



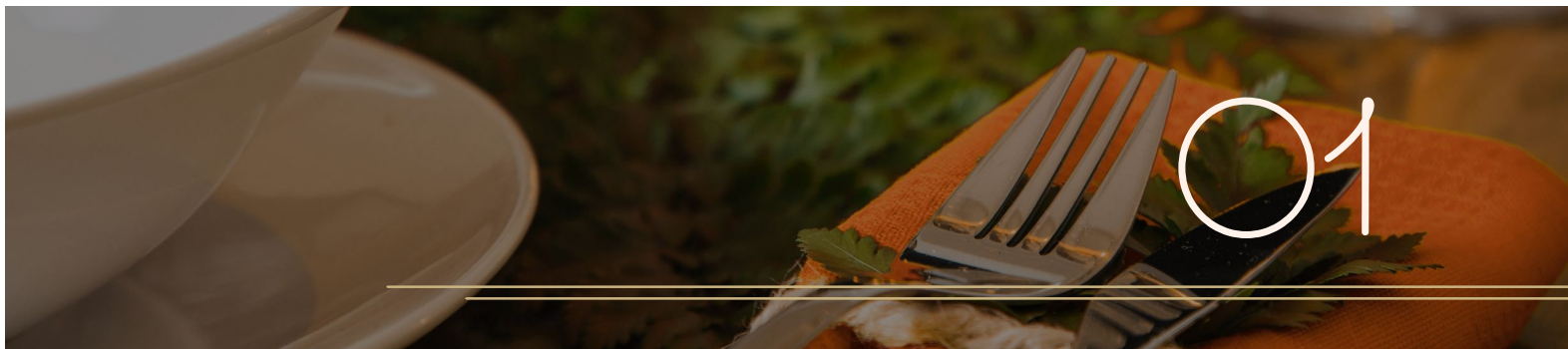
The Battle of Restaurant in Hong Kong

Applied Data Science Capstone - Capstone Project
Wong Man Yan

Contents

- Background
- Business Problem and Problem Statement
- Data
- Result and Analysis
- Conclusion and Limitation

Background



01

Background

- Hong Kong
 - International City in the world
 - Over 7 million people with huge flow of people
 - Diversity of countries and cultures
 - Form different restaurants with different food types

Business Problem



Business Problem

- Invest & Open a new restaurant that we need to decide:
 - Location
 - Which place and district should we open?
 - Food Type
 - What kind of food should we provide?

Problem Statement



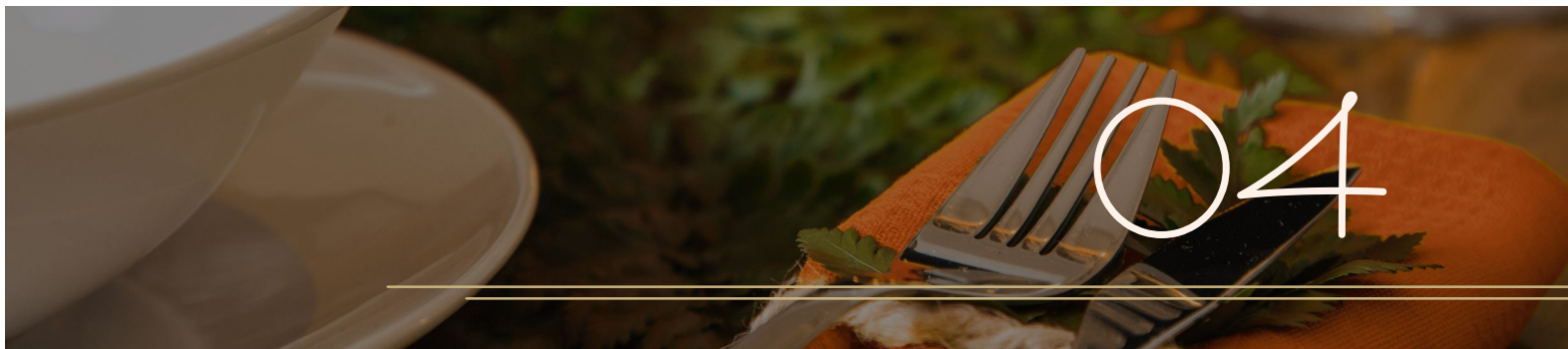
Problem Statement

1. How many restaurant in Hong Kong?
2. Which district has the largest number of restaurants?
3. How many type of food in Hong Kong?
4. What is most popular food type?

