

Capstone Project - The Battle of Neighborhoods



Opening a new Artisanal Coffee Shop in Toronto

Business Problem and Background

Problem Background:

Toronto is the most populous city in Canada with a developed economy that is highly diversified with strengths in technology, design, financial services, life sciences, education, arts, fashion, aerospace, environmental innovation, food services, and tourism. This presents a host of opportunities and challenges for an entrepreneur.

While the urban setting, large population and strong economy drive strong demand, there is also significant competition and one of the highest operating cost for any location in Canada. Hence leveraging data science and the insights it produces to identify ideal conditions and test hypotheses provides a better chance of success for any new business.

Problem Description:

A (hypothetical) client wishes to open a new artisanal coffee shop, which will be their foray into the Canadian market. They plan to offer a cozy and comfortable space for both business workers and casual visitors to sit down, while also offering a take-out option. There will be a strong emphasis on high quality coffee at a reasonable cost.

One of the most important success drivers for a coffee shop business is its location and hence they are looking to leverage data to identify an ideal Toronto neighborhood that will broadly satisfy the following criteria:

- A strong demand – they feel that they test well with office/business workers (white collar) and may also work well with college students (colleges in vicinity a plus, but not mandatory)
- A robust population – the preference is for a neighborhood with a large population (especially working age), with ideally a high average per capita earning

- Limited competition – the location should have a low density of coffee shops, but not so low that it indicates a lack of viability. Something in the middle is preferable

Target Audience:

The target audience for the location report is the hypothetical coffee shop's management team. They expect to see a report with a recommendation for a neighborhood that meet their criteria, the rationale behind it, data source, methodology, and any further actions/caveats.

Success Criteria:

The success of this endeavor will depend on the data scientist's ability to leverage available data to satisfactorily meet the client's requirement and make an acceptable recommendation for a suitable neighborhood to open their new artisanal coffee shop.