

# Exploring Taipei Neighborhoods

## Coffee Addiction 2.0



 <b>Latte</b> Milk Foam 1/3 Steamed Milk 2/3 Espresso	 <b>Americano</b> 2/3 Water 1/3 Espresso	 <b>Espresso</b> Espresso (1 Shot)
 <b>Breve</b> 2/3 Steamed Half & Half 1/3 Espresso	 <b>Flat White</b> 2/3 Steamed Milk 1/3 Espresso	 <b>Cappuccino</b> 1/3 Milk Foam 1/3 Hot Milk 1/3 Espresso
 <b>Mocha</b> (Whipped Cream) 2/5 Steamed Milk 2/5 Chocolate 2/5 Espresso	 <b>Caffè Affogato</b> 2/5 Espresso 3/5 Vanilla Ice Cream	 <b>Galão</b> 3/4 Steamed Milk 1/4 Espresso
 <b>Macchiato</b> Dash of Steamed Milk Double Shot Espresso	 <b>Café au Lait</b> 1/2 Steamed Milk 1/2 Coffee	 <b>Iced Coffee</b> Ice Cubes Chilled Coffee





# Introduction & Business Problem

Taipei is the political, economic, educational, and cultural center of Taiwan and one of the major hubs in East Asia. Considered to be a global city, Taipei is part of a major high-tech industrial area, where overworking is the rule.

There are hundreds of them throughout the city, many with expert baristas who do all the roasting in-house. There's so much competition in Taipei that you really need to make your coffee shop unique to attract enough business.

What could it be more important than a cup of coffee in the morning?

Wouldn't be the best way to boost your energy levels?



# Target Audience

What type of clients or a group of people would be interested in this project?



- Business personnel who wants to invest or open a coffee bar. This analysis will be a comprehensive guide of what are the pros and cons of this business .
- Student who is interested in finding the best place close to universities, high schools or just a quiet place to be focused on finals.
- A whole range of passionate coffee enthusiasts ( coffee geek or coffee nerd ) that will easily find coffee related reviews as well as hidden gems of the city.



# Data Acquisition

Just one city will be analyzed in this project :  
Taipei

- **Website data**
  - Chunghwa POST
  - Wikipedia
  - LatLong.net
  - Household Registration Offices
- **Foursquare API**
  - Taipei geographical coordinates data will be utilized as input for the Foursquare API, that will be leveraged to provision venues information for each neighborhood..



