Market Intelligence Report

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Exploring the opportunity to open a Vietnamese restaurant in Kuala Lumpur, Malaysia

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Introduction

Majority of Asian love soup, noodles or noodle soup, there are a variety of noodle dishes available in the Asian continent. According to Wikipedia, the origin of noodles is from China and the earliest written record of noodles found in a book dated to the Eastern Han period (25-220 CE). Noodles often made from wheat dough. It became a staple food for the people of the Han dynasty (206 BCE – 220 CE). Based on Wikipedia, noodles claimed as a staple food in many cultures, for example, Chinese noodles, Japanese noodles, Korean noodles, Filipino noodles, and Vietnamese noodles. According to Wikipedia, noodles are also a popular food in the European continent as early as 1st BC, Israel and Greece, Germany and Poland, however it is Italian variety and recipes of noodles that gain popularity across the globe. What can be concluded is that noodles are a popular dish that can live up to the taste bud of both Asian, European and possibly many other nationalities from other continents.

Based on sources from Wikipedia, the word "coffee" entered the English language in 1582 via the Dutch "koffie", borrowed from the Ottoman Turkish "kahve", in turn, borrowed from the Arabic "qahwah". By the 16th century, it had reached the rest of the Middle East, South India (Karnataka), Persia, Turkey, the Horn of Africa, and northern Africa. Coffee then spread to the Balkans, Italy, and the rest of Europe, as well as Southeast Asia and then to America. Today, coffee is a lifestyle beverage enjoyed by many nationalities across the globe, and each country has its variant of popular coffee beverages.

Pho is arguably the most popular food in Vietnam. It is served both at restaurants and in families, eaten for breakfast, lunch or dinner. This famous dish is rice noodle soup but the broth seasoned in a unique way that appeals to almost everyone. There is also a vegetarian option for pho, replacing beef and chicken with a variety of mushrooms which provide an opportunity to cater to both vegetarian and non-vegetarian customers. On the other hand, Vietnam unique signature ice coffee and its northern variant of egg coffee offer the opportunity to market the coffee to coffee lover after their main dish. Vietnam unique coffee beverage and its wide variety of noodles dishes offer the opportunity to venture into capturing local Malaysia and tourist market.

The Business Problem Statement

The business is bullish about the opportunity to open a Vietnamese restaurant in Kuala Lumpur, it needs intelligence about the best strategic location for its first Vietnamese restaurant outlet. Having the intelligence about the other existing Vietnamese restaurant and guidance will enable the company to decide which area in Kuala Lumpur best suited for their venture.

The Market Intelligence Objective

The objective of this market intelligence report is to provide information on the existing Vietnamese restaurant in Kuala Lumpur city area, highlighting which area that has a high concentration of Vietnamese restaurant as well as identifying which area that is underserve and offer business opportunity and potential.

The Target Audience For this report

The target audience of this report is limited to the board of directors and senior management of the client who commissions this report.

The Data Requirements

To realise this market intelligence report, the following data are required:

- The Kuala Lumpur, Malaysia geo-position (Latitude, Longitude).

- The Vietnamese restaurant location data (latitude and longitude) to enable the creation of the visual map and insight knowledge about the existing concentration of Vietnamese restaurant and which cluster offer the strategic opportunity for the venture.

The Data Gathering and Processing Technique

The data source identified for this report are:

- Using Geocoder to find the coordinates of Kuala Lumpur, Malaysia and the use of Four-Square API to retrieve the Vietnamese restaurant venue information within 20km radius from the geo-position of Kuala Lumpur, Malaysia.

The tool and processing technique used for this project are:

- Python Pandas and Numpy for data wrangling and analysis
- Python Geocoder library package to retrieve the latitude and longitude information for Kuala Lumpur township.
- Python Folium for map visualisation.

- Four-Square API calls

The Project Methodology

Project Planning Stage

The project methodology begins by investigating and understanding the business needs and problem statement as described in the above section of Introduction and Problem Statement. Subsequently, the project objective, target audience, data source, tool and techniques identified as described in section Objectives, Target Audience, Data Source & Gathering and Processing Techniques.

Project Data Collection Stage

From the data source, tools, processing techniques identified in the project planning stage, the project data gathering commences using Python programming with a combination of geocoder and Four-square API calls.

Project Data Observation, Analysis and Wrangling Stage

Unfortunately, the data collected from four-square API call for Kuala Lumpur, Malaysia is in-complete and have limited use for clustering which render limited use of machine learning. The probable reason could be that there is a limited active user of Four-square in Malaysia and hence the quality of data is low.

