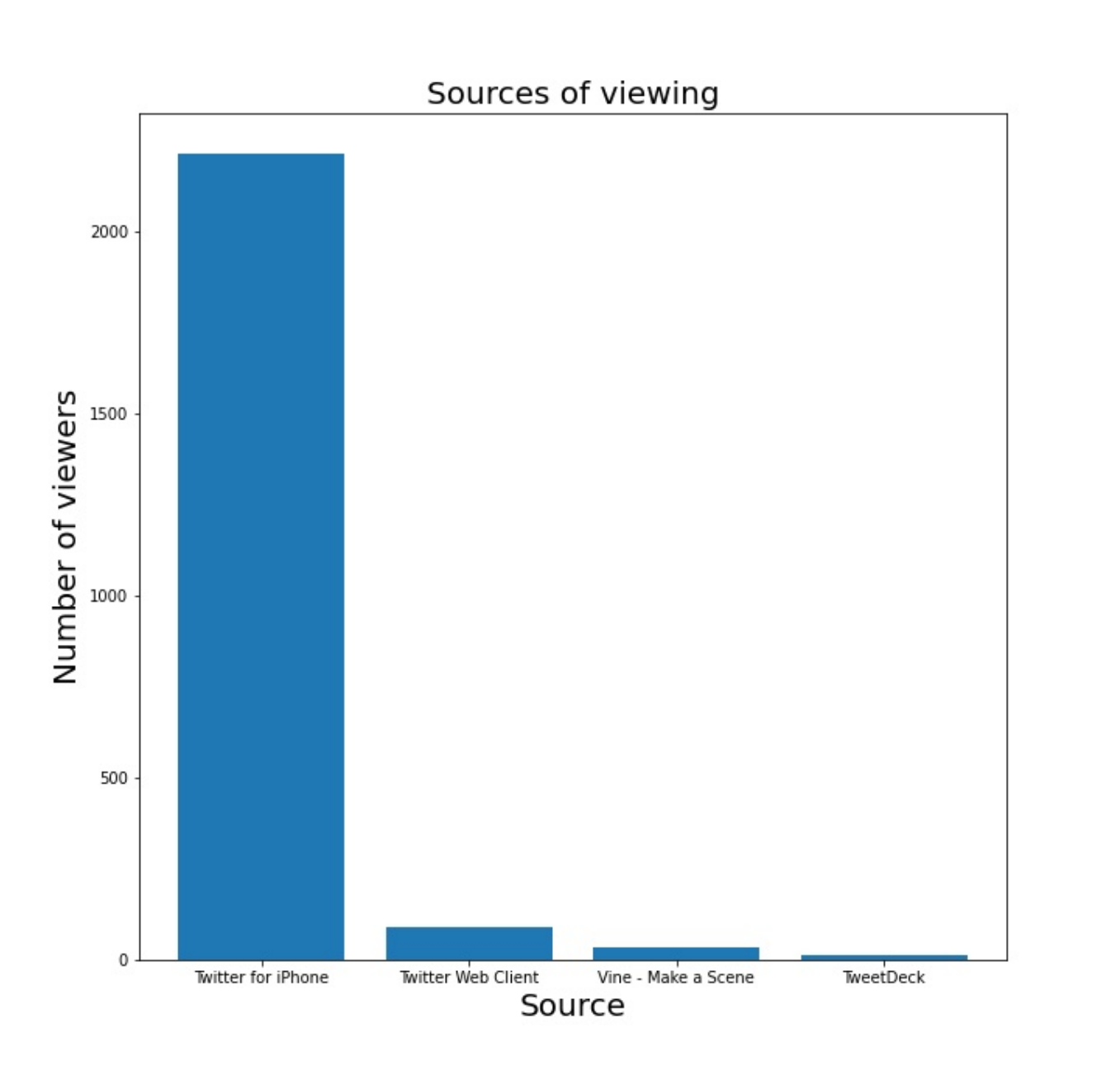## Sources of Viewing:

we have 4 sources of viewing these tweets. after cleaning the sources column, we are able to compare the sources according to the number of viewers.

```python
from IPython.display import Image
Image(filename='Graphs\\sources.jpg')
```


Twitter for iPhone is the most used source with a very wide margin. then the web client. The visualization is very predictable. but for me, I did not except such a difference between iPhone and web. This data can be used to improve the mobile website / application quality. The developers are actually developing for mobile. then the rest come next!

