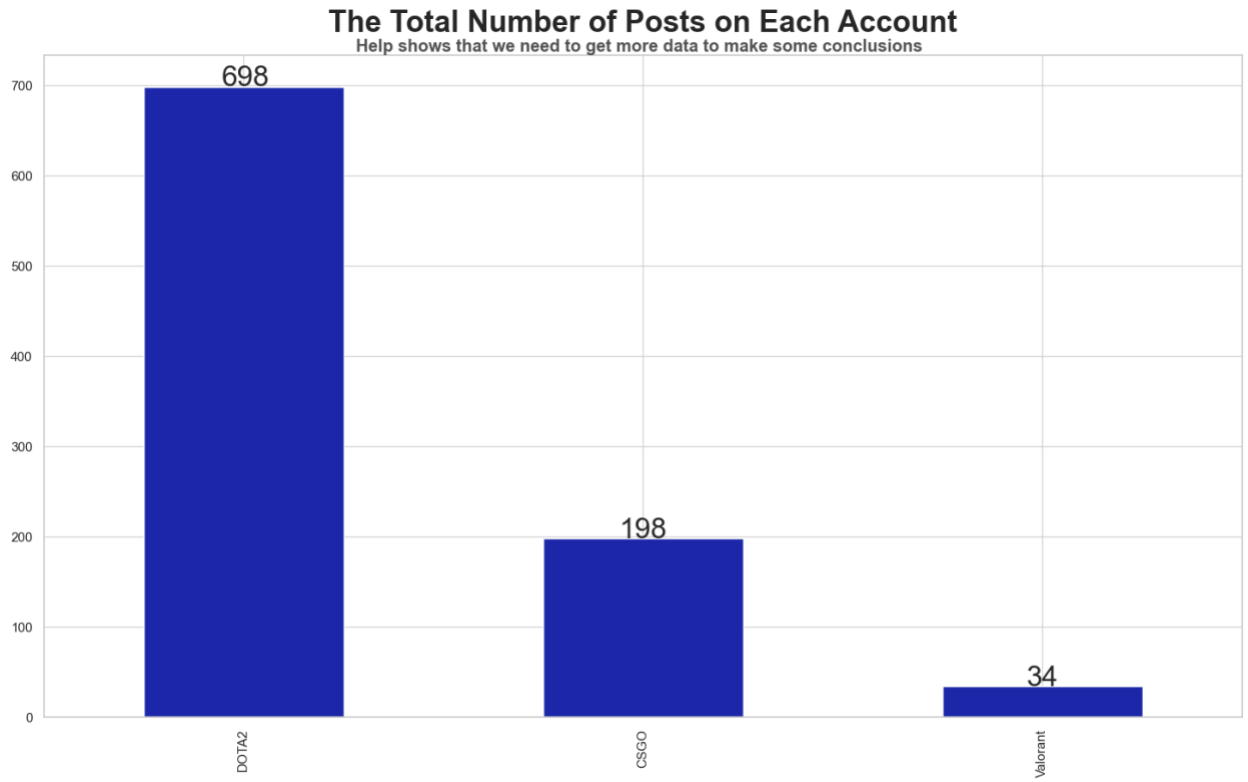
From the graph we can see an increase from 5AM to 10AM, while a steady decrease throughout the rest of the day, and a huge decrease at 8PM to 11PM. From this we can conclude that the time the post is published does affect the engagement rent.

How Are Specific Games Doing? Should We Focus More or Less on a Certain Game?

For this question we first need to answer the first question which is how the game titles are doing in terms of social performance in order to answer the second question.



From the graph above we can see that CSGO is doing the worst out of the game titles. We could also see that Valorant is doing way better than the rest, however it is wrong to assume so.

