

Identifying the Optimum Location for a Bank

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1. Introduction

1.1 Background

John's Pizzeria is a northeastern United States pizza chain restaurant. The company has several chains in New York and New Jersey but is looking to expand outward. John (the owner) has enough liquid assets to afford another location but not one with such high rent like his current stores – so he sets his eyes on Toronto, Canada.

1.2 Problem

As John is not a native to Toronto or Canada in general, he does not have a good grasp of the current market and thusly does not know which location in Toronto would maximize this business opportunity. This project aims to give John enough information to determine which borough in Toronto to set up shop.

2. Data

2.1 Gathering Data

I will be using the Foursquare API to pull information about a given locale based on a series of queries. This data will then be passed into Pandas data frames for further cleaning and analysis. I will also be using a provided CSV of Postal Codes to Latitude/Longitude coordinates in order to locate venues in Toronto and render them on a map.

3. Analysis Methods

3.1 Clustering

The data will be run through a k-means clustering algorithm and render to a map to visualize companies in the local area. It will also enable John to see what sorts of businesses are missing from the area and if his would be a good fit.