# Project Process

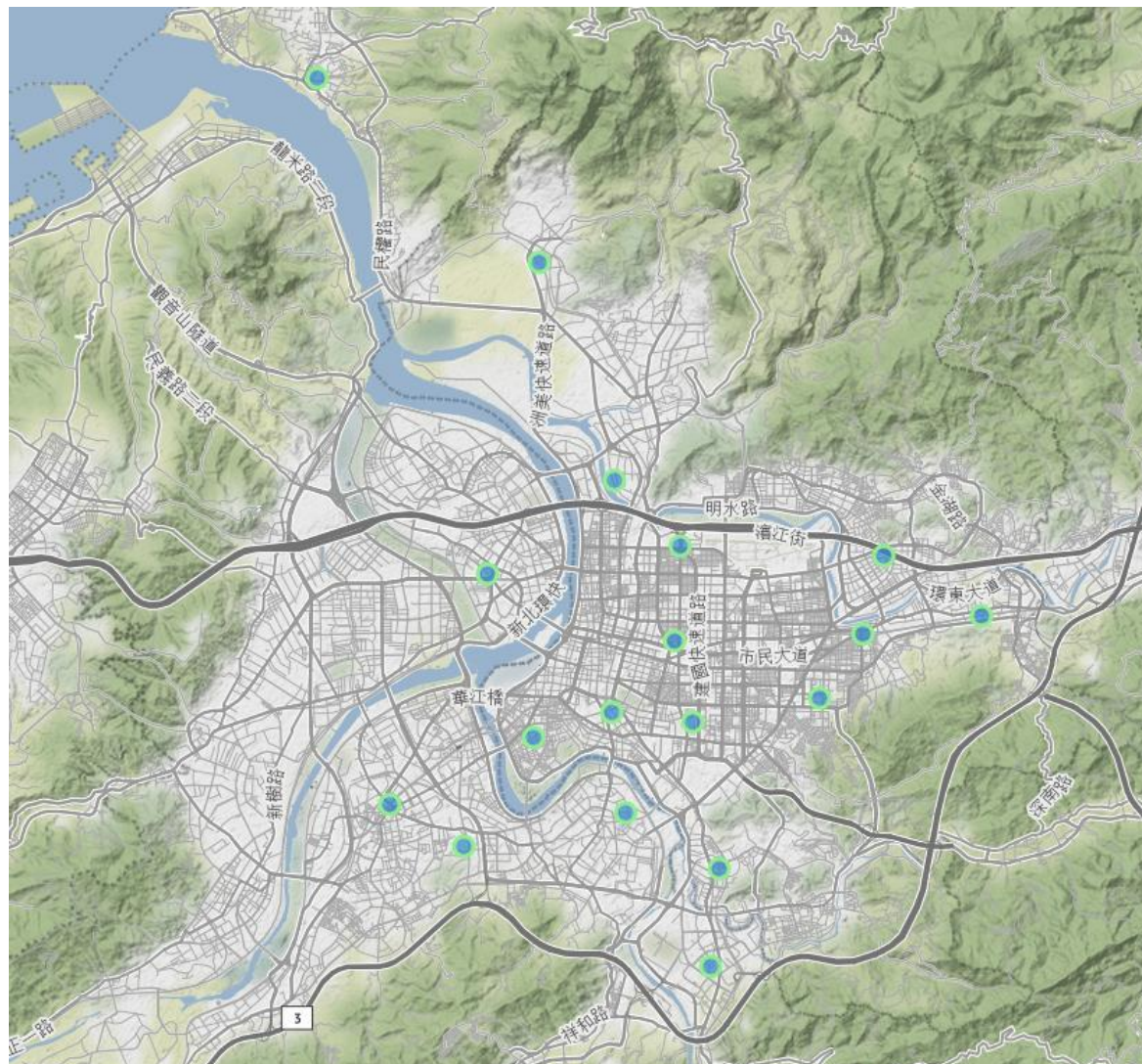


- Coding in Watson IBM Studio in order to obtain a complete dataset.
- Include geographical information to create a map of Taipei and related districts.
- Perform statistical analysis using Clustering technique.
- Evaluate coffee shops rating and position.
- Visualize resulting values using distribution plots and heap map.



# Districts Map

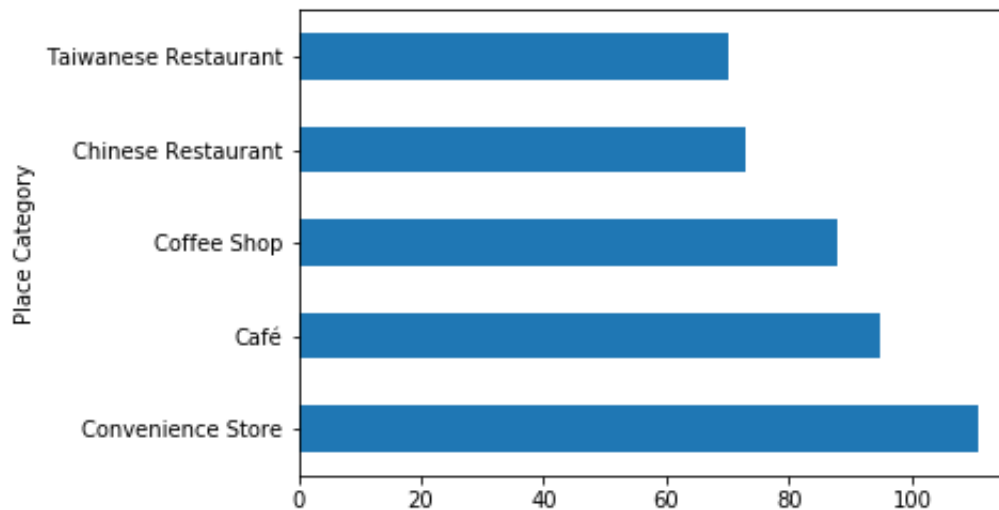
Code	Districts	Chinese	Latitude	Longitude
100	Zhongzheng District	中正區	25.031667	121.516389
103	Datong District	大同區	25.047760	121.531850
104	Zhongshan District	中山區	25.068889	121.533056
105	Songshan District	松山區	25.049300	121.578000
106	Daan District	大安區	25.029730	121.536137
108	Wanhua District	萬華區	25.026285	121.497032
110	Xinyi District	信義區	25.034833	121.567664
111	Shilin District	士林區	25.083300	121.517000
112	Beitou District	北投區	25.131901	121.498597
114	Neihu District	內湖區	25.066666	121.583331
115	Nangang District	南港區	25.053315	121.607409
116	Wenshan District	文山區	24.997021	121.542762





