# Proposal for top three area locations of English Learning Center in Hong Kong

## Introduction/Business Problem

# background

Hong Kong is the city in which people mainly have their mother tongue of Chinese. However, English is equally important as Chinese in Hong Kong. Therefore, parents in Hong Kong pay lots of attention to build up the English ability of their kids. Many of them send their kids to English Center to learn English when their kids reach as early as three years old. The number of English learning center for early age students have been growing for the last decade.

#### **Business Problem**

Babington Education has been established for 11 years and have opened 26 English learning centers around different part of Hong Kong. Now they are planning to open their 27th English learning center and want to use a quantitative approach to come up with the top three area locations in Hong Kong.

#### Data

### **Description of the data**

To find the best locations, we need to have some locations data, therefore, location data is obtained from <a href="https://data.gov.hk/">https://data.gov.hk/</a>. We will use <a href="2019 District Council Ordinary Election Constituency Boundaries (JSON)</a>. This 2019 District Council Ordinary Election Constituency Boundaries dataset contains the boundary geo data in Json format.

Also, we need to obtain the statistic for each district council constituency area. Therefore, we use 2016 Population By-census Statistics (By District Council Constituency Area).

This 2016 Population By-census dataset contains statistics relevant to demographic, household, educational, economic, housing, and internal migration characteristics of the Hong Kong population residing in the 431 District Council Constituency Areas in 2016. It is an established practice from 1961 for Hong Kong to conduct a population census once every 10 years and a by-census in the middle of the intercensal period. The 2016 Population By-census, which was conducted in June to August 2016, provides benchmark statistics on the socio-economic characteristics of the Hong Kong population vital to the planning and policy formulation of the government.

Of course, we will use *Foursquare* to obtain the existing English learning center information.

How to use the data to solve the business problem.

We will use use <u>2019 District Council Ordinary Election Constituency Boundaries (JSON)</u> helps to define the boundaries of the 431 District Council Constituency Area in Hong Kong. With the use of <u>FourSquare</u>, we are able to find the density of the English Learning Center in different area.

Using the density of the English Learning Center in different area is not sufficient to determine the best area for the new English Center. We also need to use <u>2016 Population By-census Statistics</u> (<u>By District Council Constituency Area</u>) to incorporate population data and socio-economic characteristics of the Hong Kong population data into our analysis in determine the new center area.