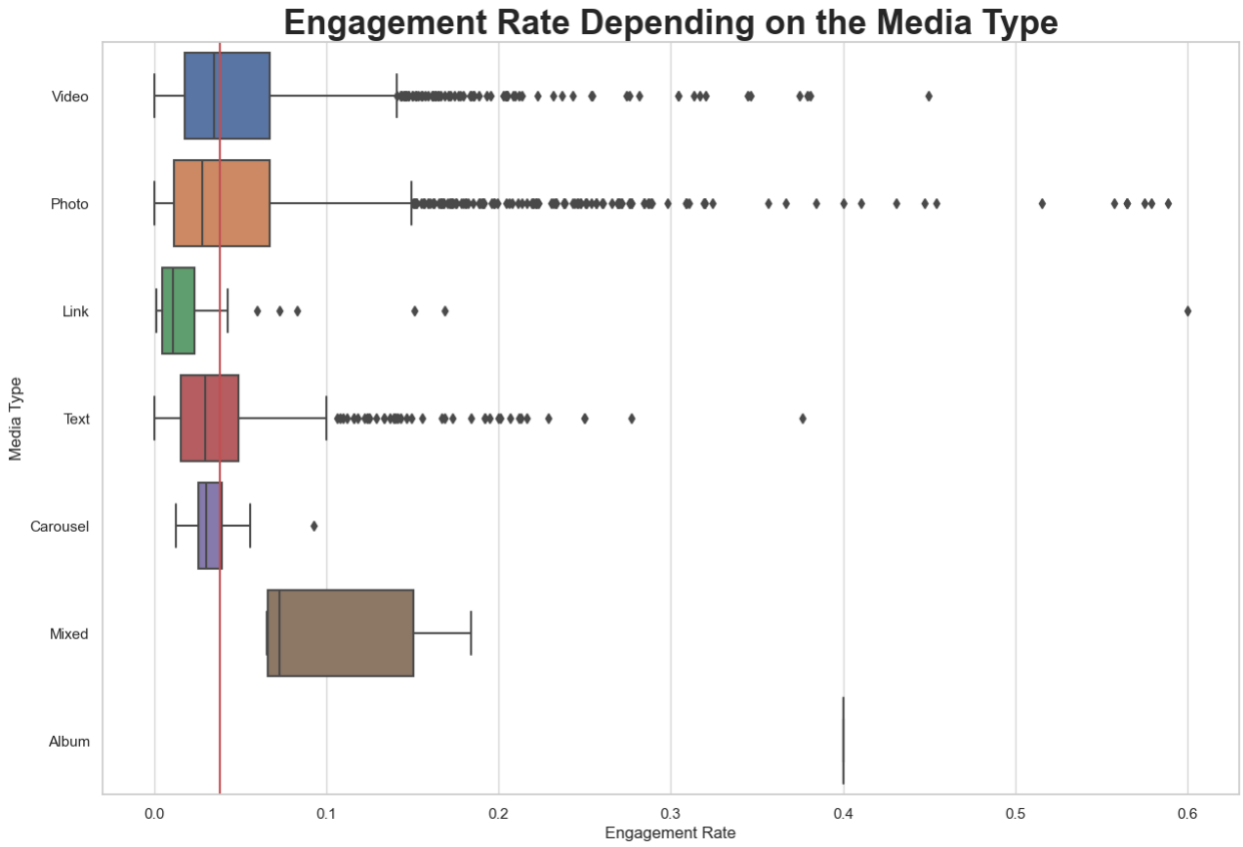


The graph above shows the discrepancy between the number of posts for each game respectively. Valorant only has a total of 34 posts which will make it hard to conclude that it does perform better. This does not mean we should ignore either, it's good performance despite the low amount of data makes it an interesting possibility for future posts.

