## **Insight from WeRateDogs Tweets**

by Arturo Parrales Salinas Aug 26, 2018

WeRateDogs is a twitter account that rates people's dogs and it was started in 2015. It became very popular due to a twitter response to a criticizing tweet against the rating score that is not 1 to 10, but 1 to any number you imagine. The antagonist was a twitter user named Brant, who said WeRateDogs their system was awful for giving unrealistic scores. WeRateDogs replied: "They're good dogs Brent". This phrase spread over the web and made WeRateDogs very noticeable among twitter users and dog lovers (figure 1).



Figure 1. The origin of WeRateDogs popularity

In this project, we collected data from this twitter account, cleaned it and found some insight that can be summarized in 5 points:

- 1. Common breeds and highest rating breed
- 2. Favorites, retweets and breeds
- 3. Percentage of tweets per source
- 4. Tweets over the Time
- 5. Tweets per Weekday

We start our insights finding the most common breed in tweets and the highest rated breed by WeRateDogs, fig. 2 shows on the left boxplot the distribution of tweets of a specific breed and on the right boxplot there one can see the distribution of average rating numerator of each breed.

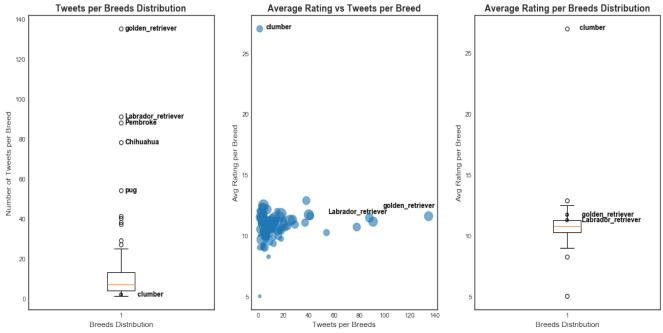


Figure 2. Right boxplot - distribution of tweets of each breed. Left boxplot - distribution of average rating numerator of each breed. Scatter plot - correlation of average ratings and number of tweets per breed, the size of every point is the average number of retweets per breed

From figure 2, one can tell that there is no correlation between the rating and the number of tweets a breed has. This makes a lot of sense in a fair system since most common dogs don't get the lowest nor highest scores, but a mix of scores depending on the actual dog and the picture. From the plot, golden retriever is the most common breed in tweets, but its average rating is slightly higher than 75% breeds. On the other hand, clumber dogs have very high scores compare to the rest, but they are not the most common dogs on tweets. This last sentence might actually be a biassed decision on WeRateDogs in which they seem this dog breed less often and feel more prompted to give high scores. We will need to investigate more about this rating and whether users like it more.

In order to investigate if less common breeds have a higher impact on people we will need to analyze the favorite counts and retweets per breed. Figure 3 shows the result of such investigation. In this plot, the size of each point is a ratio of number of tweets a breed appeared on to average ratio of such breed. One can clearly see that golden retriever is a more common breed while clumber is not. However, something very interesting in the plot is the fact that the average number of retweets and favorite count actually have a strong positive correlation, in which average number of favorites is almost 4 times greater than the retweets. Another important insight and the answer to our main question when creating this plot is that the most common breed (golden retriever) has more favorites than the highest rated breed (clumber), so we can see people is definitively not biassed by the ratings and by how often a breed appears on the tweets. They are a very fair audience and we can also tell that WeRateDogs do not give the highest scores to most popular tweets.

