

# FINAL PROJECT: CAPSTONE DATA SCIENCE

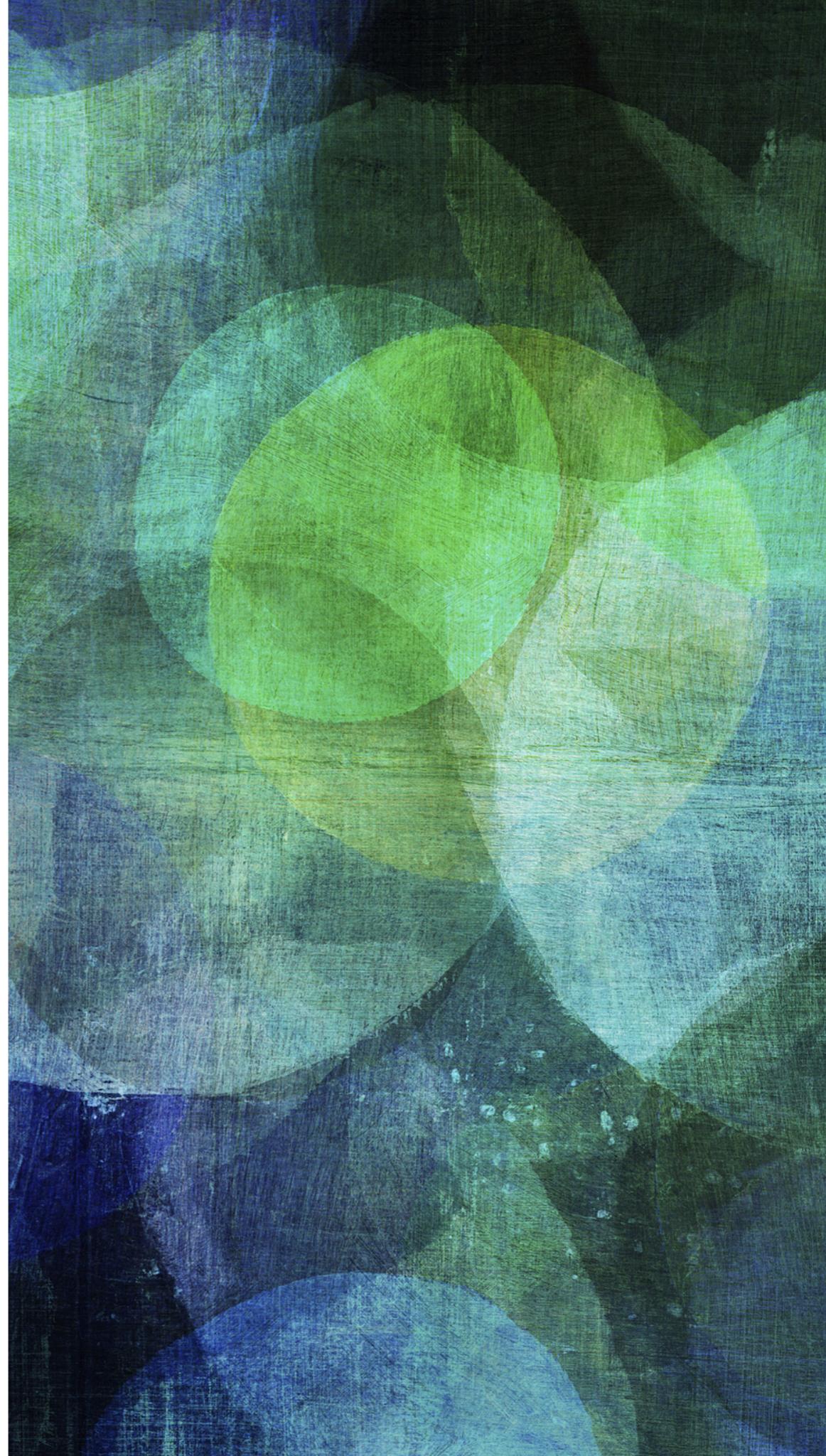
---

*Analysis of Coffee Shops in Mexico*

# WE WANT TO KNOW WHAT CITY TO INVEST IN

---

*We have a coffee shop franchise and we have three city options: Monterrey, Mexico City and Guadalajara*





