

# 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 township 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 and its township, highlighting which township cluster that has a high concentration of Vietnamese restaurant as well as identifying which township cluster 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 commission this report.

#### The Data Requirements

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

- The latest information about Kuala Lumpur, Malaysia list of townships.
- The latitude and longitude of each town in Kuala Lumpur which is essential for gathering information on Vietnamese restaurant information across the township in Kuala Lumpur, Malaysia.
- The Vietnamese restaurant location data (latitude and longitude) for K-Means machine learning clustering 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:

• HTML data scrapping from internet website for the latest information on Kuala Lumpur, Malaysia townships. The use of Four-Square API to retrieve the Vietnamese restaurant within 2km of each township in 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.
- Python K-Means machine learning library.
- Four-Square API calls

#### References:

- 1. <a href="https://en.wikipedia.org/wiki/Vietnamese\_iced\_coffee">https://en.wikipedia.org/wiki/Vietnamese\_iced\_coffee</a>
- 2. https://en.wikipedia.org/wiki/Vietnamese\_noodles
- 3. <a href="https://en.wikipedia.org/wiki/Noodle">https://en.wikipedia.org/wiki/Noodle</a>
- 4. <a href="https://en.wikipedia.org/wiki/Malaysia">https://en.wikipedia.org/wiki/Malaysia</a>
- 5. <a href="https://www.live-less-ordinary.com/top-10-vietnamese-food-eating-in-vietnam/">https://www.live-less-ordinary.com/top-10-vietnamese-food-eating-in-vietnam/</a>