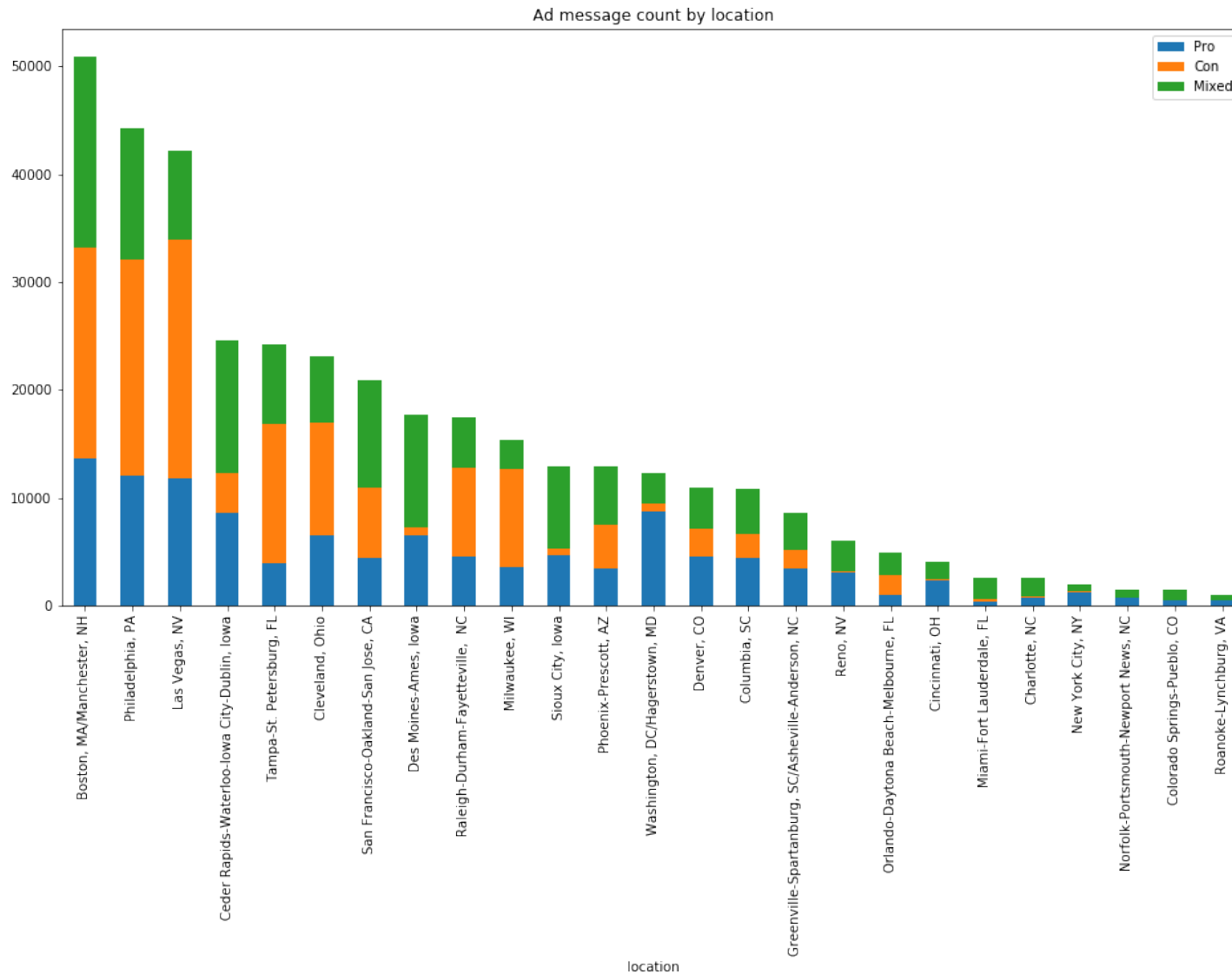


Political Ad Experiment

In a previous project I analyzed a Political Ad database on the basis of the Message Type of each Ad. Serval conclusions were made based on the information from the dataset. We determined that some cities were more likely to be served negative or positive adds than others. Some Ad buyers were more likely than others to produce negative or positive Ads as well.



