**Finding best location for ALDI store**

**Description & Discussion of the Background**

ALDI is a discount supermarket chain that has over 10,000 stores in 20 countries. Discount supermarkets typically offer a reduced product range to enable themselves to gain economies of scale and offer a lower price than conventional supermarkets. The other way of gaining economies of scale is through growth. Worldwide, ALDI has been rapidly increasing store count. In fact, in the U.S., ALDI is predicted to become the third largest grocer by store count by 2022.

However, new store openings are a risky and capital-intensive endeavor. To reduce risk, supermarkets will need to analyze an array of data to predict which locations have the greatest chance of success for their brand. As a former NYC resident, I am interested in which areas I can expect ALDI stores to open up next.

**Data Description**

The below data can be used to address the problem:

* I will use Foursquare location data to determine areas in NYC that have relatively little competition for ALDI. There have to be few or no discount supermarkets nearby. This data will be used to explore the NYC boroughs. I will use the explore function to determine the most common venue categories in each neighborhood. I will use the Folium library to visualize the NYC neighborhoods.
* I will also use the following dataset, which contains the 5 NYC boroughs, the neighborhoods that are in each borough, and the latitude and longitude of each neighborhood: <https://geo.nyu.edu/catalog/nyu_2451_34572>
* I will use demographic data to determine areas with high population density and low median household income: <http://www.city-data.com/nbmaps/neigh-New-York-New-York.html>.

**Methodology:**

For an ALDI store to be successful, we can assume:

* To increase likelihood of demand for the store, it should be in an area with a high population.
* The location should be a dearth of competition. Though all supermarkets can be seen as competition, ALDI should in particular avoid areas with existing discounters.
* As ALDI’s main customer base are price-conscious shoppers looking for cheap goods, ALDI will most likely thrive in low income areas.

**Results:**

Taking into account the above assumptions, I decided to look for the area in NYC with the highest population to supermarket ratio in areas where the majority of earners earn below the median wage. I excluded any area with an existing discounter.