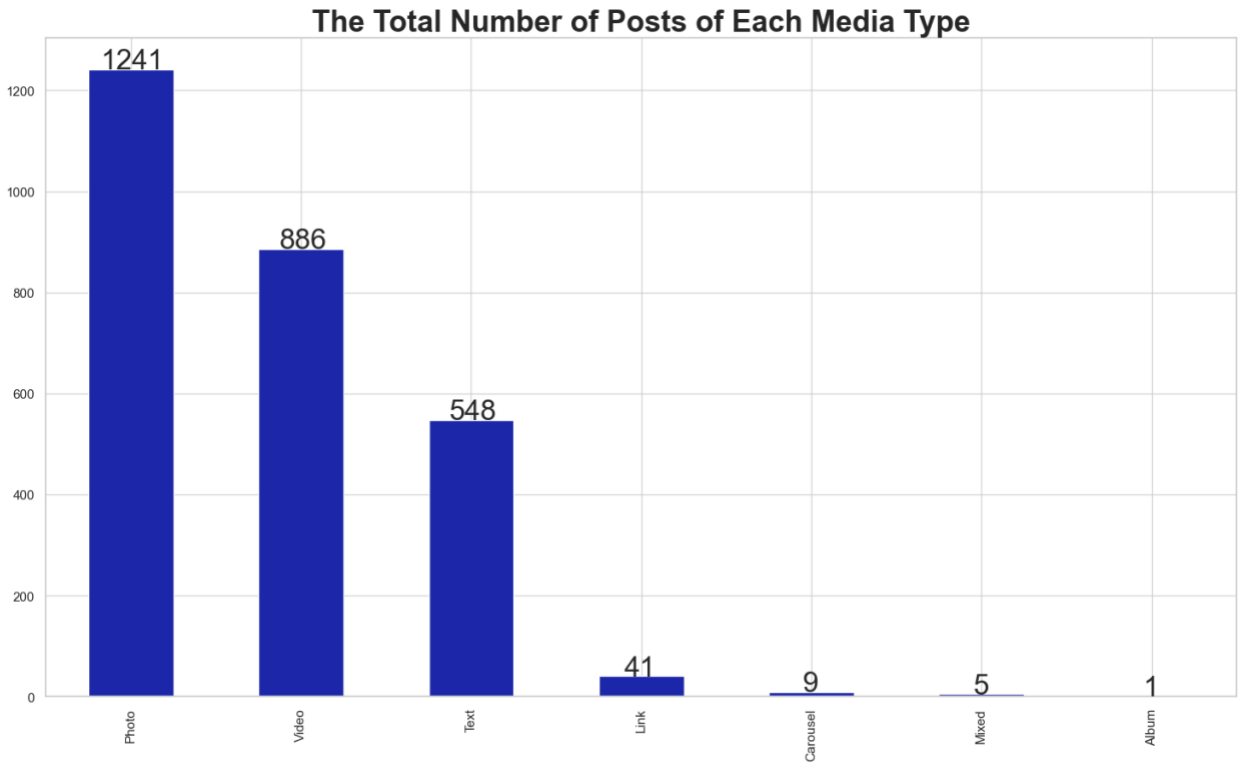
However, CSGO does have enough data to make conclusions and it is not performing worse than the dataset median, so I would recommend that we focus a little less on the game for a while, but never truly ignore it, since CSGO is by far the most popular game on Steam, so it is a huge market to just leave behind completely.

DOTA2 has the most amount of data out of the three and from the previous graph is doing well, so we should not make any changes regarding posts about the game.

What Media Type Does Best?

