Business Near the Subway Stations

Mauricio Bustos

March, 2021

Introduction

Subway stations are places with a high transit rate of people with their associated consumption needs, which is reflected in the high density of commerce in the nears.

In places like Santiago de Chile, a growing city, the subway network (Metro) still projects new stations.

This project aims to study the opportunity of establish new businesses near the actual and/or the future Metro stations, taking into account what kind of commerce is established in a consolidated city.

Subway networks in mega cities could give valuable information in order to pick the best business to locate near stations in subways of growing cities, such as Santiago.

It is intended to analyze what kind of businesses are located near each metro station in New York City, and use this info to compare it with the info in a growing city (Santiago) to identify which businesses are not located right now and which ones is to be good to locate in the future in the next stations to be build.

Data

The data to be collected and analyzed could be grouped into two sets:

- Big city analysis:
 - Metro stations geolocalization: expected to be collected from some data source on the
 web. Initially the city will be New York as it is the economic center of the country. Will need
 to find the latitude and longitude (decimal format) for each subway station.
 - Venues around each subway station: will be obtained via the Foursquare API within a
 certain radius, to be defined, around each station. From these info we will be using the
 venues classification and the frequency of tips given by the Foursquare users.
- Growing city analysis:
 - Actual and future Metro stations geolocalization: the same info as for the NYC subway stations, plus the info of projected Metro stations. All info from data sources from the web.
 - Venues around each Metro station (actual and future): idem as for NYC, will use the Foursquare API to obtain venues and frequency of tips.

In both cases, the results of the venues will be ranked and compared to identify the differences between them and then make an analysis to identify which businesses appears as the most attractive to locate near the Metro of Santiago stations.