



# WHERE TO START A NEW CAFÉ IN BANGKOK?

# INTRODUCTION AND PROBLEMS

## 1.1 Introduction

It a little dream for many people to have their own small cozy café. For over the past decade, the number of cafés in Bangkok has been growing continuously due to many reasons and, surely, one of them is increasing in demand from both Thai and foreigners. As Bangkok is a capital city of Thailand which has been one of the most desired holiday destinations for many tourists. Moreover, Bangkok has becoming a centre of many multinational organizations so the number of expats is increasing as well.

Apart from the number of increasing tourists and expats, the domestic demand has also been increasing as Thai people enjoy spending their time in a cozy and iconic atmosphere. Some cafés position themselves as a co-working space to encourage people to come in and spend times working in their cafés.

# INTRODUCTION AND PROBLEMS

## 1.2 Problem

Despite the increasing in the demand, many entrepreneurs have seen the opportunities and tried to capitalise it but many has failed. From the opinion of many entrepreneurs, one of the important keys to success in this business is to get the right “location”. Time after time when entrepreneurs quit their jobs and followed their dream blindfoldedly; choose the location which match their personal preference without any research or rational data to back up the decision. For example, an entrepreneur might consider their home area to be a perfect location because he or she assumes that it is a convenient location and there is a lot of demand because there are people traffic in the area. Nonetheless, it might not be the case. Consequently, the businesses did not pan out in the way that they wanted it to be. Thus, without the right location, the dream café could turn in to a nightmare.

## METHODOLOGY

This study will begin by making assumptions then acquiring needed data and finally analyse the data to get information to support the assumptions.

### 2.1 Assumption

Let's assume that the new café that is about to open is targeting tourists and the perfect location is an area that there will be some tourists with not too intense competitions. Hence, an area which has some attractions but there are not many café would be a perfect location.

### 2.2 Data

The data needed for this analysis can be acquired from Foursquare via Foursquare API. The example of data that is needed could be the number of cafes and attractions in Bangkok.