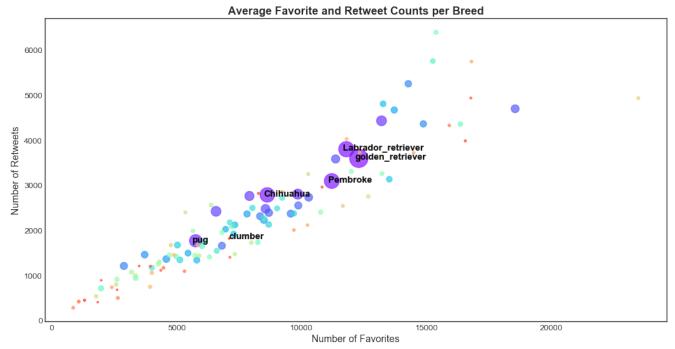


Figure 3. Relation between average favorite counts and average retweets per breed with the size of every point represented by the ratio of number of tweets to rating numerator per breed

Since we found the audience to be fair and that WeRateDogs is not biassed on how popular a tweet is, we can continue our analysis to the source of all this tweets and to understand more how WeRateDogs has performed over time.

We can first try to understand what is the main mean of users to tweet their dogs pictures. Figure 4 shows a pie chart of the sources of the tweets. We can clearly see most of the tweets were posted through iPhone and this makes sense as an iPhone has a camera and it is very convenient to take a picture and posted in a tweet. Thank you Twitter and smart phones!

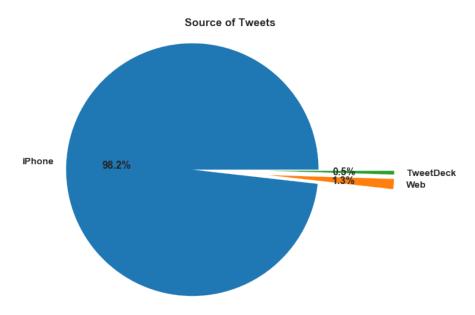


Figure 4. Percentage of tweets posted in WeRateDogs per source

Once we have understood our audience uses smartphones (iPhone) the most, it will be great to see the performance of WeRateDogs over time. We can represent how the audience engage over the time and how the number tweets grew or decrease. Figure 5 shows the explosion on tweets in WeRateDogs and how audience engaged on it. The size of the points corresponds to the number of tweets in that date (the bigger the are of the point the more tweets were posted). We can clearly see that the size of the point decreases over time, but even when it is decreasing the number of favorites and retweets increased in 2016 which means the audience engaged more. It is in 2017 that the number tweets keeps decreasing and the audience is also starting to lose engagement. Maybe it is time for a new tweet that brings back popularity to WeRateDogs, they need a new Brent!

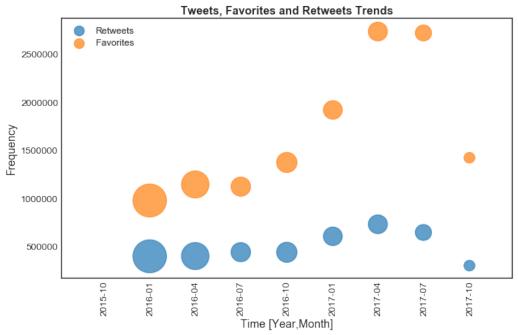


Figure 5. Trends on the tweets related to WeRateDogs over the time from late 2015 to late 2017

We have learned that the trend on WeRateDogs over the time, so for our own curiosity it will be good to know which days were more popular to tweet in WeRateDogs. Figure 6 shows a summary on the tweets per weekdays in every year.

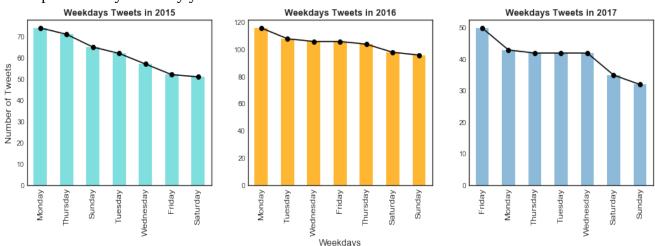


Figure 6. Tweets per weekday in every year from 2015 to 2017

From the plot in figure 6, we can see that in 2016 was when more tweets were posted and 2017 is the year with less tweets. It also shows that Mondays of every year is one of the top two days of peaks in tweets. However, it confirms that WeRateDogs is losing audience.

All in all, the insights we have done help us understand the history of WeRateDogs in twitter and how their system is fair enough to make justice to their goal of rating good dogs!