

Report:

Recommendation engine for location of ice cream trucks during summer in Toronto

1. Introduction:

An ice cream company having outlets all over North America is planning to enter Toronto. But due to high rental costs in the city and a perceived seasonal demand for ice cream, the company has decided to try out a new model of mobile ice cream trucks only during summer. The company has invested in 3 trucks.

The business question which needs to be answered is where to optimally station these trucks to maximize footfalls and sales.

2. Data to solve the problem:

There are two data sources which I will be using to answer this question.

- (i) The FourSquare Venues API to understand the spread of existing ice cream shops and how the distribution is spread out by each neighborhood
- (ii) The city of Toronto's open data portal (<https://open.toronto.ca/>) has lots of datasets about the city. I will be using a dataset of list of public airconditioned spaces which is put out in public interest during the summer months. This dataset can be found at <https://open.toronto.ca/dataset/air-conditioned-and-cool-spaces-heat-relief-network/>. I will be using this dataset to determine how each neighborhood ranks with respect to these spaces and understand how many people are expected to use these spaces by neighborhood in the summer months.