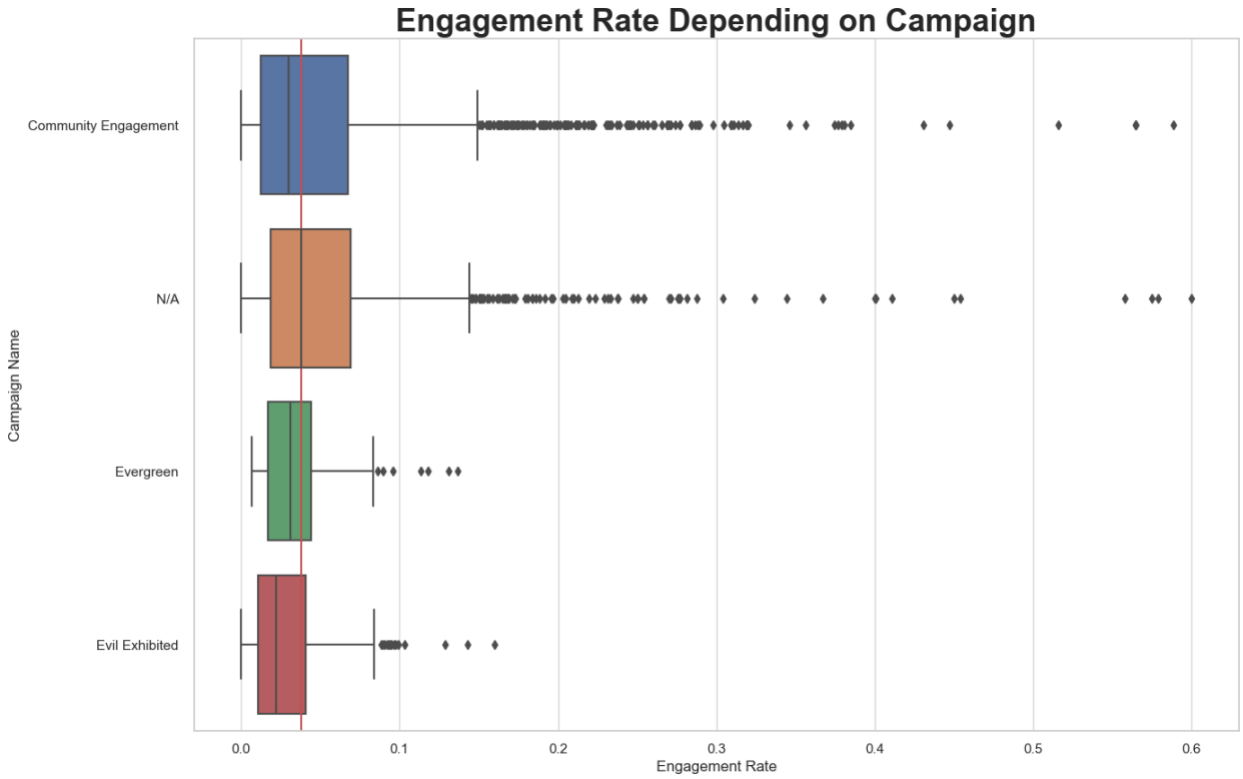


From the graph, we can see that most media types do worse than the dataset median, except for “Mixed” and “Album”. But seeing the “Album” is just a straight line, I think it is important to see the number of posts for each media type.



With a total of 15 posts across “Carousel”, “Mixed”, and “Album”, it would be wise to ignore those three media types for this analysis. The best performing media type is “Video” with the worst performing media type being “Link”.

What Is the Best Performing Campaign?



