Spent Coffee Grounds (SCG) production

and

analyses of coffee café market size in Cape town

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Introduction

Sustainability and eco-friendly practises continue to be important topics in industry

1. Amount of coffee consumed from ground coffee beans
2. The number of major coffee café's and roasters
3. The city with a high number of coffee shops per area
4. Sales and market trends of the coffee industry.
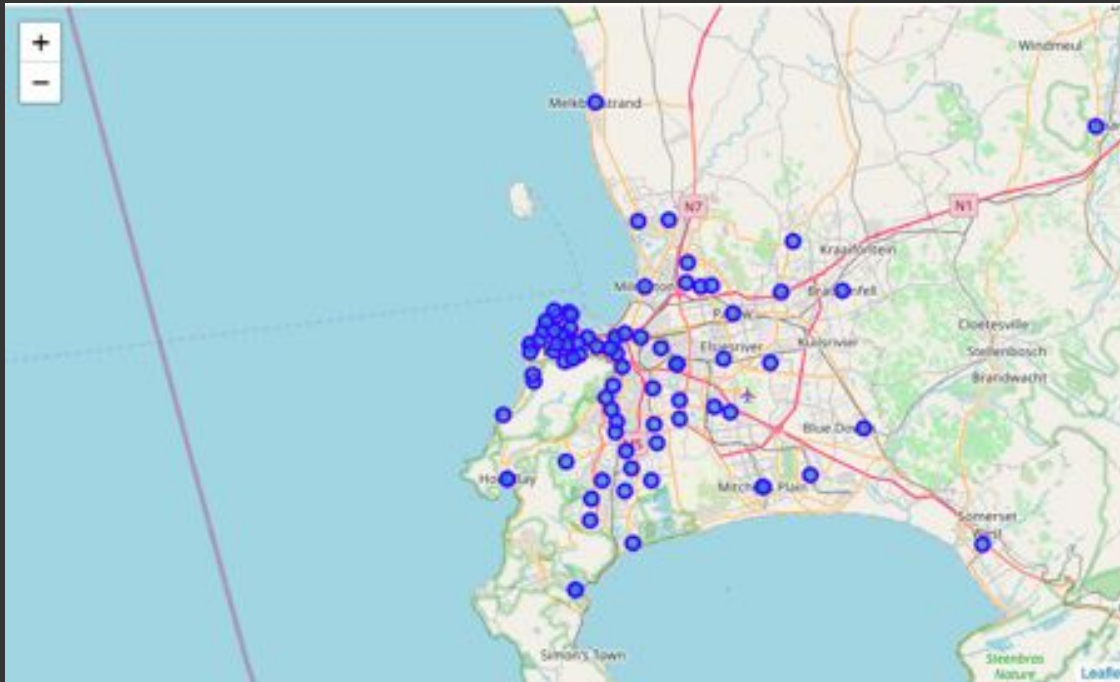
Exploratory Data Analysis

What our data looks like

➔ **Suburbs in the city**
   The data frames to be scrapped and cleaned

	Suburb	Zip Code	Postal Code
0	NaN	8000.0	8001.0
1	Athlone	7760.0	7764.0
2	Athlone Industria 1	NaN	7764.0
3	Athlone Industria 2	NaN	7764.0
4	Bakoven	NaN	8005.0

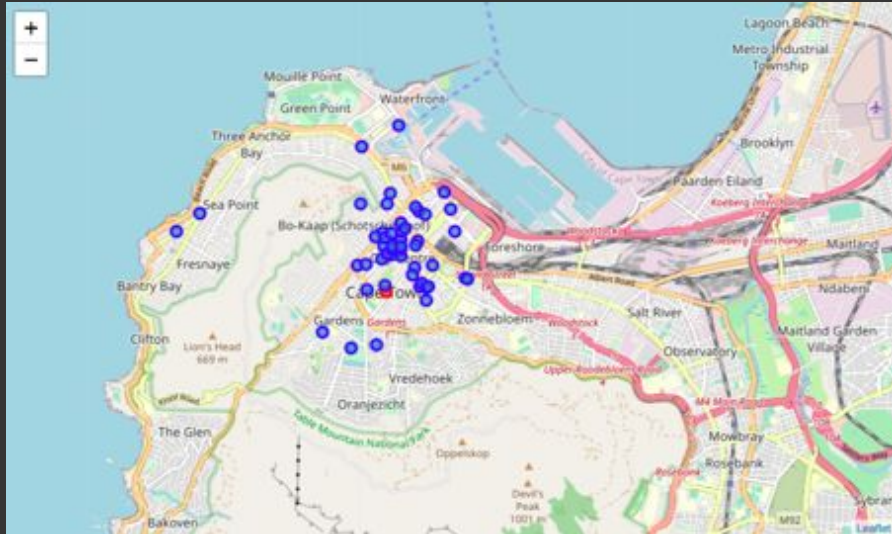➔ **Coffee shops in the city**

Cape town suburbs

Using folium, the suburbs are distributed as seen in image.

Expected.

Concentration in the city.

FourSqaure! Where are they?
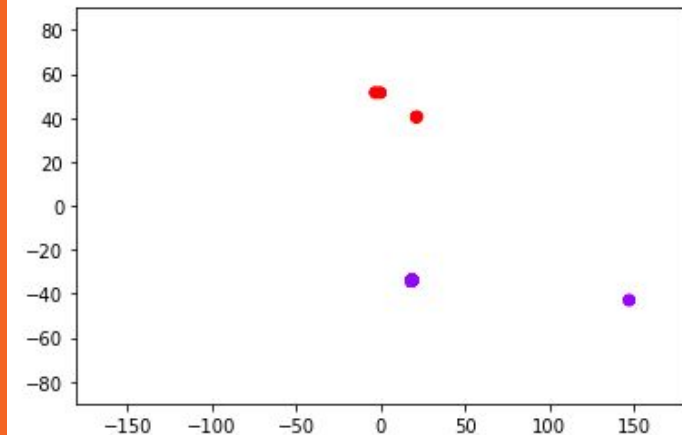
Coffee shops in Cape town

City centre!

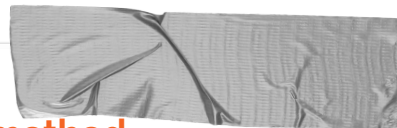As expected, the city centre has the major coffee shops with the highest volumes.

Kmeans clustering
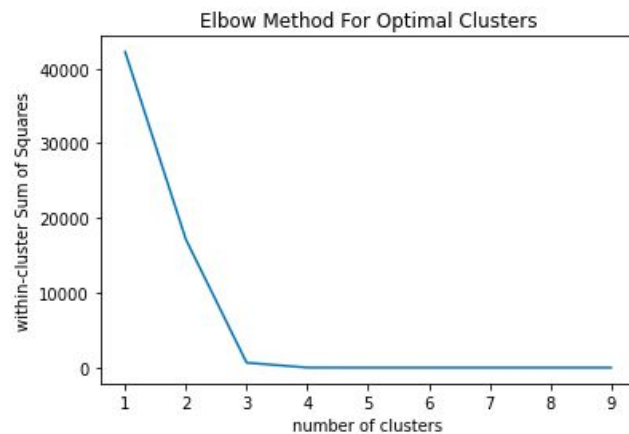
Our optimum collection points

Latitude and Longitude

2 main clusters

Elbow method

Best number of suburb clusters: 3

Conclusion

There is extensive research to be done on seasonality of sales but the output and operational feasibility gave positive results

- City center as main location
- 3 main collection points for suburb
- Increased SA consumption