

# Predicting the Best Location for a Theater

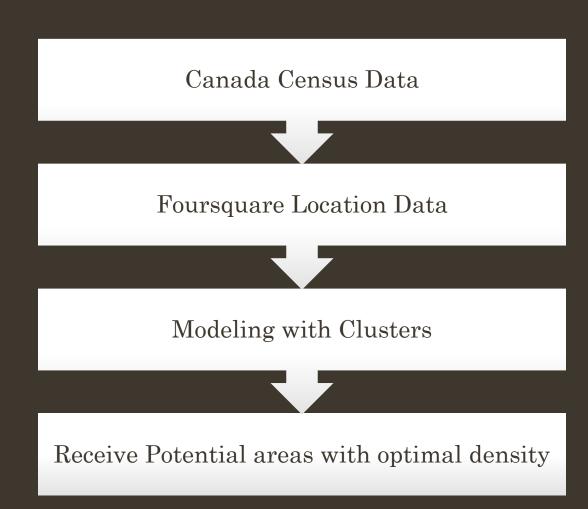
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# Predicting optimum location is valuable

- Looking at location data for existing movie theaters
- Find similarities between neighborhoods with and without movie theaters using different criteria:
  - Income
  - Most common venues
  - Venue categories
- Conclude with best neighborhoods to build next movie theater!

# Steps followed in articulating the answer/solution:

- Using the Toronto Neighborhoods census Data for 2016 to collect income data on each neighborhood.
- Importing venue information for each neighborhood in Toronto.
- Looking at the most common venues for all neighborhoods for patterns.
- Finding the neighborhoods with movie theaters and finding patterns there for optimal location determination.





# Results

# There are only 3 Movie theaters in Toronto!

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
67	Banbury-Don Mills	43.737657	-79.349718	Cineplex Cinemas	43.734279	-79.346164	Movie Theater
1155	Rexdale-Kipling	43.723725	-79.566228	SilverCity	43.726223	-79.569855	Movie Theater
1549	Yonge-Eglinton	43.704689	-79.403590	Cineplex VIP Yonge & Eglinton	43.706515	-79.398950	Movie Theater

- I am quite shocked myself; I ran the code multiple times and received the same results every time.
- Since this sample is so small, I will be analyzing the patterns manually and discussing them in the following slides.

#### ${ m Results}$

#### Income

• All neighborhoods had their individuals with incomes on the higher end of the range that was explored through the data (above \$90,000 income for that year).

#### Venue Categories

- 2 of the 3 neighborhoods had a pizza place as the most common venue in that area. There were no other similarities in the exact category names.
- However, they had similar foodrelated and fitness-related locations as most common venues (gym, sporting goods shop, restaurant, coffee shop, tea chop, etc.).

### Discussion

#### Advantages

- Knowing this, building a theater will be widely successful due to the lack of them in Toronto.
- For this purpose, analyzing similar entertainment venues might offer an approximation of an ideal location for a movie theater (to have more data points).
- Might be inaccurate but offer great insight into future market research.

#### **Future Direction**

- Looking at other social and societal factors will help understand the reason for the lack of movie theaters (different means of entertainment, movie culture in Canada, etc.).
- Population surveys regarding movie theaters and movie entertainment will provide more information for the establishment of a new movie theater.