Tweets by day:

Let us move to a different visualization, which results is completely unpredictable - at least for me-. after cleaning the timestamp column and changing its type. we can analyze the number of tweets by a certain day of month.

```python
from IPython.display import Image
Image(filename='Graphs\\tweets.jpg')
```
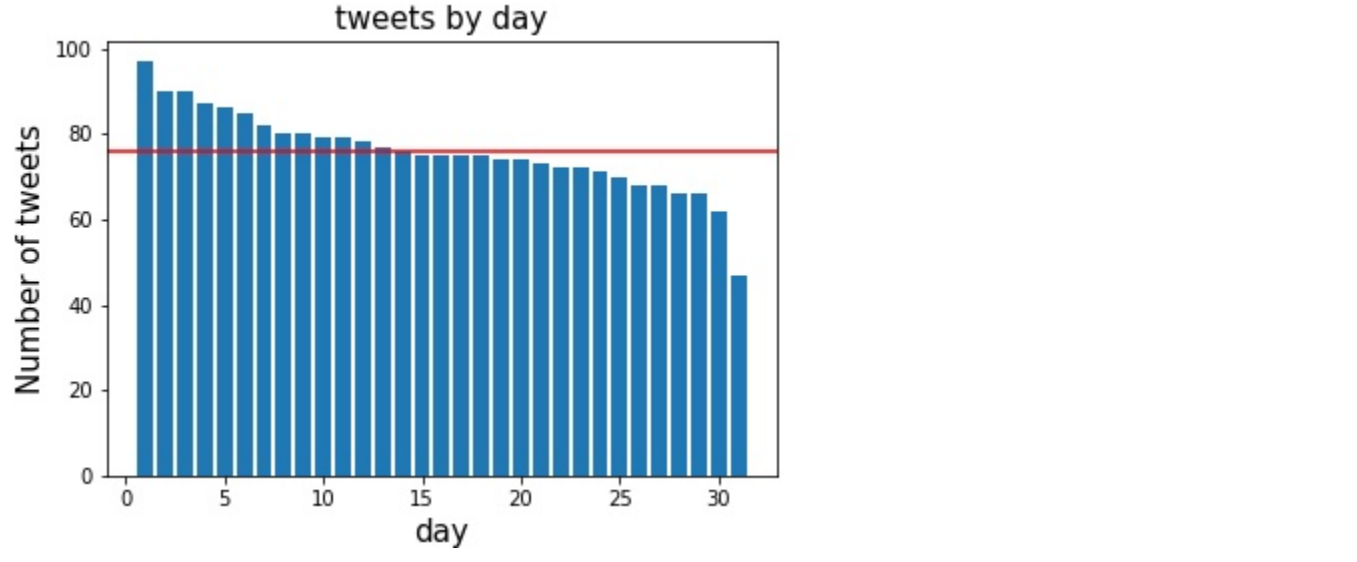

Surprisingly I found that the first half has more tweets than the second, with a fair margin between the very first day and the very last day! It is kind of weird! then I graphed the mean tweets per day with them, to find the point at which the mean meets the daily tweets. and surprisingly again. they meet at the 14th day!

