Battle of the Neighborhoods - Introduction

Client/Stake Holders: ACME Co. is an international precious stones and metals investment firm which has jewelry stores in various countries selling jewelries from low grade to the highest of unique gems.

Overall Business Goal: Due to improved economic conditions, ACME Co. has decided to establish one or two jewelry stores providing not only highest quality and grade of jewelries but also provide services such as creating custom jewelry dependent on high net-worth clients' requirements.
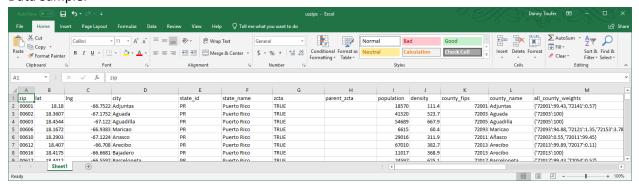
Detailed Business Goal: Los Angeles county is culturally diverse, close to international shipping routs (Long Beach shipyards), center for most famous fashion industries and large number of high net worth individuals. Due to the facts above, ACME has decided to open high-end jewelry stores in Los Angeles county. Because of this they need to find the best LA city/cities to open one or two exclusive jewelry stores. This would also provide an opportunity for ACME Co. to introduce and build a brand for itself among the high net-worth communities.

Resources/Data

Ideas: So the questions that comes to mind are where are the best Los Angeles areas to provide jewelry services to high net-worth individuals? What is the best way to find these individuals and have them visit our store(s)? How can we find high net-worth individuals?

Resources/Data: Our analysis will be based on several types of resources and data:

- A list of all Los Angeles county zip codes, names and geo positions
- Resources: https://simplemaps.com/data/us-zips
- Data Sample:

- A list of all Los Angeles county zip codes and their average "single family" home values
- Resource: https://www.zillow.com/los-angeles-county-ca/home-values/

- Data Sample:

Excel spreadsheet "Copy of los-angeles-county-ca-ZIP codes-Report – Compatibility Mode":

Region Name	Region Type	Type	Current	Month Over Month	Quarter Over Quarter	Year Over Year	5 Year Annualized	10 Year Annualized	Current	Month Over Month	Quarter Over Quarter	Year Over Year	Current	Month Over Month	Quarter Over Quarter	Year Over Year	Current	Month Over Month	Quarter Over Quarter
Los Angeles Cou	county	Single Fam	$637,700	-0.3%	-0.7%	1.8%	---	---	25.0%	---	---	---	---	---	---	---	13.5%	0.7%	-1.
90001	zipcode	Single Fam	$378,200	0.4%	1.7%	6.1%	---	---	20.0%	---	---	---	---	---	---	---	---	---	---
90002	zipcode	Single Fam	$376,600	0.1%	0.7%	4.9%	---	---	7.6%	---	---	---	---	---	---	---	9.9%	4.4%	1.
90003	zipcode	Single Fam	$397,600	1.0%	3.5%	11.7%	---	---	14.0%	---	---	---	---	---	---	---	10.0%	2.9%	3.
90004	zipcode	Single Fam	$1,576,100	0.3%	-0.4%	1.0%	---	---	50.5%	---	---	---	---	---	---	---	16.7%	0.7%	-6.
90005	zipcode	Single Fam	$1,732,000	0.1%	0.4%	12.2%	---	---	47.1%	---	---	---	---	---	---	---	---	---	---
90006	zipcode	Single Fam	$838,700	-0.6%	-1.7%	5.4%	---	---	36.6%	---	---	---	---	---	---	---	---	---	---
90007	zipcode	Single Fam	$668,300	0.5%	-1.7%	4.7%	---	---	21.0%	---	---	---	---	---	---	---	---	---	---
90008	zipcode	Single Fam	$856,300	0.1%	0.7%	6.5%	---	---	21.6%	---	---	---	---	---	---	---	---	---	---

- Finally, top 5 venues for each of the "top 10 zip codes" above
- Resource: Foursquare.com

Machine Learning Algorithm: The best suited algorithm for clustering/grouping our top 10 zip codes will be K-Means algorithm creating three K's evaluating five top venues for each cluster.

Solutions

Solution: In my opinion the best answer is not to focus on such people because they could be spread out through out Los Angeles. In some areas more and in some areas with less density. Additionally, some could also leave in middle class areas. So instead of focusing on distinguished clientele, we will focus on properties which such individuals own, specifically their homes. In conclusion, we will be focusing on Los Angeles zip codes that have the highest >average< house values.

Solution in Detail: So should we just find the first zip code with the highest average house price, and put up our jewelry store there? The answer is NO, because some expensive zones could be mostly residential, or the zones might not have the right type business environment or the zones/centers might not be the right type for jewelry store foot traffic. So we will grab the top 10 zip codes and cluster them into three groups and then evaluate each group by the type of popular venues/businesses nearby.