# Explore Districts

Check register venues in Foursquare



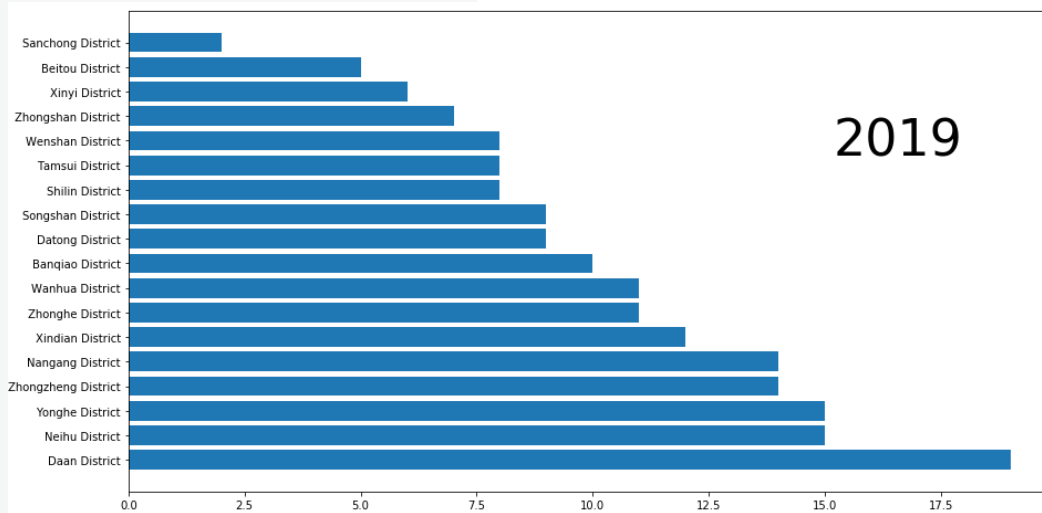
Place Category	Districts
Convenience Store	111
Café	95
Coffee Shop	88
Chinese Restaurant	73
Taiwanese Restaurant	70
Hotel	69
Park	47
Noodle House	47
Japanese Restaurant	46
Dessert Shop	33
Dumpling Restaurant	27

- Coffee Shop and Café are counting for more than 11% of all the places found using the Foursquare GET request function