Problem Statement

5. What is the most popular restaurant in Hong Kong that
6. Should we open the same type of food?
7. Where should we open the restaurant and which food should we provide?

Data



Data

- Hong Kong districts name with the following locations
 - Districts name
 - Latitude
 - longitude
- Restaurants in Hong Kong with location, name, categories

Data

- Hong Kong districts name with the following location
 - Dataset collected from geodatos

	District	Coordinates
0	Hong Kong	22.27832, 114.17469
1	Kowloon	22.31667, 114.18333
2	Tsuen Wan	22.37137, 114.11329
3	Yuen Long Kau Hui	22.45, 114.03333
4	Tung Chung	22.28783, 113.94243
5	Sha Tin	22.38333, 114.18333
6	Tuen Mun	22.39175, 113.97157
7	Tai Po	22.45007, 114.16877
8	Sai Kung	22.38333, 114.26667
9	Yung Shue Wan	22.22623, 114.11241
10	Ngong Ping	22.25556, 113.90391
11	Sok Kwu Wan	22.20453, 114.13159
12	Tai O	22.25515, 113.86309
13	Central	22.28299, 114.15846
14	Wan Chai	22.28142, 114.17258
15	Sham Shui Po	22.33023, 114.15945
16	Wong Tai Sin	22.35, 114.18333

Data

- Restaurants in Hong Kong with location, name, categories
 - Collected through Foursquare

Index		District	ID	Name	Category
0	0	Hong Kong	560e8177498eec19033d3851	The Optimist	Spanish Restaurant
1	1	Hong Kong	53b508c1498ee296db480fea	Kam's Roast Goose (甘牌燒鵝)	Cantonese Restaurant
2	2	Hong Kong	5282091711d293929eb9139f	Zahrabel	Lebanese Restaurant
3	3	Hong Kong	4b794ce0f964a520e9f22ee3	Woolloomooloo Steakhouse	Steakhouse
4	4	Hong Kong	4b13d798f964a520a49923e3	Sang Kee Seafood Restaurant (生記海鮮飯店)	Seafood Restaurant