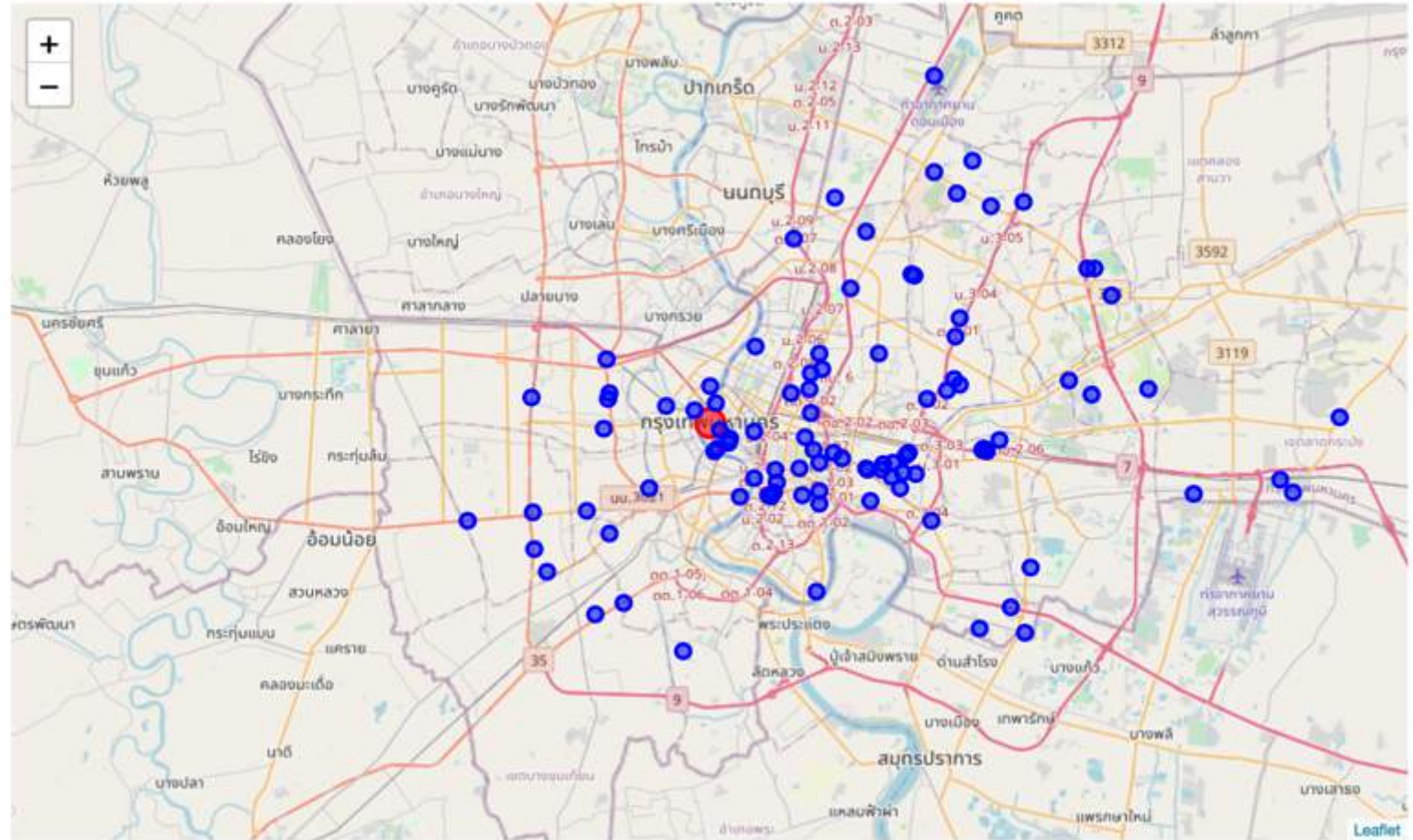
### 2.3 Analysing Data

We will try a couple methods to find a perfect location. Firstly, we will use K-Cluster to group the number of cafes to see where the attractions and cafes are clustered the most. Secondly, we use simple numerical operation to see which area has lowest competition by comparing the number of attractions and cafes.