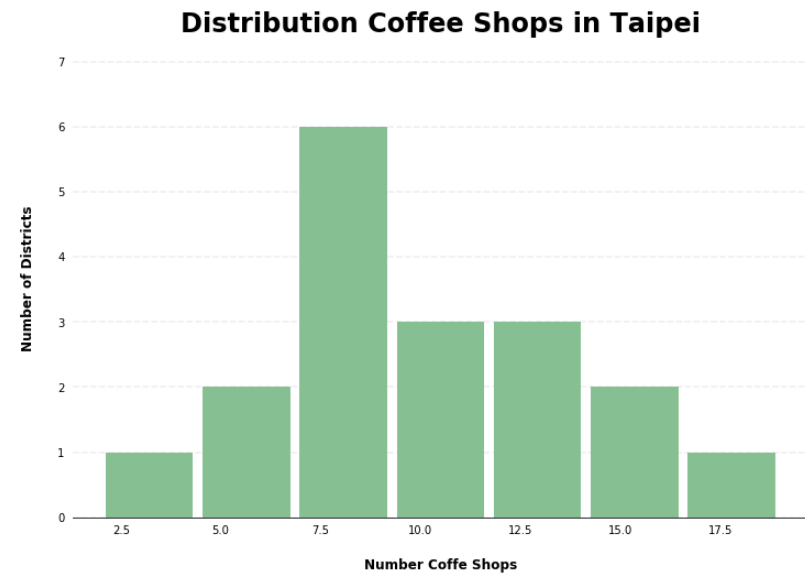


# Explore Districts

## Check coffee shops and Café



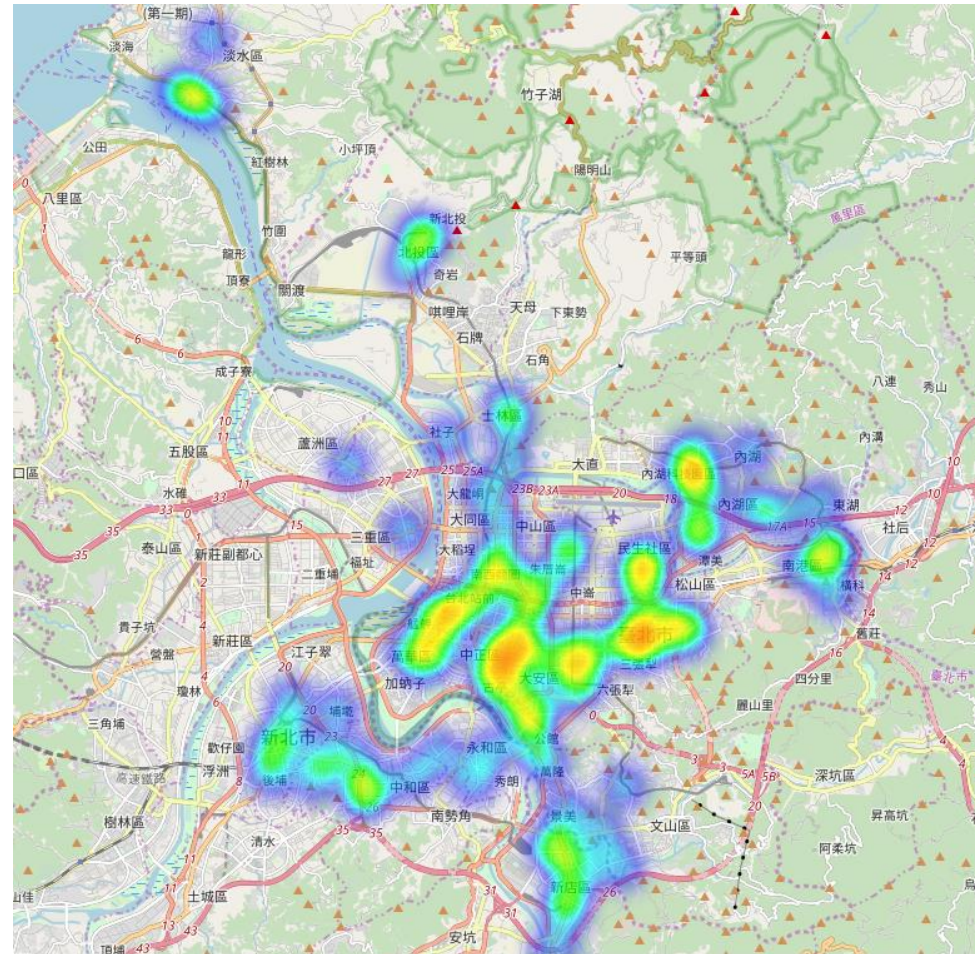
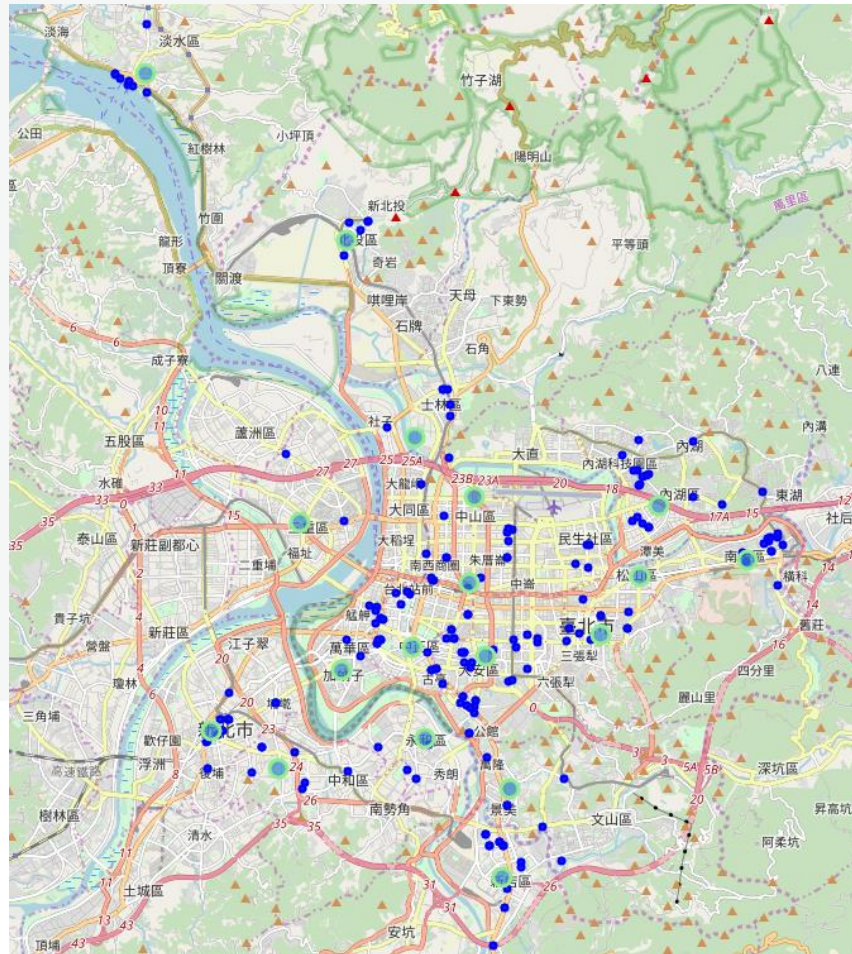
- Daan District is the district with most coffee places
- Half of the districts have at least 7 shops