Result and Analysis



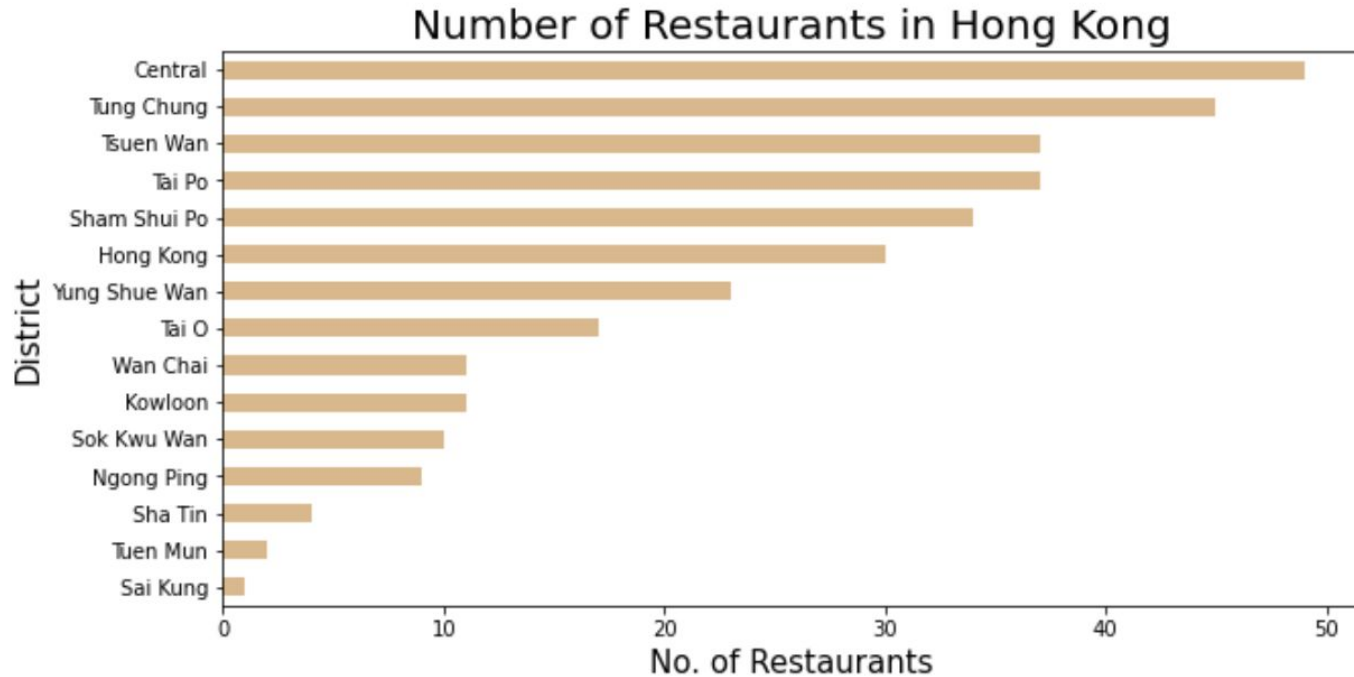
1. How many restaurant in Hong Kong?

- There are total 320 restaurants in Hong Kong

Index	District		ID	Name	Category
0	0	Hong Kong	560e8177498eec19033d3851	The Optimist	Spanish Restaurant
1	1	Hong Kong	53b508c1498ee296db480fea	Kam's Roast Goose (甘牌燒鵝)	Cantonese Restaurant
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4	4	Hong Kong	4b13d798f964a520a49923e3	Sang Kee Seafood Restaurant (生記海鮮飯店)	Seafood Restaurant
...
315	315	Sham Shui Po	5cd3fdc4588e36002cd9a270	Years (素年)	Japanese Restaurant
316	316	Sham Shui Po	58ddc08437318110dcab5c78	Golden Café (黃金冰室)	Cha Chaan Teng
317	317	Sham Shui Po	4ca6f13576d3a093be99066b	Ming Fat (明發)	Dumpling Restaurant
318	318	Sham Shui Po	5986c721c4df1d5dfae7510d	Sun Hang Yuen (新香園)	Cha Chaan Teng
319	319	Sham Shui Po	568a7f45498e112e6625d571	Go Go Restaurant (高高酒家)	Cantonese Restaurant