## THE MODELS

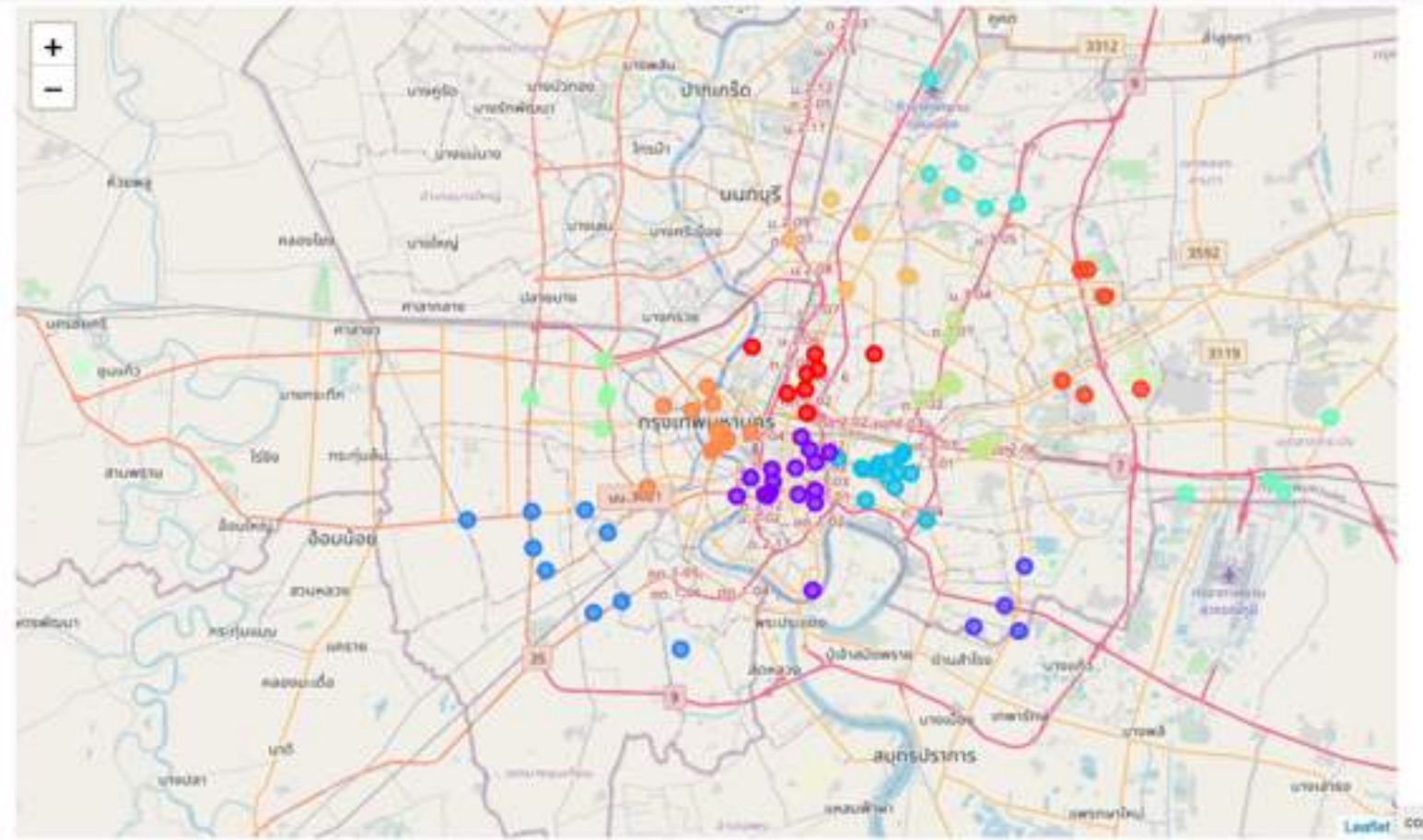
First, let's see how where the recommended cafés are in the map of Bangkok. We can see that the cafes are more clustered in the centre of Bangkok than in the suburb area.



Locations of Foursquare Recommended Cafes in Bangkok.

## THE MODELS

Then, we can use the k-cluster to segment the cafés by its coordinates. The result from the model is the following figure. In this model, the **number of K is 12**



Clusters of Foursquare Recommended Cafes in Bangkok.

## THE MODELS

To be understand each cluster more clearly. Take a look at the following table, we will see the number of cafes in each cluster so we know which clusters have higher number of cafes. Furthermore, we can see the list of cafes in each cluster as well.

	cluster_number	number_of_cafe
0	0	8
1	1	16
2	2	4
3	3	9
4	4	14
5	5	6
6	6	4
7	7	5
8	8	11
9	9	6
10	10	11
11	11	6

Number Of Cafes In Each Cluster.