# Explore Districts

## Check coffee shops and Café



# Clustering evaluation



## Most visited places in Taipei

Districts	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue
Banqiao District	Convenience Store	Coffee Shop	Shopping Mall	Train Station	Restaurant
Beitou District	Hotel	Hot Spring	Noodle House	Convenience Store	Resort
Daan District	Café	Hotel	Chinese Restaurant	Coffee Shop	Noodle House
Datong District	Chinese Restaurant	Hotel	Taiwanese Restaurant	Coffee Shop	Dumpling Restaurant
Nangang District	Convenience Store	Coffee Shop	Café	Fast Food Restaurant	Noodle House
Neihu District	Convenience Store	Coffee Shop	Café	Chinese Restaurant	Supermarket
Sanchong District	Convenience Store	Park	Metro Station	Taiwanese Restaurant	Coffee Shop
Shilin District	Taiwanese Restaurant	Café	Chinese Restaurant	Ice Cream Shop	Food Court
Songshan District	Department Store	Café	Chinese Restaurant	Hotel	Hotpot Restaurant
Tamsui District	Taiwanese Restaurant	Convenience Store	Snack Place	Café	Coffee Shop
Wanhua District	Café	Park	Taiwanese Restaurant	Noodle House	Dessert Shop
Wenshan District	Convenience Store	Japanese Restaurant	Park	Café	Coffee Shop
Xindian District	Convenience Store	Coffee Shop	Chinese Restaurant	Fast Food Restaurant	Japanese Restaurant
Xinyi District	Department Store	Hotel	Chinese Restaurant	Hotpot Restaurant	Café
Yonghe District	Café	Convenience Store	Coffee Shop	Park	Dessert Shop
Zhonghe District	Convenience Store	Coffee Shop	Chinese Restaurant	Café	Shopping Mall
Zhongshan District	Hotel	Taiwanese Restaurant	Chinese Restaurant	Café	Breakfast Spot
Zhongzheng District	Café	Noodle House	Ice Cream Shop	Coffee Shop	Taiwanese Restaurant