Python pandas, numpy and JSON library, is used for data filtering, observation, analysis and wrangling into a useable format for visual analysis using Folium map.

The Project Results

From Folium Map visual observation, it is evident that there is no cluster of Vietnamese Restaurant exist within 5 km radius toward the western area of the latitude and longitude of Kuala Lumpur: 3.1516636, 101.6943028. The majority of the Vietnamese restaurant in Kuala Lumpur City centre concentrated at the northwestern, eastern area, the southern, southwestern area of Kuala Lumpur city centre. (see Figure 1 Kuala Lumpur City Vietnamese Restaurant Topology).
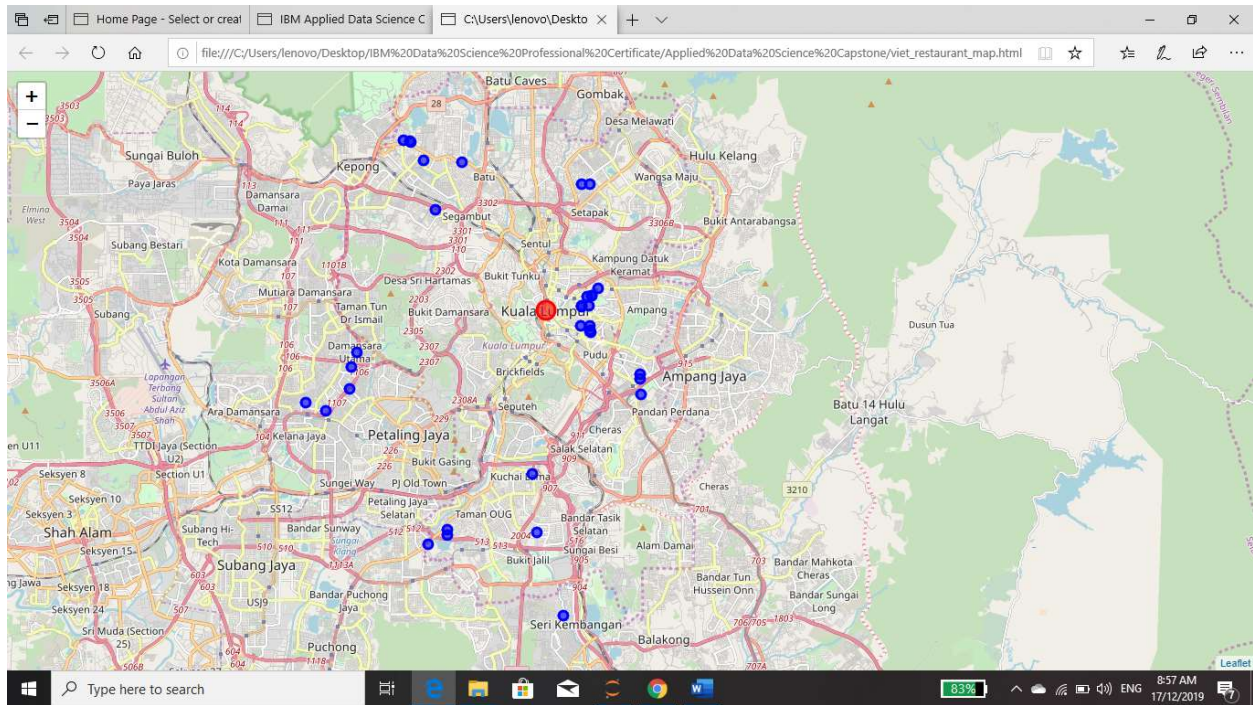
Figure 1: Kuala Lumpur City Vietnamese Restaurant Topology

Discussion

Though the visual observation has shown that immediate western part of Kuala Lumpur City offers the most optimum or strategic location for opening a Vietnamese Restaurant, further investigation recommended, for example performing a field trip to analyse and understand why no Vietnamese restaurant existed in that western part of the Kuala Lumpur city.

Recommendation

The western area of Kuala Lumpur city offer strategic opportunity and it is recommended that effort is focus on investigating the feasibility of opening a Vietnamese Restaurant in within 5 km radius toward the western area of the latitude and longitude of Kuala Lumpur: 3.1516636, 101.6943028

Limitation

This project analysis is heavily dependent on Four-Square data was found to be limited in term of data quality for Kuala Lumpur, Malaysia. This project did not take into consideration other relevant factors that could influence decision making such as income, population distribution, due to unavailability of data.

