



Coffee in Cape Town

IBM Data Science Specialization
Capstone Project

by Laura Tissing
January 2020

Report part 1

Target Audience

A client is looking into the possibilities of opening a Coffee Shop in Cape Town.

Cape Town has many suburbs, spread around the central area within a distance of approximately 50-60 kilometers. Like many others cities in the world, the suburbs are becoming more and more attractive to South Africans and tourists, and a lot of development projects are taking place.

The client wants to open the Coffee Shop in an area where citizens and tourists are mingling, away from but within a reasonable distance of the busy city centre.

Apart from this specific client, the studied factors and collected information can serve as a starting point to make recommendations to others clients who want to start a business in Cape Town.

Task Description

A Coffee Shop is a business which sells coffee, tea and some food items to customers. A business like a Coffee Shop normally has to have fast and efficient operations in place since part of the customers will order on the go. On the other hand, a Coffee Shop needs to be a place where people can sit for a moment, meet up with friends or read a book and escape the daily stresses of life.

The location of a Coffee Shop is an important part of its success, therefore various factors need to be studied before a recommendation can be done. These factors can include:

- location of competitors
- surrounding venues
- surrounding businesses
- surrounding attractions
- distance to city centre
- accessibility to and from city centre
- population
- tourism
- rental prices for commercial property

Data description

The following data will be used to address the task description:

- Website on Cape Town's postal codes (www.postoffice.co.za/Tools/postalcodes.html)
- Geographical coordinates from Google Maps
- Geolocator geographical coordinates
- Foursquare API with data on Venue names, locations, id's and categories.
- Wikipedia
- Websites on Cape Town's suburbs (SA-venues.com, blog.rawson.co.za/spotlight-on-maitland-cape-town)

The data will be used to

1. Divide the broad area of Cape Town's suburbs into reasonable sized areas based in Street Codes (equal to Postal Codes)
2. Retrieve information on venues (category, location, total number, etc) in each Street Code area
3. Cluster the Street Codes based on the occurrence of Coffee Shops
4. Analyse the venues, clusters, Street Codes and suburbs to be able to make a recommendation