

Battle of The Neighborhoods: Where in Los Angeles is the Best Location to Open a Pet Store?

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1 Introduction

1.1 Background

With a population of 4 millions, city of Los Angeles is the second most populous city in the United States. The "City of Angels" is a city of sharp contrasts, home to people who hail from all parts of the globe and an important center of culture, business, media, and international trade. Being the world's hub of television, motion picture, and music industry, Los Angeles has a diverse economy and hosts businesses in a broad range of professional and cultural fields.

The city is divided into many different districts and neighborhoods, some of which were incorporated cities that merged with Los Angeles. These neighborhoods are well-defined enough that the city has signage marking nearly all of them.

Being a demographically and economically segregated city, it would be interesting to know in which part of LA is the best place to open a business. This work focuses on finding out which zip codes of LA are the best locations to open a business dedicated to pet such as pet store which sells pet foods and accessories or even pet clinic.

Pet foods and treat market is a fast-growing market. According to Euromonitor International, global pet food sales totaled \$ 93.9 billion in 2019, an increase of 6.5 % over 2018. US pet food and treat consumers accounted for 36.5% of that by purchasing \$34.3 billion of pet food and treats, of which nearly \$6 billion was spent on dog and cat treats and mix-ins. US pet food sales grew in 2019 by 5.8% over 2018. Despite the pandemic, this number was projected to increase by 4% in 2020.

1.2 Problem

A good location is important to the success of a retail business. For small pet-related businesses, the advantages to opening a retail store in a busy area can include improved revenue and increased marketing exposure. In addition, the presence of similar businesses is a very important factor. Hence, deciding where to open a new business can be tricky sometimes so some important factors such as population, pet ownership, rent price, and number of existing similar businesses should be taken into account when looking for locations or zip codes to establish a new business dedicated to pet-related products.

1.3 Interest

This work would provide a recommendation for those who are planning to open a new pet store in LA, or anyone who is interested to know about the market of pet-related products in the region.

2 Data Acquisition and Cleaning

2.1 Data source

Data will be obtained from publicly available datasets, primarily those on <http://laalmanac.com/> which has been a unique online reference devoted to providing statistical and narrative information about the people, places and stories of Los Angeles County. Some important datasets could be obtained from aforementioned website are:

- Pet ownership by zip codes
- Population by zip codes
- Retail rent price by zip codes
- Average income by zip codes

In addition, geography-related data such as coordinates, information about number of existing venues on each zip codes, as well as popularity of venues are obtained from Foursquare API call. When it comes to Foursquare, there are a huge number of venues in Los Angeles, much more than cities in some countries where Foursquare isn't so popular.

2.2 Data cleaning

Data provided by laalmanac.com websites are in the form of tables which are no so straightforward, for example on this link. Therefore, after fetching the data with either BeautifulSoup or pandas, it is necessary to obtain a proper dataframe by cleaning the unnecessary rows.

On the other hand, after getting venues from API call, it is necessary to filter the returned venues so that we only get pet-related venues from Foursquare, for example: pet store, pet shop, pet clinic, pet saloon.

3 Analysis

References