# Opening a Sushi Restaurant in Boston

### Choosing a neighborhood to open a Sushi Restaurant in the US's University Capital:

## 1 – Introduction

The following report will be created with the idea of assisting an entrepreneur seeking to open a Sushi restaurant in the city of Boston, Massachusetts. The business problem, though relatively simple, begs a very fundamental question: *in which neighborhood shall the entrepreneur open his new business?*

Boston is a very diverse city, as its various neighborhoods differ greatly amongst each other when it comes to a wide variety of demographic factors (i.e., race, age, gender, education level). As such, the composition of the businesses that compose each neighborhood varies greatly – some are home to a wide variety of restaurants, while others offer more residential appeals. Some neighborhoods may be over-saturated with Japanese eateries, while others may have a general scarcity of restaurants, indicating a smaller market for restauranteurs. As such, we will attempt to determine which neighborhoods are optimal for the opening of a Sushi Restaurant based on lack of direct competition (other Sushi Restaurants) *and* the presence of a solid dining landscape. To accomplish this goal, we will attempt to identify the neighborhoods that display *both* a low density of Sushi Restaurants, *and* an average density of general dining venues.

## 2 – Data

The data we will use to solve this problem will come from a variety of different sources. First, we will need to identify **all Boston neighborhoods.** This task we will be able to accomplish by simply grabbing each of their general demographics as outlined by the **Boston Archive**. The **Boston Archive** provides a free database of its neighborhoods' demographic data (including their zip codes), from which we will extract all their identifying labels, as they appear according to the city's officials[1].

Once we have extracted the official denominations of each of the city's neighborhoods, we will require a database of **longitudinal and longitudinal coordinates to match each of the identified neighborhoods**. To achieve this, we will extract a dataset which relates each US Zip Code to its latitudinal and longitudinal coordinates. This database, titled **"US Zip Codes Database"** is compiled by **Simple Maps,** using data from the **IRS, The United States Census, and the American Community Survey.**[2]

Once we have retrieved the coordinates of each of the city's neighborhoods, we will be able to leverage the **Foursquare API** in order to retrieve data regarding the venues that are present within a given radius of the coordinates passed. To achieve this, we will require a Foursquare Developer account capable of performing the **Explore function** (Free accounts will work fine for our purposes). The data we will extract using the **Foursquare API** will contain the

[1] Boston Archive: http://archive.boston.com/news/local/articles/2007/04/15/sixfigurezipcodes_city/
[2] Simple Maps Archive: https://simplemaps.com/data/us-zips

categories, names, and precise coordinates of a significant sample (N = 100) of venues for every neighborhood.

Having these three datasets at our disposal, we should be all set to determine which of the neighborhoods identified will have the most saturated market for Sushi Restaurants, while offering a competitive and appealing dining landscape.