Top 1000 Highest Funded Google Election Ads | Exploratory Data Analysis Overview

Project Overview

This exploratory data analysis exercise seeks to better understand the characteristics of the most well-funded election campaign advertisements served by Google. By profiling, cleaning, and validating the data pulled from Google's BigQuery service about the top 1000 highest funded advertisements, observations about trends in the data are made to craft better informed questions about the dataset as a whole for further analysis and visualization.

Details

Top 10 Advertisers (by # of ads run): Ad Type Distribution

Key Insights

- About 40% of advertisements in the dataset received over 10,000,000 impressions (the highest recorded range).

- **Only 6% of ads utilize specific gender targeting**, with 38% utilizing age targeting, and 87% utilizing gender targeting.

- Ad types represented are 54.8% video, 36.2% text, and 9.0% image

- Higher value ad campaigns tend to start more frequently at the beginning of the year, and tend not to end in April or May.

- The top 10 advertisers (by number of occurences) are represented in 440 out of 1000 total advertisements.

- **Most advertisers in the top 10 run ads for less than 150 days on average**, while DNC SERVICES CORP / DEMOCRATIC NATIONAL COMMITTEE is an outlier, running them for >300 on average.

- **Only two advertisers in the top 10 run image ads at all,** with the majority coming from "TRUMP MAKE AMERICA GREAT AGAIN COMMITTEE".

- Among the top 10 advertisers that run both age-targeted and non-targeted ads, **age-targeted ads tend to get more impressions.**
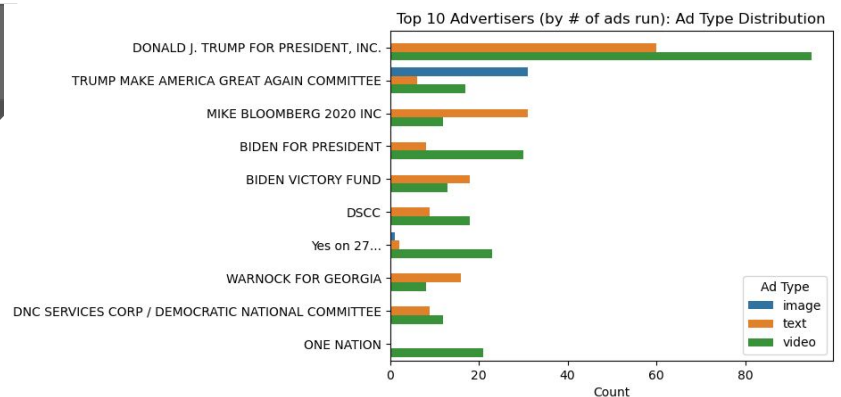
Image ads consistently fall in the highest impression range, while video ads have a wider distribution of impressions values. Text ads are underrepresented, and tend to have fewer impressions overall.

Distribution of minimum impressions by ad type
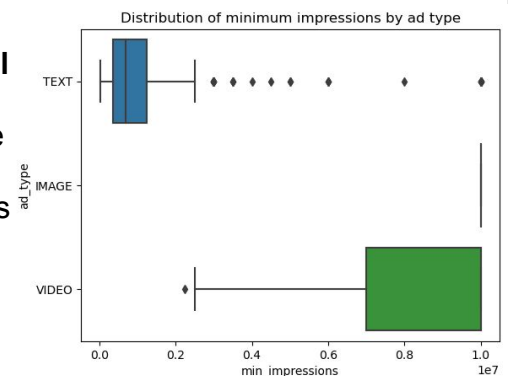
Next Steps

➔ **Perform analysis on a larger subset of the data in order to make observations that would better represent election ads on Google's platform overall**

➔ **Explore why the "ad_campaigns_list" column contains only null values for this subset**

➔ **Further investigate the return for money spent in impressions in a dynamic visualization on Tableau**