

IBM Applied Data Science Capstone Project Proposal

A. Chen

May 15, 2020

1 The Problem

Suppose we are the owner of a thriving restaurant in the US and are looking to expand beyond the confines of your city. As you begin to map out your expansion plans, we are struck with a tough question: Where should we go?

Perhaps we might consider large cities. After all, a larger market means more customers. However, at the same time, a larger market also means more competition.

Nor would a small city be necessarily ideal as an expansion location. There may not be enough customers to make the expansion worthwhile, even if we are the sole provider of our cuisine.

Finally, we may want to expand to a location that has similar tastes to the city in which we are located. That would allow us to put our extensive research and experience to good use.

Now, with some data analytics we recently picked up, let us shortlist some locations methodically.

2 The Data

A dataset of the top 1000 US cities by population, hosted on OpenDataSoft, will be used to determine possible cities for expansion.

Data from the Foursquare API will be to determine the most common restaurant types in each city within a radius of 20km.