Profiling Restaurant Audience

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Profiling is valuable for marketing

- Generally, market research is an essential part of establishing strategy for any establishment or business.

- Recognizing and targeting advertisements and bonuses provides substantial economic benefits to the business

- Profiling and catering ads served to a demographic most likely to visit your restaurant saves time and money and potentially increases the patronage of the business.

Data Summary

- Candidate areas based on a radius surrounding a central location (in our case the Empire State Building)

- Number of restaurants and their locations based on the Foursquare API calls

- User data matched from check-ins to those restaurants, matched by unique ids provided by Foursquare

Data Cleaning

- Data will be taken from the Foursquare database and primarily use the Venues and Users endpoints for the requests

- Data is mostly in JSON format, and had to be cleaned and delineated into pandas dataframes and lists to make calculations and plotting easier.

Methodology

- First, a perimeter around the Empire State Building was set at 2000m.

- Foursquare API was called to get a list of Japanese restaurants in the area

- API was again used to search user who liked the venues by multiple calls per venue ID

- These results were cleaned to create stats and plots

Results 1

- Users predominantly fall into two categories when it comes to number of friends they have. Either there are a lot of friends or very few if any.

- This tells us there is perhaps a value in targeting advertising to users who have a lot of friends on the app. This would narrow down the number of recipients as well as ensure reaching a wider audience through the recommendation of those individuals.
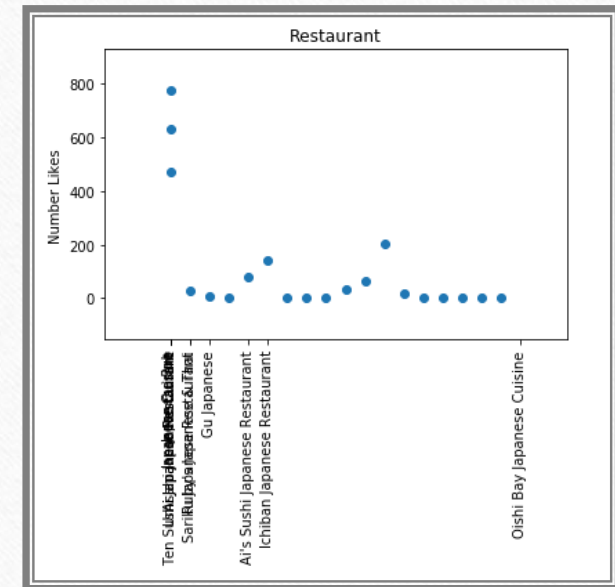
Results 2

- Looking at gender next, we found there to be no clear advantage to either gender as there was 17 female, 14 male, and 27 not identified.

- We should avoid targeting one gender or another in marketing in order to ensure that we reach the current audience in keeping with the current statistics.
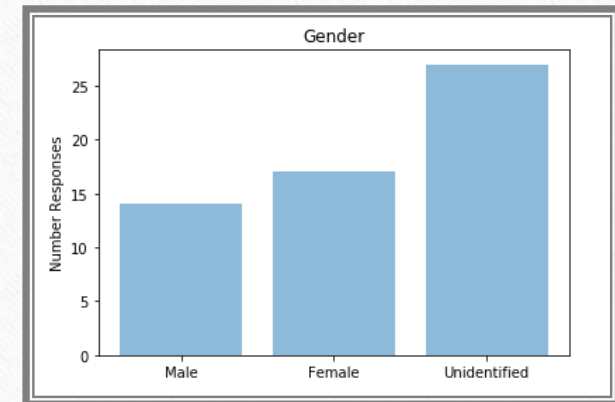
Conclusion

- Overall, this analysis has shown that it is best to target high-usage and high-engagement users of the platform, and then cast as wide a net as possible after that. With the analysis being centered around a more traditional cuisine, there seem to be no obvious bias in gender to be had that would greatly affect marketing strategy.

- In the future, more detailed user profiles or even surveys could be used to mine more data and draw better conclusions.