## THE MODELS

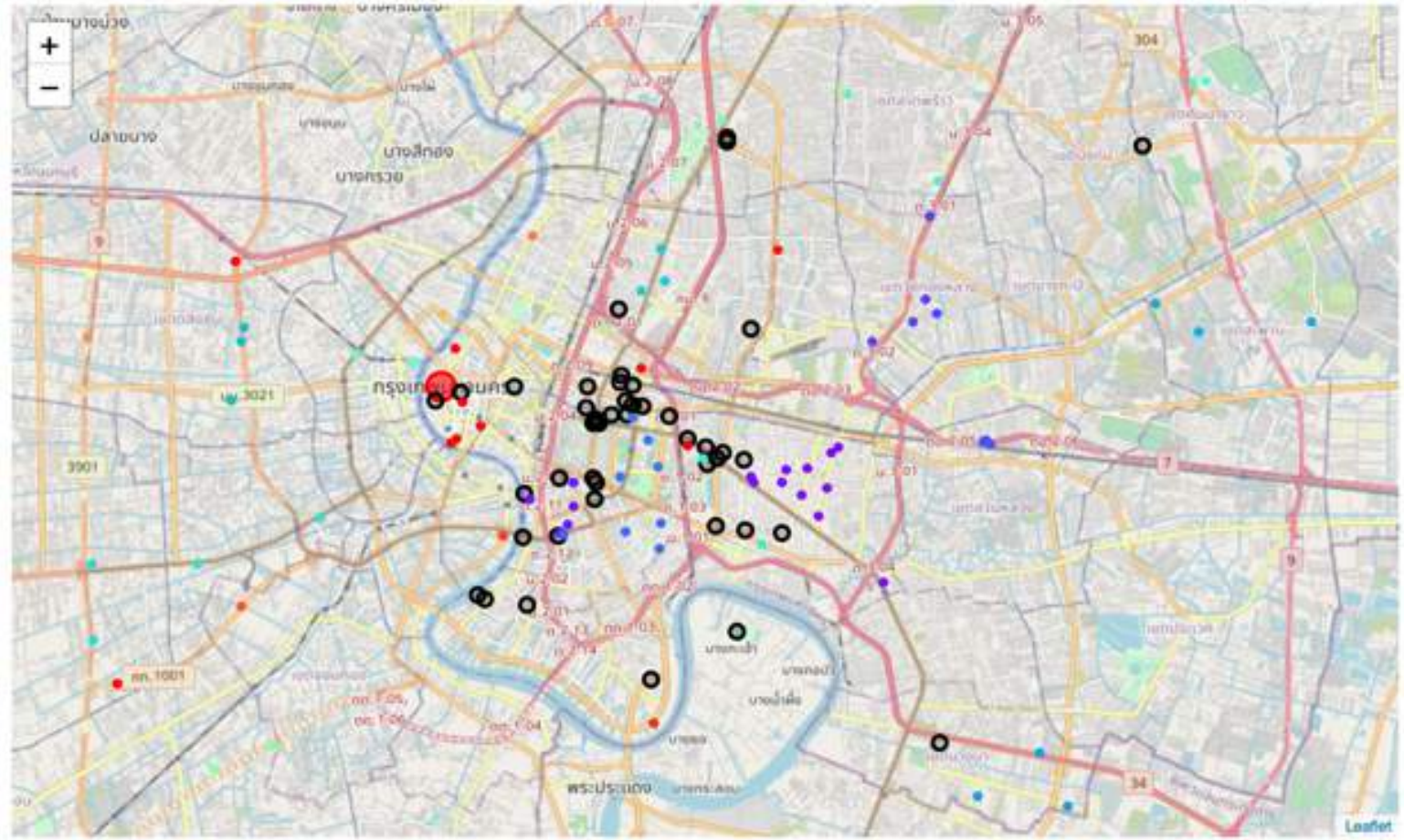
Cluster		name	categories	location	postalCode	city	lat	lng	id
0	1	Starbucks	Coffee Shop	39/1 Lang Suan Rd/nan	10330	ปทุมวัน	13.741662	100.543542	4b46a783f964a520512626e3
1	1	Pacamara Boutique Coffee Roasters	Coffee Shop	King Chulalongkorn Memorial Hospital/nan	10330	ปทุมวัน	13.732901	100.536407	54795975498e156b2245b3f0
2	1	Luka	Café	64/3 Pan Rd/nan	10500	บางรัก	13.721661	100.523878	562f4971498e2a51cd30a199
3	1	Starbucks	Coffee Shop	SENA fest/G Fl & 1st Fl, #G03 & #102	10600	คลองสาน	13.719129	100.507924	51448d80e4b0136aa63e72a3
4	1	Starbucks	Coffee Shop	Sindhorn Tower/Wireless Rd	10330	ปทุมวัน	13.735516	100.545969	54f3fb1d498ee35c902104c5
5	1	AKART Day	Café	30 Yen Akat Rd/nan	10120	สาทร	13.715894	100.546260	585a0356bbec662a38e1c163
6	1	The Coffee Club	Café	144 Sathorn Nuea Rd/at Mode Sathorn Hotel	10500	บางรัก	13.719771	100.521750	5911c71ab2958f1a2e220fce
7	1	Starbucks	Coffee Shop	INT Intersect/nan	10120	Yannawa	13.674842	100.544847	4fb91a03e4b0cddc4842816a