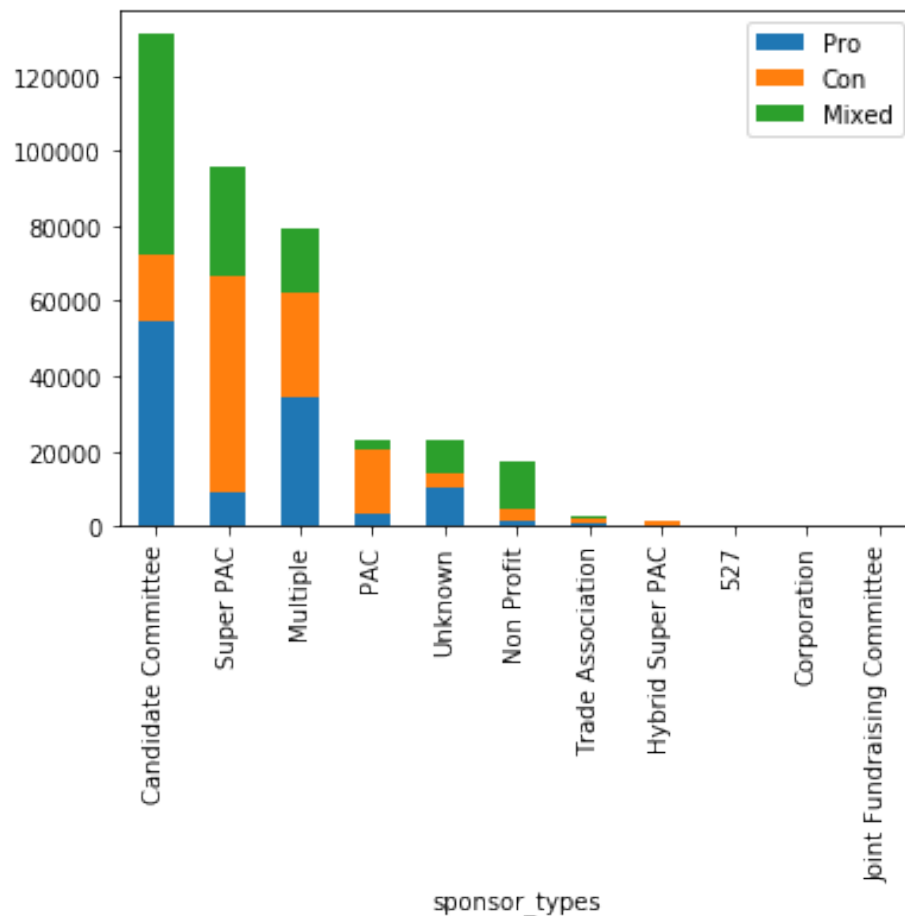
The chart above shows us a few things. First the bottom four locations where fewer Ads are shown do not have any 'Con' Ads. If people have a limited amount of resources to display Ads, do they focus on Pro and Mixed Messages. As more Ads appear by location a larger percentage are allocated to Con Ads. This could indicate that after a campaign is satisfied that it has sufficiently described the positives of its campaign they begin to allocate resources to attacking their opponent.

One exception is Ads from cities in Iowa. Ad Campaigns in Iowa appear to be very positive compared to the rest of our Locations. Are Iowan's culturally less inclined to respond well to Con Ads? It could be due to their proximity to more rural cultures. Looking at other small cities we have: Denver, Columbia, Greenville-Spartansburg/Asheville-Anderson, Raleigh/Durham, and Milwaukee all also have lower occurrence of Con Ads. It seems appears that smaller and more rural cities are not targeted with as many Con Ads as a whole. This supports our hypothesis from our observations in Iowa. There are some exceptions; let's examine Milwaukee and Raleigh-Durham. Why do they have such high occurrences of Con Ads relative to other small cities? It is possible that competition in the campaign together created the negativity; Once one side begins using Con Ads does this escalate the usage by their opponent creating a Con feedback loop?