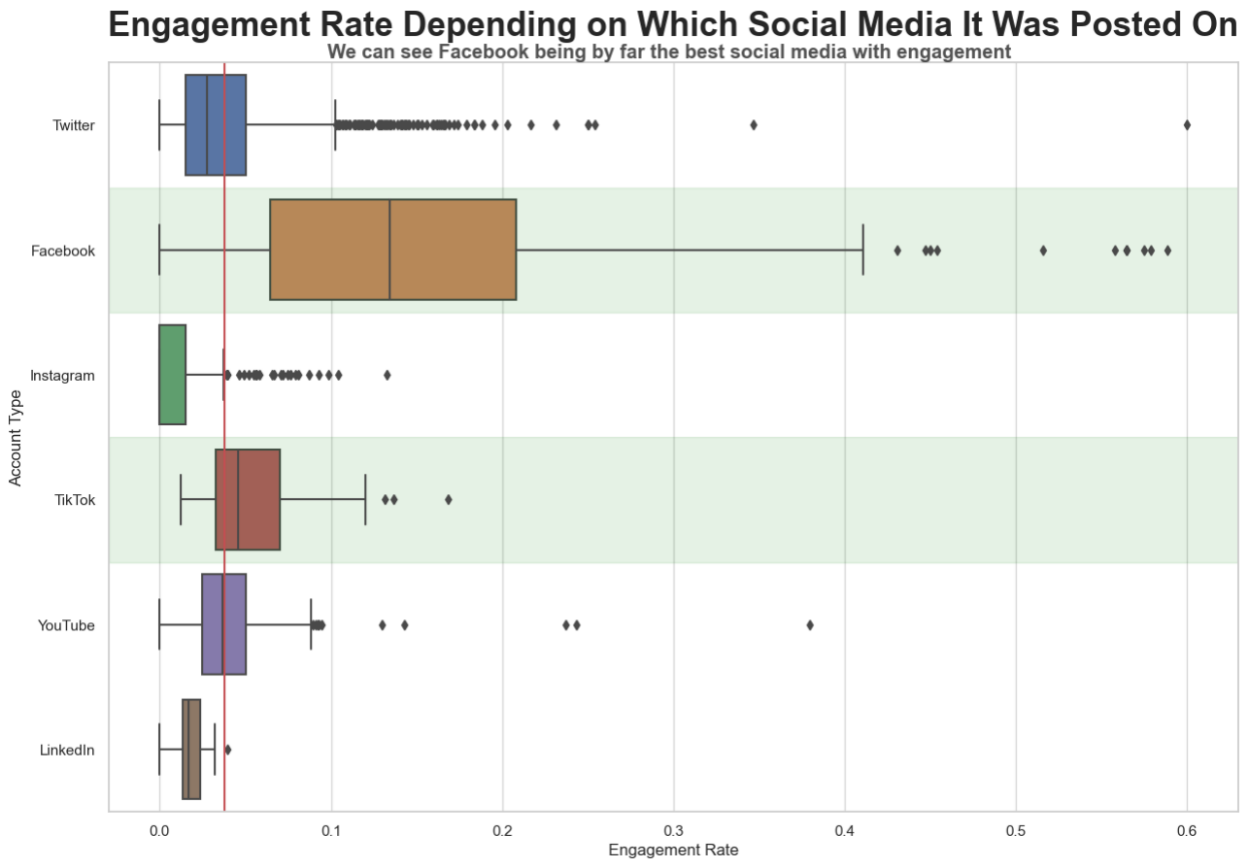
We see that the Evergreen campaign can be expected to do better than the Community Engagement campaign, however the lack of outliers in the in the Evergreen campaign and the sheer number of outliers in the Community Engagement campaign, I would say that the Community Engagement campaign was the best campaign. However, it turns out though that not having a campaign did better than all the previous campaigns we have done before.

Posting Strategy

A general posting strategy using the findings of this paper is to try to post more around the morning (5 AM – 10 AM). If we have a post that we know will do good and does not have an urgency to be published immediately, we can try to post it on Tuesday since that is the best performing day, while trying to avoid big posts on Saturday. While there is already a low number of posts including links in them, we should further try to remove links from our posts. We should maybe redirect them to our bio instead and have the links there, this will possibly get more attention to our brand in general. Use more videos and photos on our posts. Limit our CSGO posts temporarily since it may just be an off-season for the game. Finally, I believe that we should start to focus on Valorant a little bit more, since it's early success might be a good indicator that it will continue to do well and push the brand out to new audiences.

Suggestions For Posting

Looking at the data, there are only 34 posts for Valorant, and all the posts have so far been published on YouTube. A similar thing has happened to CSGO where all the posts about CSGO have only been published on Twitter.



Looking at the graph we see clearly that Facebook is by far our best performing social media website, so we should start posting more Valorant and CSGO on Facebook. TikTok is also doing well so I would recommend to push Valorant on TikTok as well.