8	1	เพลินชัย ชนมปัง-กาแฟ	Café	229 Si Phraya Rd/nan	10500	บางรัก	13.731794	100.525185	4ccbe6762dc437045422c308
9	1	A Coffee Roaster by li-brary	Coffee Shop	Warehouse 30/nan	10500	บางรัก	13.727875	100.514764	5a080b341108ba39f42253e0
10	1	CityLight Coffee	Café	Sukhumvit Soi 4/nan	10110	พระนคร	13.740250	100.553100	535a543711d2feb87bb99742
11	1	Cafe Neighbor	Coffee Shop	466/23 Suan phlu/nan	10120	สาทร	13.720072	100.538003	55a5db75498e6ad9e5b2de06
12	1	Malai Coffee House	Café	54 Soi Ngam Duphli, Rama 4 Rd./Malaysia Hotel	10120	สาทร	13.721962	100.546415	4cdd94957e2e236a06c7791b
13	1	Monochrome	Coffee Shop	8 Decho Rd/nan	10500	บางรัก	13.726133	100.525290	5c3ecf14b6b04b002c5c75ef
14	1	Roots	Coffee Shop	31, 33 Sathon Tai Rd/at Bhira Tower, 1st Fl, ...	10120	สาทร	13.719232	100.522710	5b1c7f5978782c002ca96b67
15	1	Starbucks	Coffee Shop	CentralWorld/1st Fl, Beacon Zone	10330	ปทุมวัน	13.747076	100.539601	5b0bf1816adbf5002c8bdb64