Tweets VS Favorites:

What is the relationship between the two? It is quite predictable. But visualizing it makes it clearer.

```python
from IPython.display import Image
Image(filename='Graphs\\ret-favs.jpg')
```
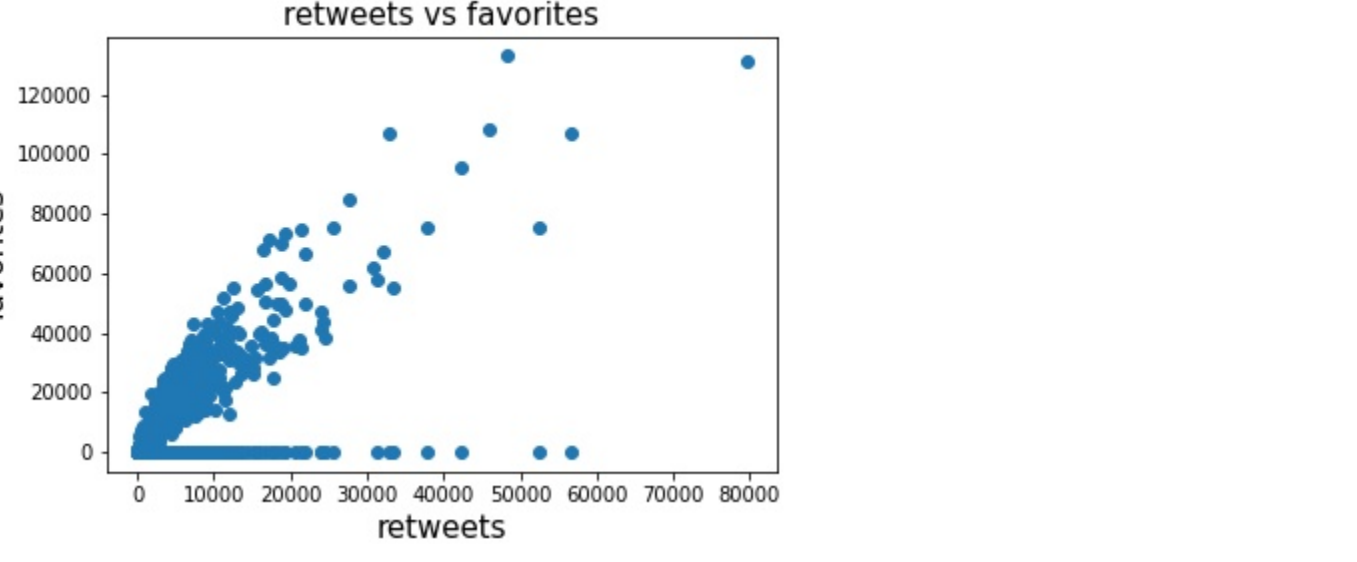