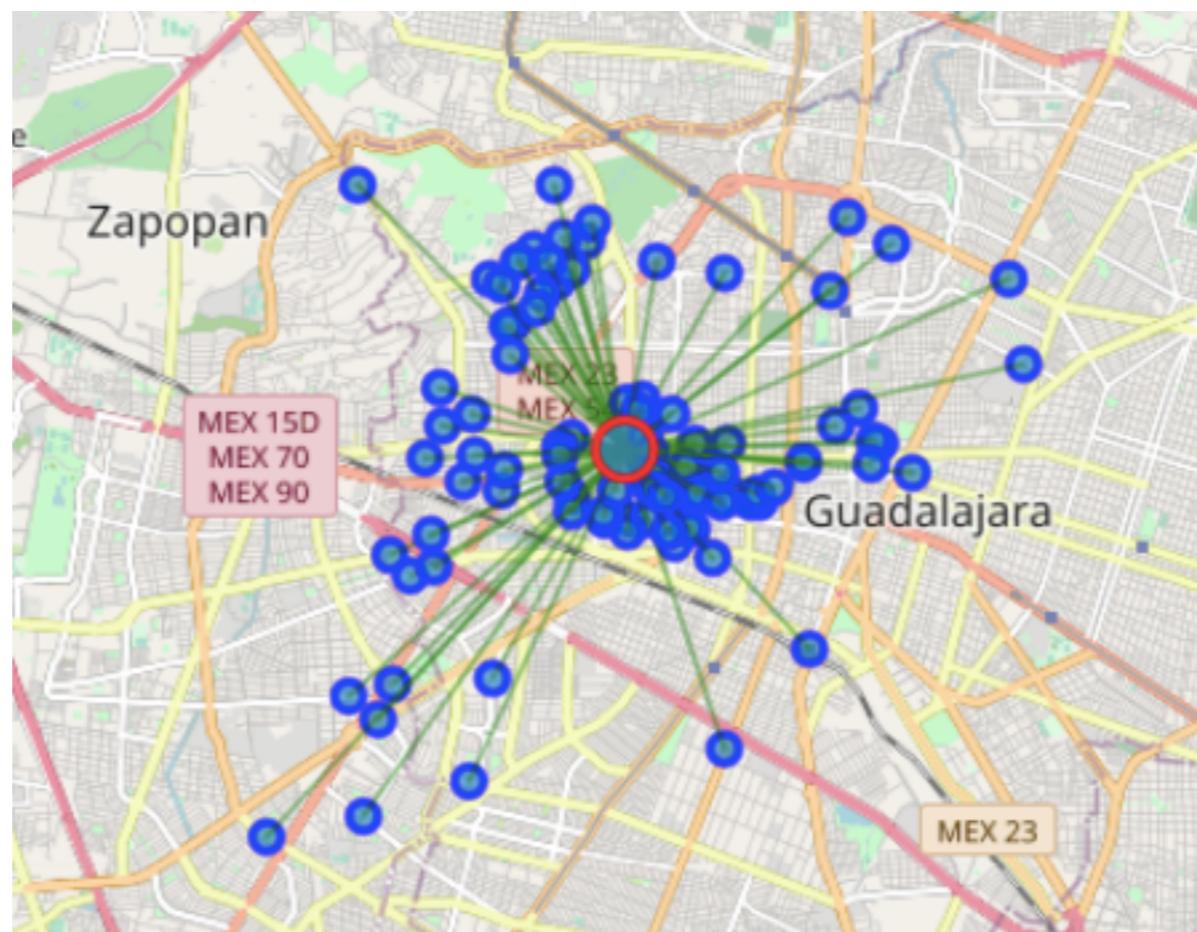
## DATA AND METHODOLOGY

---

- We obtain data from Wikipedia and Foursquare API
- Variables in analysis will be:
  - Coffee Shop Density
  - Population Density
  - Income per Capita
- We create an indicator with these 3 variables
- We calculate the mean of the normalized values (with income inverses so it has the same interpretation as the others)
- Lesser values is better