List of Foursquare Recommended Cafes in Cluster 1



## THE MODELS

We can repeat the process and also see the locations and clusters of the attractions in Bangkok. In the following figure, you will see the location of attractions and cafes in the same map and we can visually identify the area that has many attractions but less cafes because it is the intention of this study. A big circle with black outline represents an attraction while the small circles represent cafes.



Locations of Foursquare Recommended Cafes and Attractions in Bangkok.

## THE MODELS

However, this might not be the best approach to specify the area of where we should look for a space for the new café because it is very difficult to tell where the physical boundary of the cluster is. So, we can use group attractions and cafes according to their district (city) instead. Then we can plot the location of each cafes into a map and each colour represents different city.

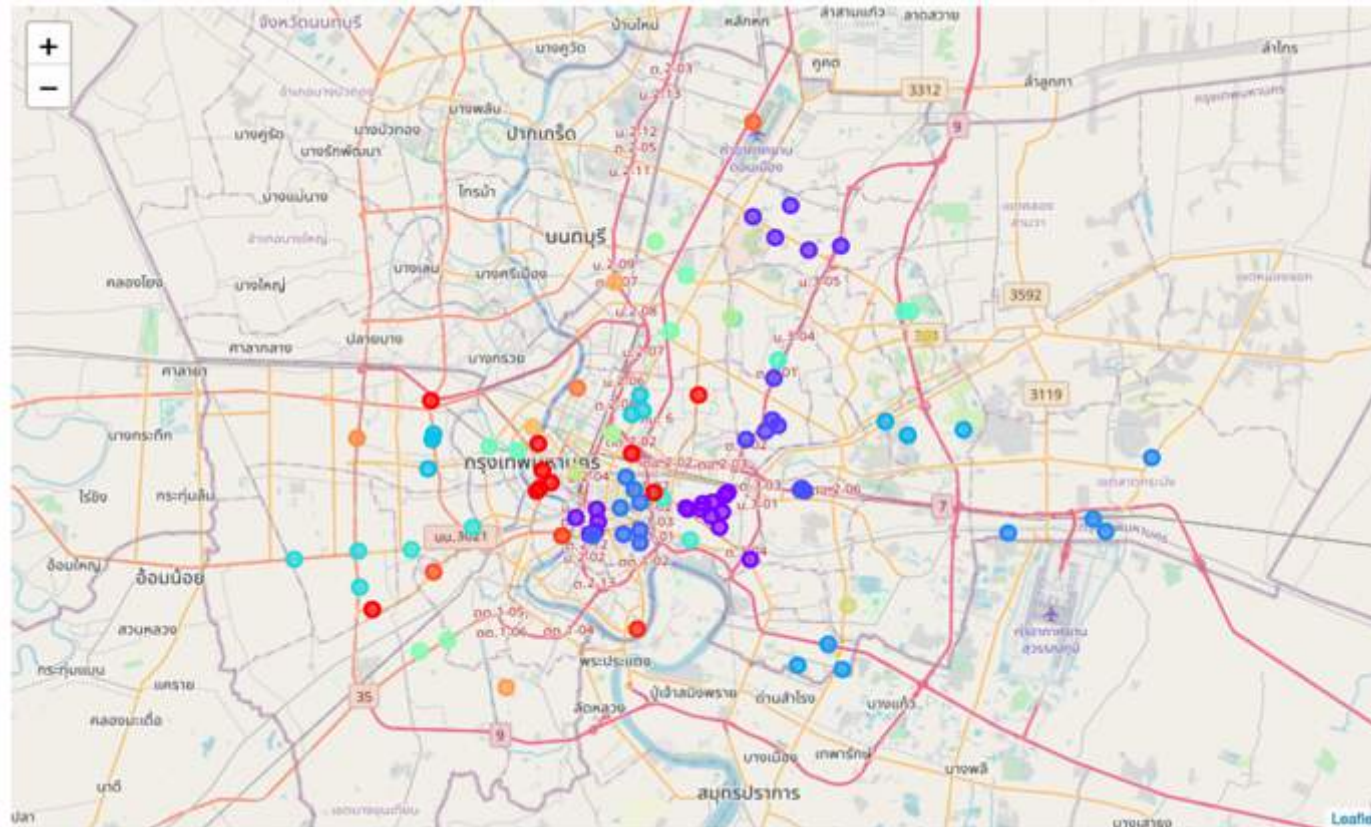
	city	city_number	cafe_count
0	พระนคร	0	9
1	วัฒนา	1	11
2	บางรัก	2	5
3	บางเขน	3	5
4	วังทองหลาง	4	5

	city	city_number	cafe_count
32	ดอนเมือง	33	1
33	จอมทอง	34	1
34	คลองสาน	35	1
35	Yannawa	36	1
36	ห้วยขวาง	37	1



## THE MODELS

This is much easier to see where the cafes are clustered, therefore intense competitions but it also means that there are some demands in the area.



Location of Foursquare Recommended Cafes in Bangkok. Segmented by City



## THE MODELS

Next, we can combine the attractions data and cafes data together and group them by district.