The relationship has some linearity. But it behaves weirdly in some points. Check the top-most two points! The top-most one has less then 50,000 retweets. While the second top-most one which has little smaller favorites. Has about 80,000 retweets! This is very curious you must have guessed that I searched for these very tweets at once! I got their IDs using the code below and opened them. The one with more retweets was a doggo standing in the pool! Which is something worth sharing. While the one with more loves is something that many people do not seem to see that it worth retweeting. Even if they loved it!
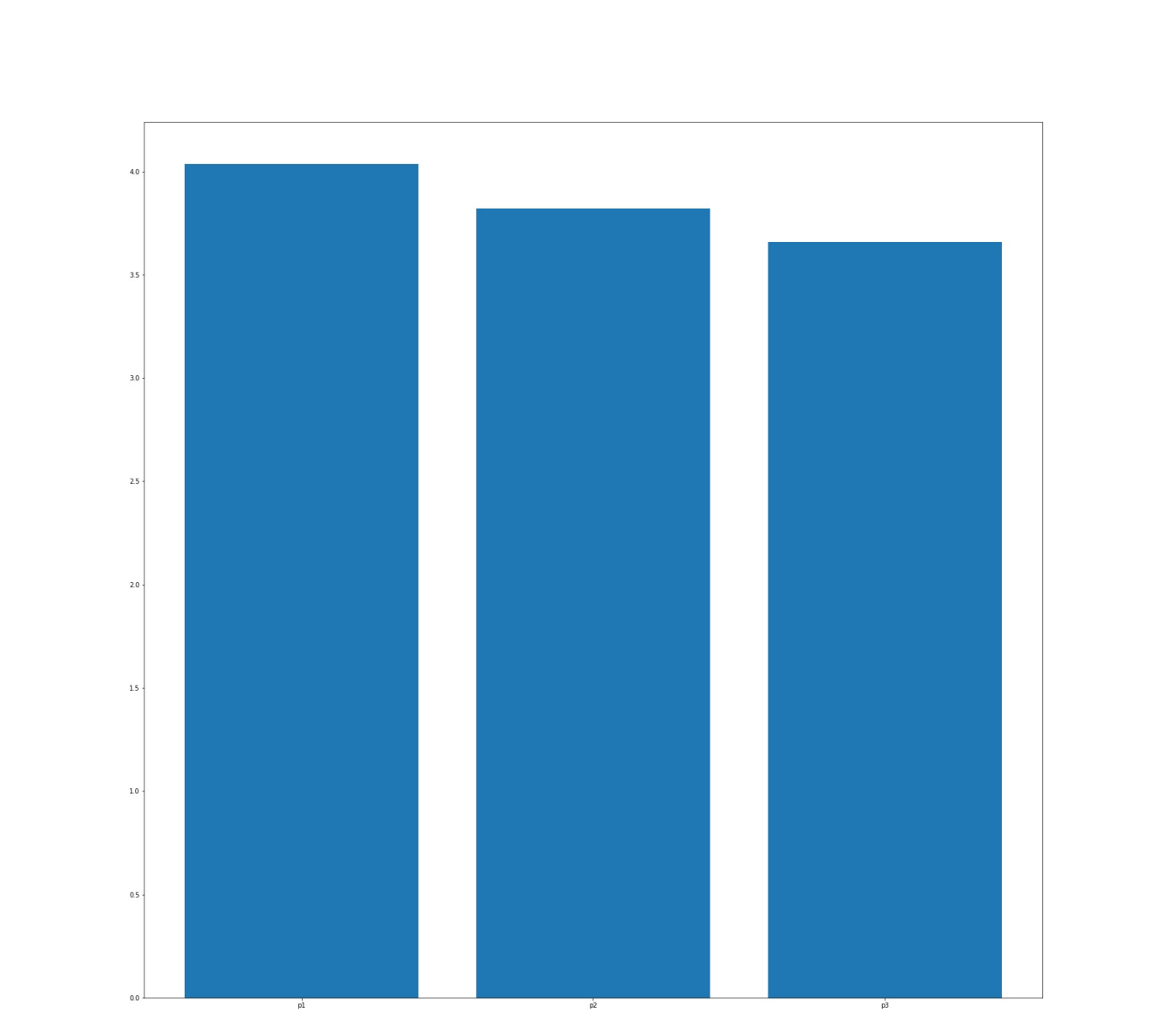
```python
df_all_cleaned["favorite_count"].sort_values(ascending = False)
df_all_cleaned["retweet_count"].sort_values(ascending = False)
df_all_cleaned.iloc[411]
df_all_cleaned.iloc[1035]
```

Predictions:

How much accuracy were in our predictions! Sadly, I did not start learning neural networks yet. But I was really curious about what makes a prediction more accurate than the other beside the technical factors. Can these other factors – really affect-?

```python
from IPython.display import Image
Image(filename='Graphs\\predictions1.jpg')
```



```python
from IPython.display import Image
Image(filename='Graphs\\predictions2.jpg')
```
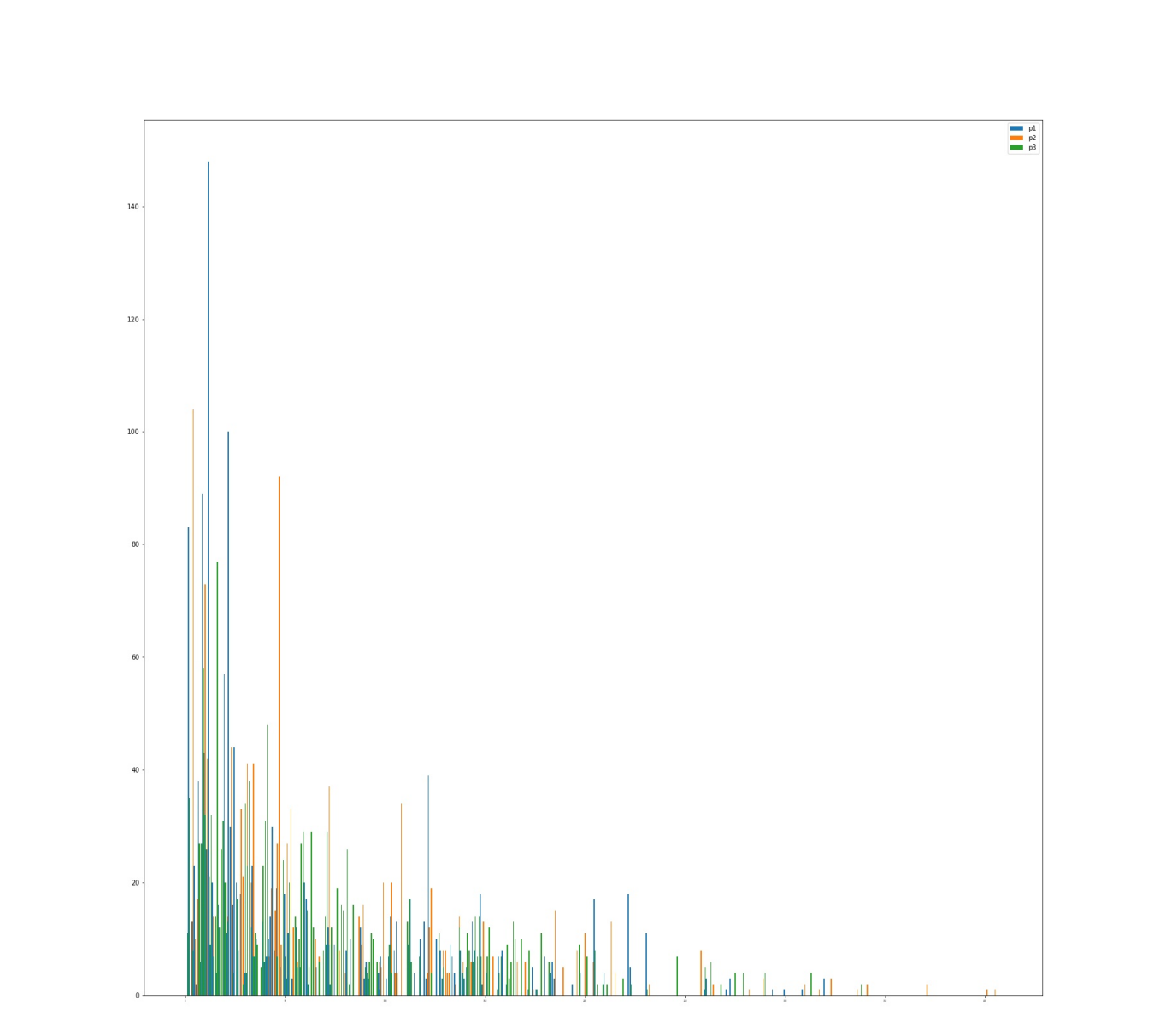

When we look at the means chart `the bar chart` : In my opinion, it is a coincidence, the three are arranged from 1 to 3. But the difference does not seem to effect in such a way to make us curious about it. The really one is amazing is the second graph. In which I graphed the numbers of correct prediction vs specific breed! I am not asking why some breeds are very well recognized while the others are not. My question is why the blue breeds – in the first photo` are!