Let's take a look at the more populous cities: Boston, Philadelphia, Las Vegas, San Francisco-Oakland/San Jose, New York, Washington DC. Conversely to smaller cities, larger more populous cities appear to have larger uses of Negative Ads. The exceptions are New York and DC which have more Pro Ads than Con, however, these cities have significantly fewer total Ads shown than the rest. In our larger cities with high volumes of Ads shown the majority have a significantly higher occurrence of Con ads. Could this be opposite to the rural trend we saw earlier in our smaller cities? Campaign Advertisers may view people in big cities as more receptive to Con Ads than those in rural areas. This reinforces our hypothesis that culture could determine the message Advertisers use.

We can see significant differences here in the Message based on the sponsor type. Candidate Committee and Non Profit funded Ads are predominantly Pro and Mixed while Super PAC and PAC funded Ads. If a Candidate is paying for his own Ads it would make sense that they would want to keep a Pro Message to preserve the image of running a clean campaign. Non Profits have to consider their donors, a Pro Message is less likely to offend their donors. On the other hand, PACs and Super PACs are vehicles that corporations and donors use to funnel large amounts of money to a specific candidate or cause. They are not run by the Candidate and thus are less connected to their Campaign. This could explain why they are inclined to sponsor more Con Ads. They do not have an image to protect, only a message to convey or a goal to achieve i.e electing a candidate.

While we started with an even distribution of Ads across all message types. We looked at the type of show (News or Not News) and AirTime, statistically, to see if we should expect a difference in message type based on those characteristics. Our analysis showed us that yes there is a difference based on the characteristics. We then dove into the details of the data and we discovered that depending on the Location of the Campaign or the people paying for it we



discovered that the distribution of message type can vary greatly. We discovered a potential trend in Advertising targeting based on location size and culture. Additionally we looked into the types of Advertisers responsible for paying for these Ads and addressed the motivations that would lead them to advertise with a certain message type.

To explore further I would want a larger data source covering more Ads in more campaigns to see if the trends we discovered hold or more trends emerge across the country. We would need this larger data set to provide recommendations based on this data and would need to research which candidates won each race and by what margin to determine if there was any correlation between winning a race and the characteristics of Ads shown in our data. Additionally I would want to dig into the strategy, goal, and motivation of these Advertisers(Campaigns).

Now for the experiment. We have made numerous observations above and suggested paths for gathering more information. Here we will pick one and design an experiment to test our observations.

The experiment will involve drafting a survey to be distributed by a social media Ad campaign to voters located in the regions our data set collected advertisements from. We will sample a population of voters from each city and compare it to our data set. The survey Ad will contain the following questions:

- 1) Did you vote in the 2016 Presidential and Congressional Elections?
- 2) Did you watch any Political Ads prior to voting in the 2016 Elections?
- 3) In the Ads that you saw was the message Positive, Negative or Mixed?
- 4) Did any Ads you saw influence your vote?
- 5) Who did you vote for in the 2016 Elections?
- 6) When you see any Positive Political Ad how likely is that Ad to influence your vote (1-5)?
- 7) When you see any Negative Political Ad how likely is that Ad to influence your vote (1-5)?
- 8) When you see any Mixed Political Ad how likely is that Ad to influence your vote (1-5)?

We will use the data we collect in this experiment to compare it to our Political Ad data set to determine if it correlates with the way Advertisers targeted the constituents in each city. We will also pull the election data from 2016 to determine the outcomes of each race to see if our data can predict the outcome correctly.

Success will be determined by the correlation of our survey data to our Ad data analysis as well as our ability to predict the winner of each race given our two data sets.