	name	categories	location	postalCode	city	lat	lng	id
0	The Grand Palace	Palace	Na Phra Lan Rd Maha Rat Rd & Sanam Chai Rd	10200	พระนคร	13.751150	100.491615	4ceb69b1d27560fca3439b3a
1	The Jim Thompson House	Museum	6 Soi Kasem San 2 nan	10330	พระนคร	13.749252	100.528323	4b6fbb5bf964a5201dfb2ce3
2	Kama Bangkok- Bed, Breakfast, Restaurant & Bar	Bed & Breakfast	Sut Prasoet 4 Alley Charoen Rat Rad	10120	Bangkok	13.702799	100.513823	5392b068498e12427cd0dd37
3	Modena by Fraser Bangkok	Hotel	2527 Rama IV Rd nan	10110	คลองเตย	13.721473	100.559966	5747d235498e7542e39feb24
4	Holy Shrimp	Seafood Restaurant	ตลาดนัดรถไฟ nan	10400	Din Daeng	13.768087	100.568476	562a2722498e31c0f670c729
...	...	...	...	...	...	...	...	...
132	Starbucks	Coffee Shop	21 Chakkraphet Rd/nan	10200	พระนคร	13.744966	100.502495	55b1cfd0498ec8b295ab7c55
133	Coffee Today	Coffee Shop	Rat Phatthana Rd/nan	10240	สะพานสูง	13.769859	100.705297	4e0c2099fa76eaf8b39ab9f3
134	Starbucks Reserve	Coffee Shop	CentralPlaza Rama 2/1st Fl	10150	บางขุนเทียน	13.663825	100.437668	4bc0040d461576b003b07932
135	Starbucks	Coffee Shop	CentralWorld/1st Fl, Beacon Zone	10330	ปทุมวัน	13.747076	100.539601	5b0bf1816adbf5002c8bdb64
136	INK&LION Café	Coffee Shop	1/7 Ekkamai Soi 2/nan	10110	วัฒนา	13.723631	100.584994	5253fd5b498e79c215c8d9b7

137 rows × 8 columns

List of Foursquare Recommended Cafes and Attractions in Bangkok

## THE MODELS

Next, we can combine the attractions data and cafes data together and group them by district.

	city	cafe_count	attraction_count
0	วัฒนา	11	5
1	ปทุมวัน	4	8
2	พระนคร	9	2
3	บางรัก	5	3
4	คลองเตย	2	4

	city	cafe_count	attraction_count
32	คลองสาน	1	0
33	ทวีวัฒนา	1	0
34	ดุสิต	1	0
35	บางซื่อ	1	0
36	หลักสี่	1	0

## THE RESULT

Since we assume that the new café that is about to open is targeting tourists, as mentioned earlier. We will filter out any city that has no attraction sites at all from the table because it implies that there will be no tourists to visit the area. Then we can use the number of cafes divide by the number of attractions to get the café to attraction ratio of each city.

So, we can conclude that Ratchathewi (ราชเทวี) is the most interesting location to open a new café because it has up to 4 recommended attractions with only 1 recommended café, as of this moment. Thus, we can assume that there will be some tourists visit the attractions but the number of cafes in the area is relatively low and we can open a new one and still have a chance to be successful.

	city	cafe_count	attraction_count	cafe/attraction ratio
9	ราชเทวี	1	4.0	0.250000
1	ปทุมวัน	4	8.0	0.500000
4	คลองเตย	2	4.0	0.500000
5	พญาไท	3	3.0	1.000000
10	จตุจักร	2	2.0	1.000000
20	Yannawa	1	1.0	1.000000
22	Khanna Yao	1	1.0	1.000000
3	บางรัก	5	3.0	1.666667
0	วัฒนา	11	5.0	2.200000
13	บางนา	3	1.0	3.000000
7	สาทร	4	1.0	4.000000
2	พระนคร	9	2.0	4.500000



## SUGGESTION FOR FURTHER STUDY

The model can be improved by take into the account of number of check-in and rating of each attraction instead of using only the number of sites.

A photograph of a modern cafe interior. In the foreground, several wooden tables and chairs are visible. A group of people is seated at a table on the left, looking towards the right. A person in a dark blue shirt and jeans stands near the center, facing right. In the background, there is a counter area with a menu board. The menu board has a chalkboard-style background with white text that reads: "Like all great things, I have seen more than I remember. Remember more than I have seen." The cafe has a high ceiling with exposed wooden beams and modern lighting fixtures. Large windows on the left side provide natural light. The overall atmosphere is warm and contemporary.

**THANK YOU**