# WeRateDogs Data Analysis:

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## Introduction:
We all love pets, and dogs are the most beloved. They are our best friends. WeRateDogs Twitter account ha tons of photos for cute dogs.

## Scope:

We will analyze the tweets in time frame from Nov. 2015, to Aug. 2017. Each photo has its rating that expresses the user's opinion. But to get more insights we can analyze other people's interactions on the tweets. Interactions include favorites, retweets, and may be replies. But for this analysis, we will only consider the first favorites and retweets. Replies can vary, they may agree or not agree with the tweet, so it needs more complex analysis other than counting.
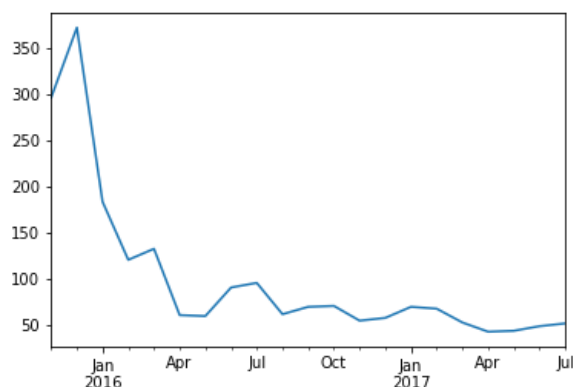
## Data insights:

The data sample includes 2356 tweet. 2075 of them have predictions of the dog type. However, after performing data cleaning, the number of tweets included in the analysis is 2092 tweet, after excluding replies and retweets as well as some tweets that don't have images or not related to dogs.
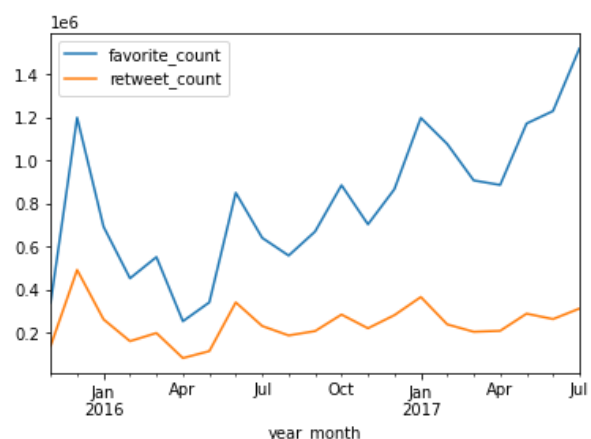
For time series analysis, I excluded those of August 2017, because the sample only includes first day of the month.

## Time Series Analysis:
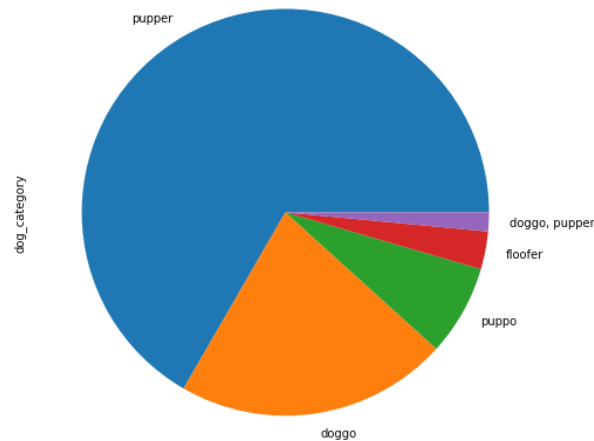
### Tweets Counts                    ### Tweets Interactions



Although the number of tweets decreases over time, the number of interactions increases. This might be due to the increase of the number of followers over time. However, analyzing the number of followers is out of scope of this analysis.
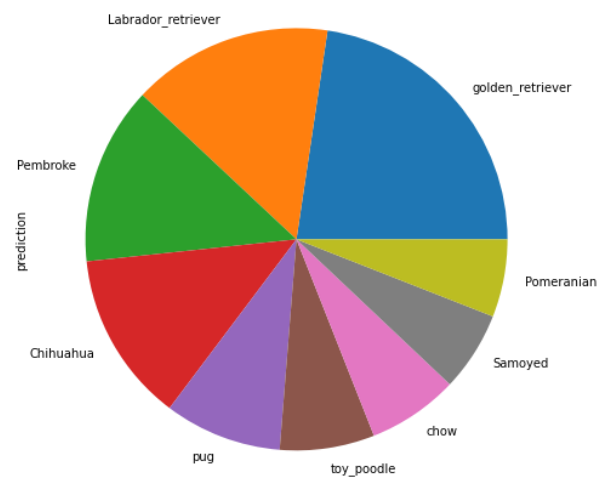
## Analysis by dog categories:

WeRateDog Twitter user, classifies dogs into four categories: Doggo, Pupper, Floofer and Puppo according to some criteria. Although a small number of tweets are categorized, it is interesting to see the distribution of tweets for this small sample.



## Tweets counts by dog types:

The sample contains a large number of predicted dog types. But only nine of them have more than 40 tweets. So let's see the distribution of tweets count for these types:



## Top 10 average ratings dog types:

Counts of tweets is not an indicator of the type popularity, so let's see the top 10 dog type average ratings:

```
Bouvier des Flandres    13.00
Saluki                  12.50
briard                  12.33
```

```
Tibetan mastiff         12.25
Border terrier          12.14
standard schnauzer      12.00
silky terrier           12.00
Irish setter            11.75
Gordon setter           11.75
Samoyed                 11.69
```

So although "Bouvier des Flandres" doesn't have a big share of the tweets count, it has the highest average of rating.

## Top 10 average interactions dog types:

But again the rating only expresses the owner's opinion. So, what about the public opinion. The top 10 dogs interactions average are:

```
Bedlington terrier      29807.00
Saluki                  26205.50
French bulldog          23092.13
Afghan hound            20550.00
Bouvier des Flandres    19952.00
flat coated retriever   19130.25
black and tan coonhound 18891.00
Irish water spaniel     18526.00
whippet                 17620.81
English springer        17412.00
```

## Most popular dog type:

While the most liked dog type is golden retriever  with 2278703 total retweets and favorites.