# The Battle of the Neighborhoods: Hostels of Japan

### 1. Business Understanding

#### 1. Background

Hostels have been always cheaper than hotels to stay at. During a long vacation, I prefer to stay at hostels because it has better and cheaper rates than hotels. A hostel is a low budget accommodation shared among travelers. It gives one a chance to experience moments which one cannot experience at a hotel. It is one of the best ways to live while travelling across the world because you can save money, meet new people and take part in a lot of social activities.

#### 2. Problem Description

Hostel accommodation is an emerging industry in Asia. 80% of the people prefer to spend less and stay in hostels. The demand of hostels has been increasing daily. This means that the hostel industry is going to grow day by day. Here are some of the problem's: -

- How should a new business person decide where to build a hostel?
- What factor would affect his investment?
- Which neighborhood venues affect a user's rating for location of a hostel?

The reviews are subjective and differ from person to person. It is important to consider other aspects like price and neighborhood which can greatly influence one's experience of the city. Following are the questions which will be answered: -

- How does price vary with location?
- What are the 'value of money' hostels located?
- How does proximity to transportation affect hostel rating?
- Suggest similar hostels with cheaper price?

#### 3. Target Audience

I have chosen Tokyo, city of Japan for the project. It will serve the following audience:

- The people who are travelling will be able to make an informed decision while choosing a hostel.
- To provide useful insights to the businessman to suggest a perfect location for the opening of their hostel.

## 2. Analytic Approach

The project will be developed using the help of two approaches: -

- 1. I will use EDA to uncover the hidden information in the data and provide useful insight to both the traveler and the businessman.
- 2. I will use prescriptive analysis to help a business person decide a location for a new hostel and predict the prices.

I will be using **K means Clustering** and **Decision Tree Regression**.

### 3. Data Requirement

The dataset has been gathered from:

- 1. Japan Hostel Dataset is available on Kaggle.
- 2. Foursquare API will help me to gather all the venues around the hostel.
- 3. Tokyo Land Prices will be scrapped from the web to get the land prices in the neighborhood of Tokyo.

I will use the list of hostels and venues around the hostel. I will use EDA To explore the neighborhood and predict how it affects the price of the hostel.

I will combine the land price in which the hostel is situated and then develop clustering and regression models to predict the location and price of the hostel.