320 rows × 5 columns

2. Which district has the largest number of restaurants?



Central has the largest number of restaurants : 49

3. How many type of food in Hong Kong?

- There are total 61 food types in Hong Kong

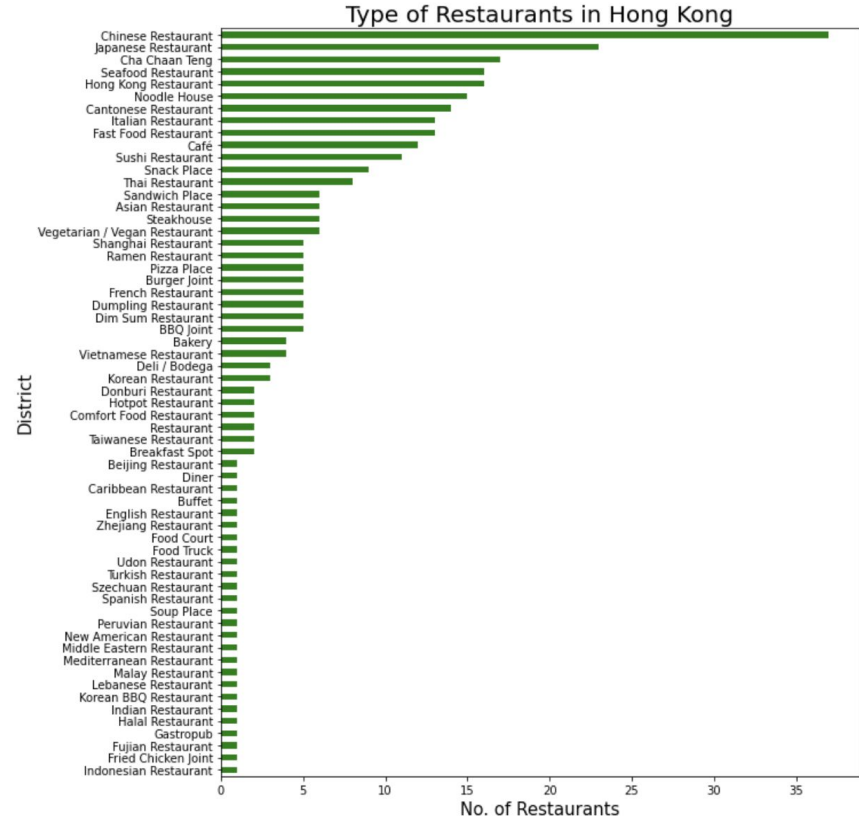
Category	
Chinese Restaurant	37
Japanese Restaurant	23
Cha Chaan Teng	17
Seafood Restaurant	16
Hong Kong Restaurant	16
..	
Halal Restaurant	1
Gastropub	1
Fujian Restaurant	1
Fried Chicken Joint	1
Indonesian Restaurant	1
Name: ID, Length: 61, dtype: int64	

4. What is most popular food type?

Category	
Chinese Restaurant	37
Japanese Restaurant	23
Cha Chaan Teng	17
Seafood Restaurant	16
Hong Kong Restaurant	16
..	
Halal Restaurant	1
Gastropub	1
Fujian Restaurant	1
Fried Chicken Joint	1
Indonesian Restaurant	1
Name: ID, Length: 61, dtype: int64	

— Chinese Restaurant:

- 49 restaurants in HK



5. What is the most popular restaurant in Hong Kong?

— By Likes:

	District	ID	Name	Category	Likes	Rating	Tips
237	Ngong Ping	5305caeb498e391fd4b9caf0	Mott 32 (卅二公館)	Dim Sum Restaurant	433	9.0	135
253	Sok Kwu Wan	4ed70871be7b3567163a9b79	Yat Lok Restaurant (一樂燒鵝)	Cantonese Restaurant	368	8.0	160
233	Yung Shue Wan	4b0e380af964a520115623e3	Zuma	Japanese Restaurant	335	8.7	141

5. What is the most popular restaurant in Hong Kong?

— By Rating:

	District	ID	Name	Category	Likes	Rating	Tips
226	Yung Shue Wan	4c7fa26501df37045bb4e6ac	Mandarin Grill + Bar (文華扒房 + 酒吧)	Steakhouse	55	9.2	15
237	Ngong Ping	5305caeb498e391fd4b9caf0	Mott 32 (卅二公館)	Dim Sum Restaurant	433	9.0	135
227	Yung Shue Wan	4b0588d8f964a520dbdc22e3	Man Wah (文華廳)	Cantonese Restaurant	38	8.8	16