Suggestion for Future Research

In the future, there exist an opportunity for the research to consider other data source such as Google API call, with a combination of other data sources such as income and population distribution to improve the analysis and recommendation. This will requires establishing a budget to pay the necessary data which is not free of charges.

Conclusion

The project commences with identifying business needs, problems and target audience as an input to plan the data source, gathering method and analysis techniques to meet the expectation of business. Though from the data and visual analysis, the western part of Kuala Lumpur city offers the most optimum location for opening a Vietnamese Restaurant, a field feasibility study investigation recommended drilling further before confirming the investment.

References:

1. https://en.wikipedia.org/wiki/Vietnamese_iced_coffee
2. https://en.wikipedia.org/wiki/Vietnamese_noodles
3. https://en.wikipedia.org/wiki/Noodle
4. https://en.wikipedia.org/wiki/Malaysia
5. https://www.live-less-ordinary.com/top-10-vietnamese-food-eating-in-vietnam/

Appendix:

Restaurant Name	Categories	Latitude	Longitude	City
Vietnamese Hawker Stall	Vietnamese Restaurant	3.153693442	101.7078107	Kuala Lumpur
Vietnamese Delicacy	Vietnamese Restaurant	3.14360404	101.7109604	Kuala Lumpur
Du Viet Vietnamese Cuisine	Vietnamese Restaurant	3.157303275	101.7114638	Kuala Lumpur
Vinh City Vietnamese Cuisine	Vietnamese Restaurant	3.144222	101.710826	Kuala Lumpur
Hot Pot Vietnamese Food	Vietnamese Restaurant	3.146044656	101.7108187	Kuala Lumpur
the besr Vietnamese noodle in town	Vietnamese Restaurant	3.153330326	101.7076645	Kuala Lumpur
Daviet vietnamese restaurant	Vietnamese Restaurant	3.157247756	101.7113302	Kuala Lumpur
Ori vietnamese food	Vietnamese Restaurant	3.156854595	101.7095454	Kuala Lumpur
Y Thu Wendy Authentic Vietnamese	Vietnamese Restaurant	3.15995083	101.7137655	Kuala Lumpur
Vietnamese Chinese Restaurant	Vietnamese Restaurant	3.207406317	101.6626355	Kuala Lumpur
MÃ²n Ãƒn Vietnamese Food	Vietnamese Restaurant	3.199104	101.707776	Kuala Lumpur
Vietnamese Restaurants	Vietnamese Restaurant	3.136187015	101.6231851	Kuala Lumpur
Kah Hing Vietnamese Restaurant	Vietnamese Restaurant	3.189387452	101.6527798	Kuala Lumpur
Ahoang Vietnamese Restaurant	Vietnamese Restaurant	3.1203952	101.729922	Kuala Lumpur
Vietnamese & Chinese Cuisine	Vietnamese Restaurant	3.0676637	101.65704	Kuala Lumpur
TRE VIET - Vietnamese Coffee Restaurant	Vietnamese Restaurant	3.127703608	101.7295843	Kuala Lumpur
Goc pho Vietnamese Restaurant	Vietnamese Restaurant	3.126087	101.72968	Kuala Lumpur
24 Hours Vietnamese Restaurant	Vietnamese Restaurant	3.069454	101.65728	Kuala Lumpur
Vn Bahn Mi Cafe â€œThe Vietnamese Street Food Cafeâ€	Vietnamese Restaurant	3.068599	101.69069	Kuala Lumpur
Prima Setapak vietnamese food	Vietnamese Restaurant	3.199123003	101.7108687	Kuala Lumpur
Diem Hen Vietnamese Restaurant	Vietnamese Restaurant	3.090436	101.688949	Kuala Lumpur

Sao Nam	Vietnamese Restaurant	3.145909184	101.7074605	Kuala Lumpur
Minh Anh Vietnamese Restaurant	Vietnamese Restaurant	3.0641236	101.649956	Kuala Lumpur
Restaurant Chinese Vietnamese	Vietnamese Restaurant	3.208009238	101.6483013	Kuala Lumpur
Pho Expert	Vietnamese Restaurant	3.153459439	101.7104517	Kuala Lumpur
Bich Tien Vietnamese Cuisine	Vietnamese Restaurant	3.215453682	101.6407153	Kuala Lumpur
Lien phat vietnamese Bread house	Vietnamese Restaurant	3.215164486	101.6431282	Kuala Lumpur