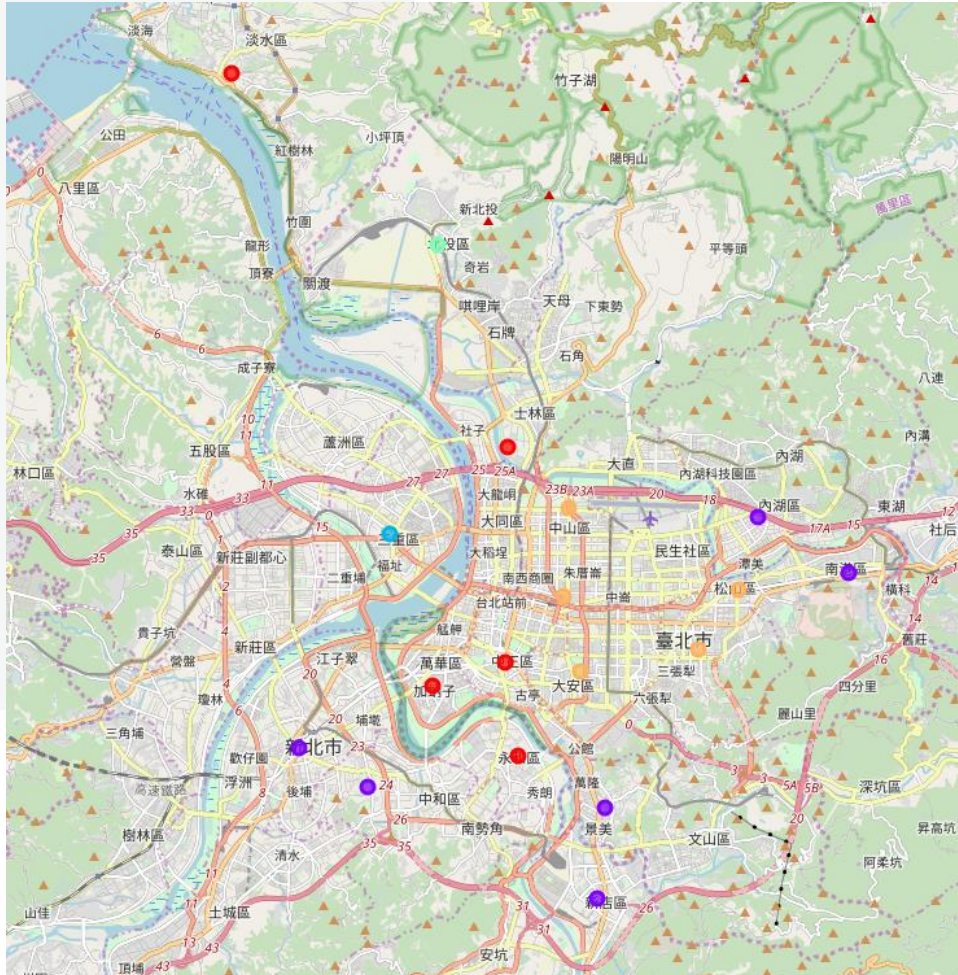
- Coffee Shop and Café are present in all districts, besides Beitou (7<sup>th</sup> Place).



# Districts clustering evaluation



K clusters = 5



- **CLUSTER 1**
  - Coffee shops and restaurants
- **CLUSTER 2**
  - Convenience store
- **CLUSTER 3**
  - Hotel
- **CLUSTER 4**
  - Park and metro station
- **CLUSTER 5**
  - Department store



# Conclusion

## How is the coffee scene in Taipei?



- Specialty coffee shops have sprung up on nearly every street corner in recent years. Most Taipei coffee shops are small independent businesses.
- Main area in which you can find coffee shops is Daan. Probably due to the high number of students and university located in that area.
- Banqiao area is getting quite popular, therefore it can be evaluated as a potential location for the next few year