5. What is the most popular restaurant in Hong Kong?

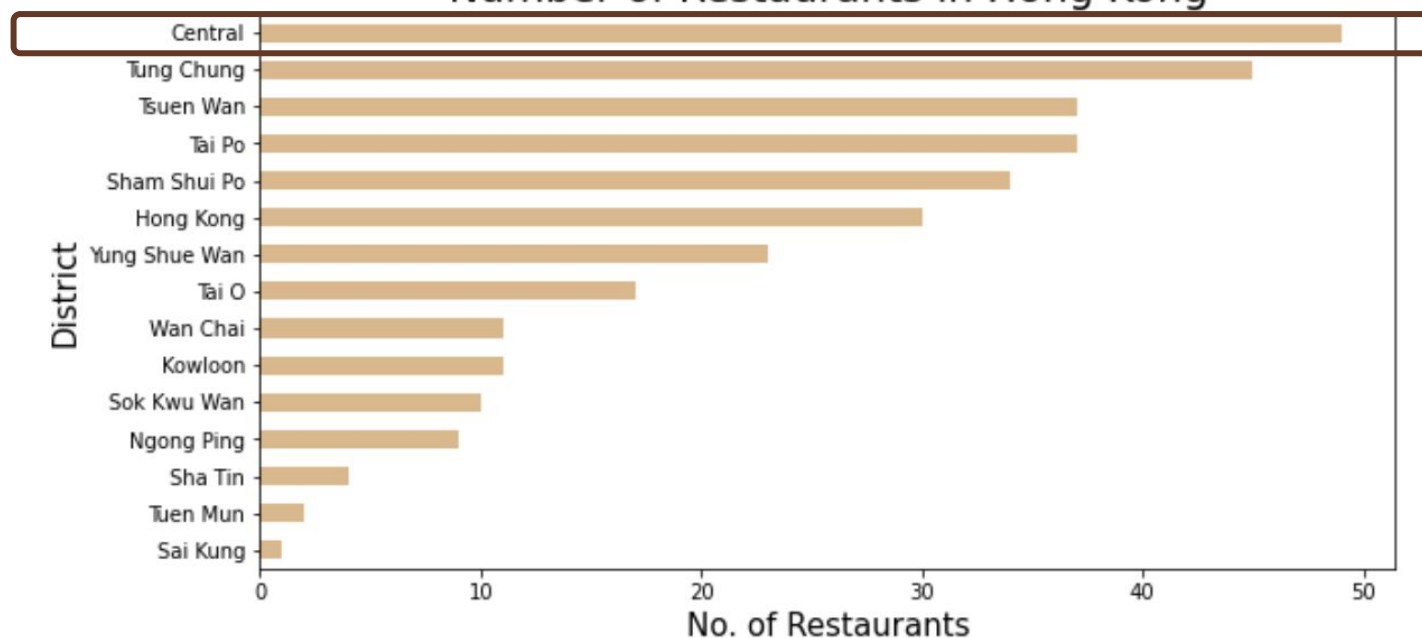
— By Tips:

	District	ID	Name	Category	Likes	Rating	Tips
253	Sok Kwu Wan	4ed70871be7b3567163a9b79	Yat Lok Restaurant (一樂燒鵝)	Cantonese Restaurant	368	8.0	160
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Where should we open the
restaurant?

Number of Restaurants in Hong Kong



Central

- Central
 - Owns the largest number of restaurants in Hong Kong
 - Many people work nearby
 - ⇒ Huge amount of potential customers



Which food should we
provide?

Chinese Food

- **Most Popular Food: Chinese Food**
 - 49 Chinese Restaurants in Hong Kong
- **Most Popular Restaurants in Foursquare:**

- Dim Sum Restaurant

- Japanese Restaurant

- Cantonese Restaurant

**Both are one kind
of Chinese foods**

Limitation



Limitation

- Not enough data
 - Hong Kong has much more restaurants
 - Even several hundreds of restaurants in a district

Limitation

- Other factors may also affect the decision
 - Opening a restaurant should also consider the price, quality, average income of customer, etc.

Conclusion



Conclusion

- Opening a new restaurant
 - Location: Central
 - Food Type: Chinese Food



Thanks

