## Theater-Cafe in Toronto

A description of the data and how it will be used to solve the problem

First, we scrap the Wikipedia-site <a href="https://en.wikipedia.org/wiki/List">https://en.wikipedia.org/wiki/List</a> of postal codes of Canada: M, in order to obtain the data of postal codes of Toronto with the name of the neighborhood as well as its Borough. Then we apply the Foursquare to utilize the location data of the neighborhoods in Toronto. A small part of this information is shown in the following:

It is sufficient to correspond each postal code with one neighborhood, so the neighborhoods who are corresponded to one postal code has to be merged. Moreover, the Borough and neighborhoods which are not assigned in our table should be omitted. In the end, we can check if there exist any duplicate row. After having unique a classified table of all the neighborhoods, we get the latitude and the longitude coordinates of each neighborhood with Foursquare. We should also check the data frame over and over again to have a clear classification of all the neighborhoods.

As we see, Toronto is a huge city and we want to invest our business in downtown for the higher probability of success. So,we only concentrate in Downtown of Toronto.

With the help of Foursquare, we have a clean data frame of each neighboorhood in downtown Toron to as well as ist Venues and the geographical coordinates. As we see, there exist too many venues, th erefore we concentrate on 100 number of venues, which are located in downtown with radius of a ha If Kilometer, which includes for example the venues: Harbourfront - Regent Park — Ryerson - Garden D istrict - St. James Town - Berczy Park, etc.

Theoretically, we can have our Cafe in any street of the downtown, but it does not seem a very clever idea, as there could already exist popular Cafes in the same venue. It reduces the number of our guests and it makes our start-up harder. So, let us see the distribution of the Cafes in different neighborhoods of downtown. Generally, it exists 360 Cafes in downtown. How can we know where they are? The Cafes should be normally in a group of Cafes or Coffee-Shops. It is not a very surprising result, that every neighborhood in downtown has at least one Cafe.

Now, we should be how Theaters and Cafes are distributed in downtown. The following diagram confirms that we do need to concentrate on Theater-idea, as it does not seem to have a normal distribution.

We have separately seen the distribution of Cafes and theaters, but does exist one Theater in each neighborhood? The following comparison denies this assumption. There exist neighborhoods in downtown, who are very poor in Theater-community.

Our prediction ist: we can have a successful Theater-show, if we not have a competitor in our chosen neighborhood. So let us concentrate on the neighborhoods, which do not have any theater:

Which of these neighborhoods can create us a cozy environment for a successful Theater-Cafe? What does this naighborhood have as a priority?

We ask us the question again: who can be interested in Theater? Definitely, we do not ask this question for Cafes, as many people already are daily customers of Cafes. With a higher possibility, we can have educated people to e interested in such an offer. Where can we find these people? The ones, who already work, are probably too busy to come to our Cafe during the day, so probably young people

would be the biggest group of our customers. They should be not far away from universities or colleges. Let us find the corresponding neighborhoods, which are not many.

Where should we open our Theater-Cafe?

As a student in college, I would not have too much time to spend on the bus to get another part of the city for Cafe. So we would concentrate to find a minimum distance from one of the Collegeneighborhoods and one oft he neighborhoods, in them there does not exist any Theater.