# GUADALAJARA

---



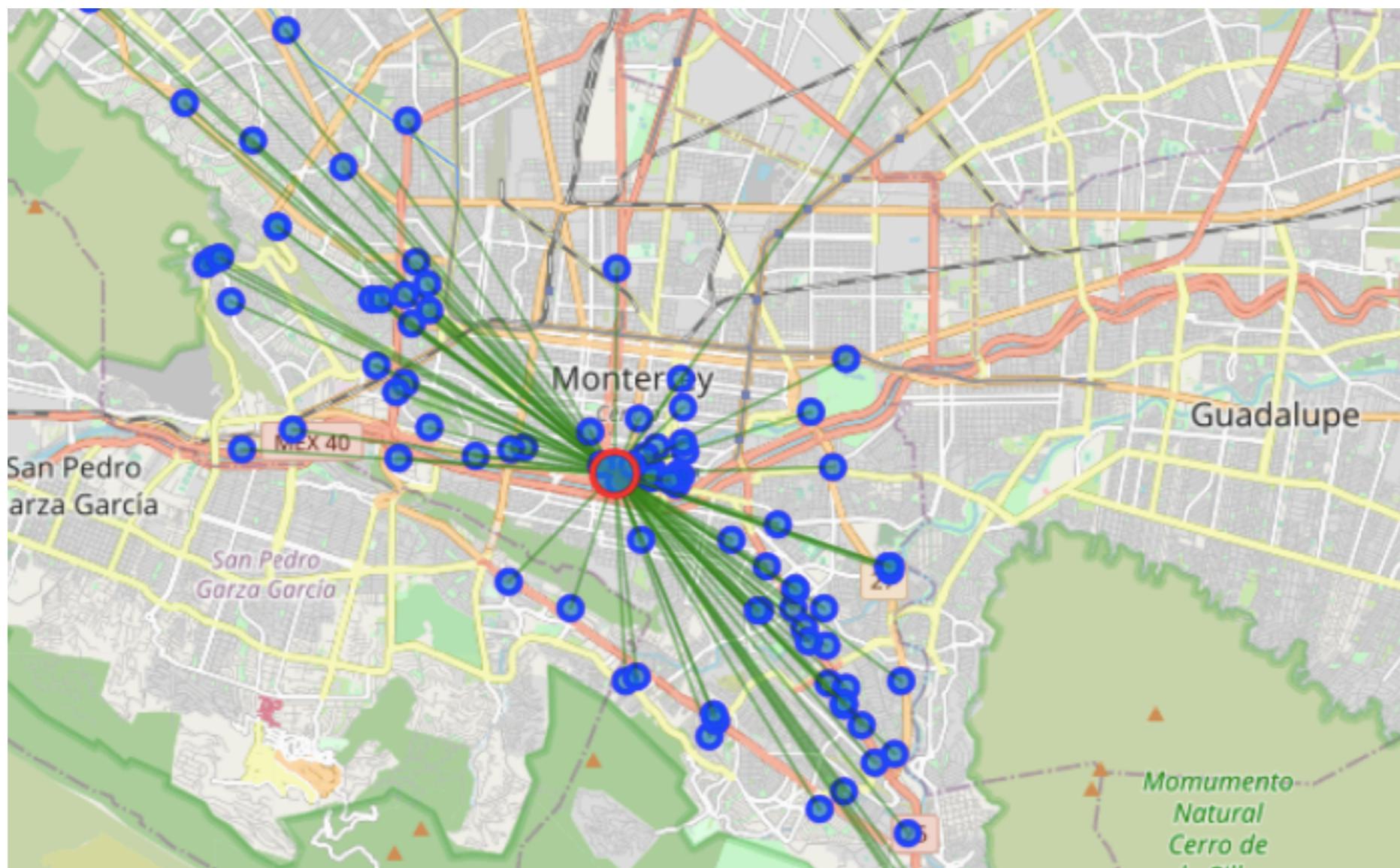
# MEXICO CITY

---



# MONTERREY

---



# RESULTS

---

	city	lat	lon	density	income	mean
0	Mexico City	19.4326	-99.1332	5966	3.88922e-06	0.0273963
1	Monterrey	25.6802	-100.315	80	4.8555e-06	0.0430332
2	Guadalajara	20.672	-103.338	100	8.86328e-06	0.019172



*Guadalajara is the  
best option!*

	city	indicator
0	Mexico City	0.448225
1	Monterrey	0.398088
2	Guadalajara	0.334466

## *Discussion and Results*

- Room for improvement in robustness of statistical indicator presented
- Extended analysis for other cities
- Combination of statistical tools and Python capabilities
- Conclusive results based on evidence