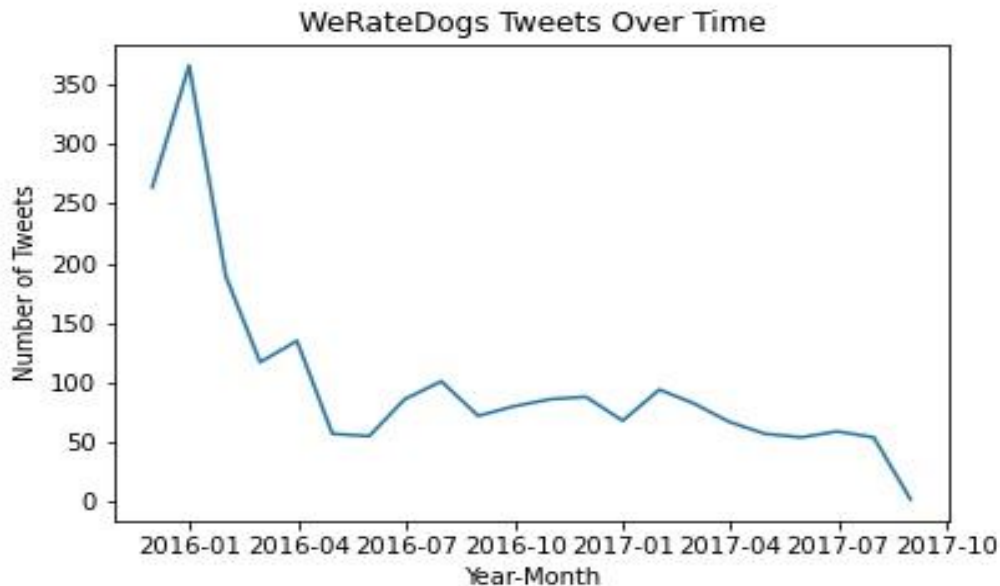# Act Report

By Michelle Bleyl

Introduction

After we finish wrangling our data, gathering, assessing, and cleaning our data, we are now moving to analyze and visualize our data to see insights.

The followings are the insights that I visualize/analyze.

1. Visualize the total number of tweets over time to see whether that number increases, or decreases, over time.
2. What is the most popular dog breed?
3. What is the most popular dog name?
4. What is the highest rating dog breed?
5. What is the highest rating dog name?

Insight 1: Visualize the total number of tweets over time to see whether that number increases, or decreases, over time.

Line plot the number of tweets by Year-Month. Number of tweets sharply decreased from early 2016. While tweets decrease over time, there are spikes in 2016 spring, 2016 summer, 2016 winter, and 2017 February. Seeing 2016's spikes, these seasons are most likely during breaks. Spring break, summer break, winter break might have impacted their number of tweets. The more people provide their dog's image, the more they can post the ratings.

However, we see a slightly sharp decrease between 2017/07 and 2017/10.

Thus, WeRateDogs Twitter account should aware that they number of tweets are decreasing over time and consider a way to increase their tweets.

Insight 2: What is the most popular dog breed?

```
#Most shown breed
None                   318
```

```
Golden_retriever        158
Labrador_retriever      108
Pembroke                 95
Chihuahua                91

#Average favorite count by breed
Brabancon_griffon             747.333333
Groenendael                   981.500000
Japanese_spaniel             1116.000000
Irish_wolfhound              1292.000000
Tibetan_terrier              1562.500000
                                   ...
Black-and-tan_coonhound     14698.000000
Bouvier_des_flandres        15398.000000
French_bulldog              16182.931034
Saluki                      20850.000000
Bedlington_terrier          21606.666667
```

While Golden Retriever is the most shown breed, it is not the most popular breed based on their average favorite count (ignoring the "None"). There are 158 tweets of Golden Retriever, 108 tweets of Labrador Retriever, 95 tweets of Pembroke, and 91 tweets of Chihuahua. However, all these breeds are not ranked in the top average favorite count favorites. The top 5 breeds that get likes are Bedlington Terrier, Saluki, French Bulldog, Bouvier des flandres, and Black-and-tan coonhound. The top 2 breeds have over 20,000 favorites.
Thus, dogs that show up more than other breeds doesn't mean they get more favorites.

Insight 3: What is the most popular dog name?

```
#Most shown name
None            670
Lucy             11
Charlie          11
Cooper           10
Oliver           10

#Highest Average favorite count
Canela       60331.0
Aja          69436.0
Duddles      93105.0
Jamesy      109158.0
Stephan     112063.0
```

The most shown name is "Charlie" and "Lucy". 2nd place is "Oliver" and "Cooper". Looking at their gender, "Charlie" and "Oliver" are boy name. Girl names is "Lucy". And Unisex names is "Cooper". There are 2 boy names, 1 girls name, 1 unisex name in the ranking. Thus, Gender of the dog doesn't relate to the number of tweets.
However, the average favorite count is not correlated with how much they showed up. The ranking is followed, "Stephan", "Jamesy", "Duddles", "Aja", and "Canela". "Stephen" and "Jamesy" are boy name. "Canela" is a girl name. "Duddles" and "Aja" is a unisex name.

There are 2 boy names, 1 girl name, 2 unisex name. Thus, gender of the dog also doesn't relate to the number of tweets.

Therefore, while the gender of dog is not related how popular the name is but the more name showed up doesn't mean it has more favorite counts.

Insight 4: What is the highest rating dog breed?

```
breed
Japanese_spaniel               0.500000
Afghan_hound                   0.800000
Walker_hound                   0.900000
Scotch_terrier                 0.900000
Soft-coated_wheaten_terrier    0.900000
                                ...
Irish_setter                   1.233333
Briard                         1.233333
Saluki                         1.250000
Bouvier_des_flandres           1.300000
Black-and-tan_coonhound        1.400000
```

The highest rating dogs are Black-and-tan_coohound, Bouvier_des_flandres, Saluki, Briard, and Tibetan_mastiff. Like the insight 2, favorite counts is slightly correlated with the ratings such that Black-and-tan_coonhound, Bouvier_des_flandres, and Saluki are both ranked in top 5. Also, Japanese_spaniel are in both rank least 5.

Insight 5: What is the highest rating dog name?

```
name
Tedrick         0.2
Henry           0.2
Chuck           0.3
Alexanderson    0.3
Tommy           0.3
                ...
Doobert         1.4
Cermet          1.4
Emmy            1.4
General         1.4
Iggy            1.4

name
Clifford     1.4
Sundance     1.4
Kuyu         1.4
Smiley       1.4
Laika        1.4
Doobert      1.4
Cermet       1.4
Emmy         1.4
General      1.4
Iggy         1.4
```

The highest rated dog names are Clifford, Sundance, Kuyu, Smiley, Laika, Doobert, Cermet, Emmy, General, and Iggy. Non of these names are not listed in Insight 3.Thus, number of favorite counts is not correlated with the rating by name.