The Battle of Neighborhoods in Yangzhou_Week1

Siwei Xiao

January 4, 2021

1.0Introduction

1.1 Background

Yangzhou is a prefecture-level city in central of Jiangsu Province in China. It possesses unique geographical advantage of natural resources for its position sitting on the north bank of the Yangtze River. At present, the population of Yangzhou has reached over 4 million with higher percentage of the young generation feature ages between 18 and 40 as there exists many educational institutions and college centers locating in it, attracting even more students come to Yangzhou for future career. In addition, Yangzhou is a city with relatively slow pace, compared other cities at a similar level. Therefore, restaurants are quite prevalent among people living in this city and drinks like coffee are also become more popular.

1.2 Business problem

College students coming from national regions bring energy to this city and new business opportunities. For example, many foreigners choose to open restaurants at streets around Yangzhou University and along historical attractions. Of course, some of them have tries to open a coffee as that type of shop provides relaxing space for students in line with the pace of frequent work and studies. However, many cases proving the failure for those coffees opening within noisy malls or on daily busy roads. To overcome that problem, this study would focus on Luckin's location strategy in Yangzhou and those of existing coffee shop competitors, considering their stable profits and distribution of business activities over this city and other neighborhoods.

2.0 Data Description

To cope with this problem of location selection, these factors will be considered:

1) number of existing restaurants in the neighborhood

2) the distance to restaurants in the neighborhood

3) distance of neighborhood from city center

4) number of schools in the neighbor (any type)

We decide to use regularly spaced grid of locations, centered around city center, to define our neighborhoods. The data sources are shown as following:

1) get Yangzhou geometry information

2) calculate geometry information, under specific conditions (e.g., about 3 km from city center, and each has 600 meters each circle apart)

3) get the detailed information in each circle by applying Foursquare API