

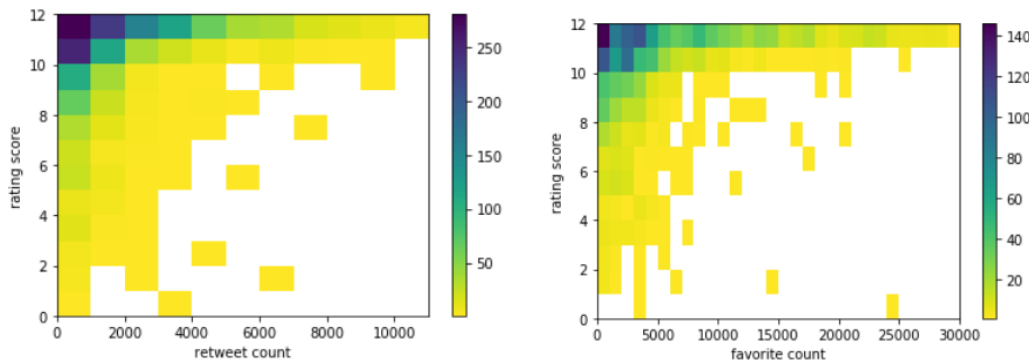
Act Report

Question: Is dog with high rating more likely to have more retweet and favourite count?

Retweet_count and favorite_count are positively correlated with the dog's rating score. The higher retweet and favorite count, the higher the rating score. It shows that Twitter users also react more actively for dogs with higher rating score.

The correlation matrix shows the correlation between rating numerator and retweet / favorite is about 0.25 – 0.3. Similarly with the heatmap below, dogs with rating score of 11 and 12 has more retweet and favorites.

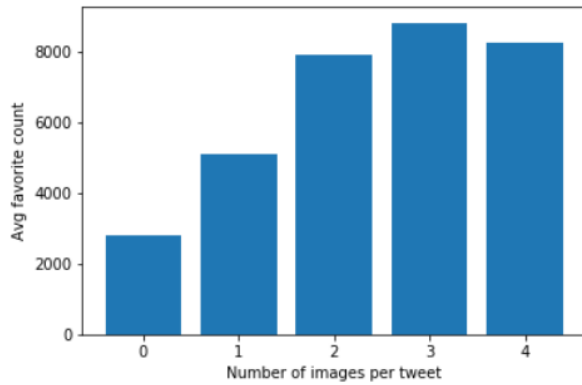
	rating_numerator	retweet_count	favorite_count
rating_numerator	1.000000	0.257570	0.290071
retweet_count	0.257570	1.000000	0.675868
favorite_count	0.290071	0.675868	1.000000



Question: Is dog with more pictures will have higher rating, more retweet and favorite count?

In the digital era where pictures carry more weights in attracting attention, it would be interesting to see the users' behavior in "retweet", "like" and rating score.

Interestingly, when a dog has more picture, its favorite count increases respectively. In the chart below, the average number of favorite count increase with the number of posted pictures. It makes sense! Picture provokes more emotion.



However, the amount of retweet and rating score seems to be independent of rating score. In the table below, when the number of images increase, the average rating_numerator doesn't increase respectively. It is in a good trend since the evaluation should depend on the characteristics of the dog instead of the number of posted images.

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In [90]: subset_df[['img_num', 'retweet_count', 'favorite_count', 'rating_numerator']].groupby('img_num').mean()
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Out[90]:

	retweet_count	favorite_count	rating_numerator
img_num			
0	2806.254237	2781.389831	10.604520
1	1633.340541	5089.182432	9.966216
2	2509.304636	7912.052980	10.947020
3	3336.500000	8809.250000	10.800000
4	2646.307692	8231.384615	11.307692