

Site Location Recommendation

Capstone Project

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Background

- Company ABC (the "Company") is a China-based Express Delivery Company who started their business about 5 years ago.
- With the rapid expanding trade between Canada and China, they foresee the potential profitability to open an international branch in Canada.
- Currently the Express Delivery Market is mainly lead by big corporate (e.g. FedEx, Canada Post, etc.).
- The company plans to open the first business in Ontario, and then depends on how the P&Ls within next 5 years.

Business Problem

- The Company had determined to open a new international Express Delivery branch in GTA, Ontario
- Focus on providing products & services to both individual and small business owners, and also thinking offering door-to-door service that will attract customers that would require more assistance.
- They need to determine Markham vs Mississauga and where they should open the branch that will allow them to attract more business.

Things to consider

- Target customer availability
- Inventory place which is secured
- Easily accessible to transportation options (e.g. near highway)
- Ideal no or minimum competing business nearby
- Parking space and public-transit friendly
- Public service and neighbourhood environment
- Cost of the rent

Data Preparation

- CENSUS data for both cities [1][2]
- Crime data for both cities [3][4]
- Neighbourhood info for both cities [5][6]
- Foursquare API

Data Example

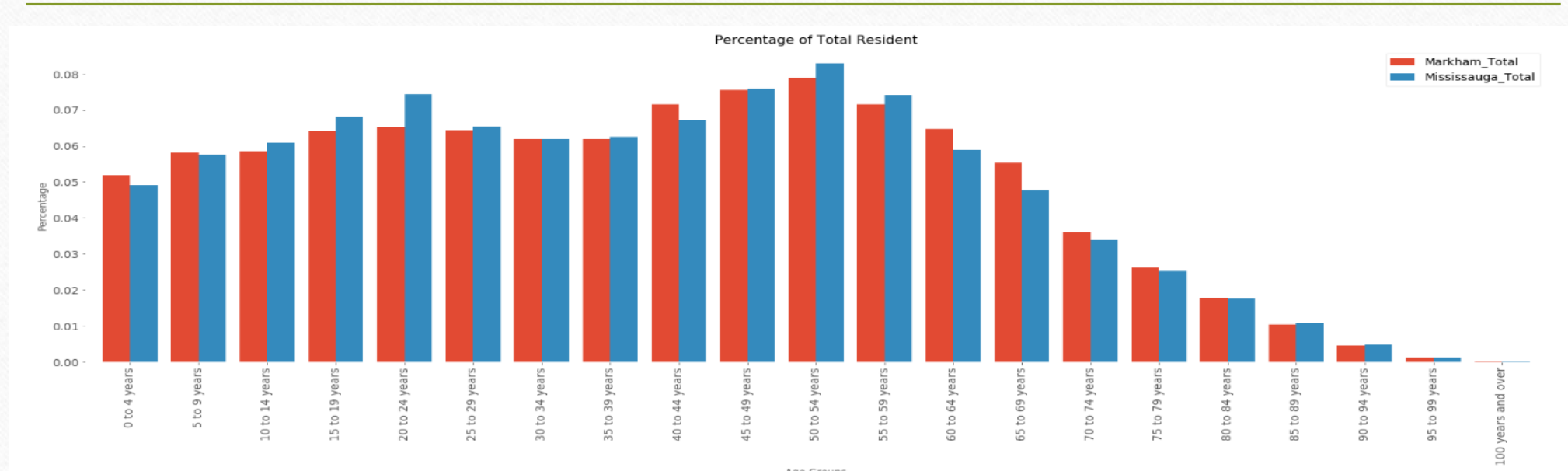
	Category	Sub_Category	Total	Male	Female
0	Age characteristics	0 to 4 years	17085	8715.0	8370.0
1	Age characteristics	5 to 9 years	19085	9905.0	9180.0
2	Age characteristics	10 to 14 years	19220	9950.0	9270.0
3	Age characteristics	15 to 19 years	21095	10910.0	10185.0
4	Age characteristics	20 to 24 years	21455	11225.0	10230.0

CENSUS data

	Postalcode	Borough	Neighbourhood
0	L6C	Markham	Berczy Village, Cachet, Angus Glen, Cathedralt...
1	L3S	Markham	Markham Southeast, Armadale, Legacy, Rouge Fai...
2	L3R	Markham	Outer Southwest, Crosby, Milliken Mills, Brown...
3	L3P	Markham	Central, Markham Village, Mount Joy, Bullock, ...
4	L6G	Markham	Downtown Markham, Markham Centre

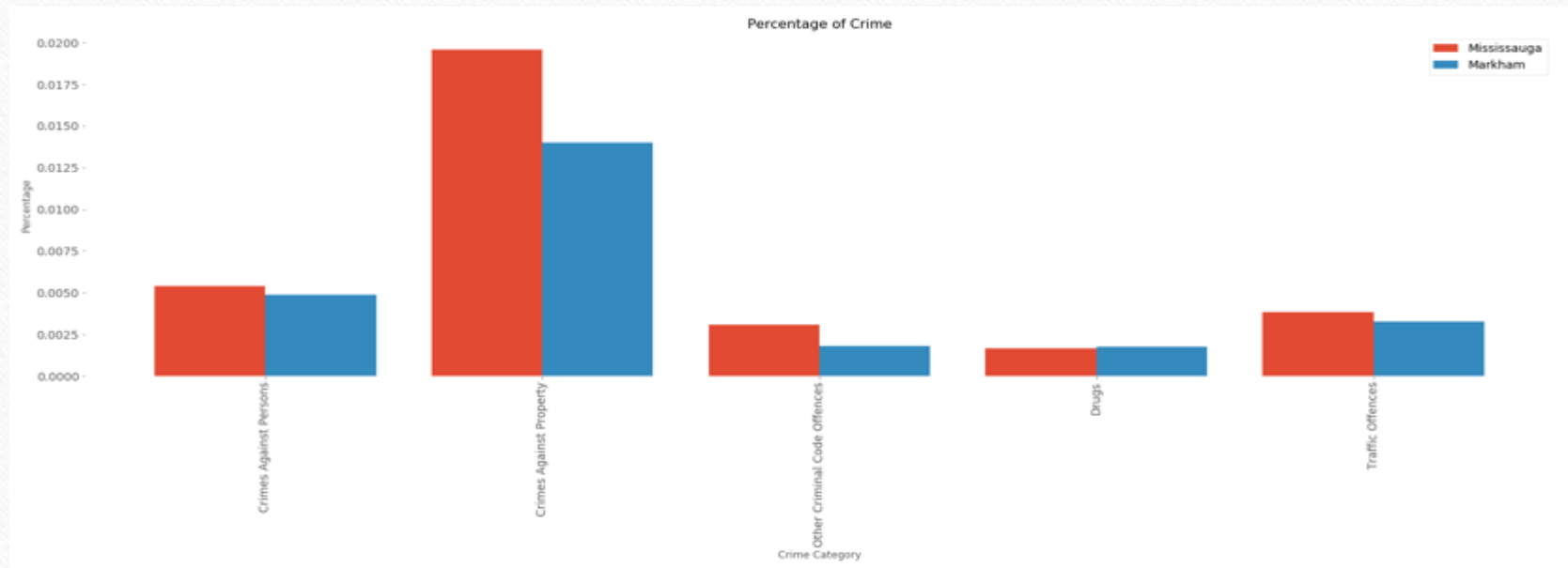
Neighbourhood data

Analysis – Population



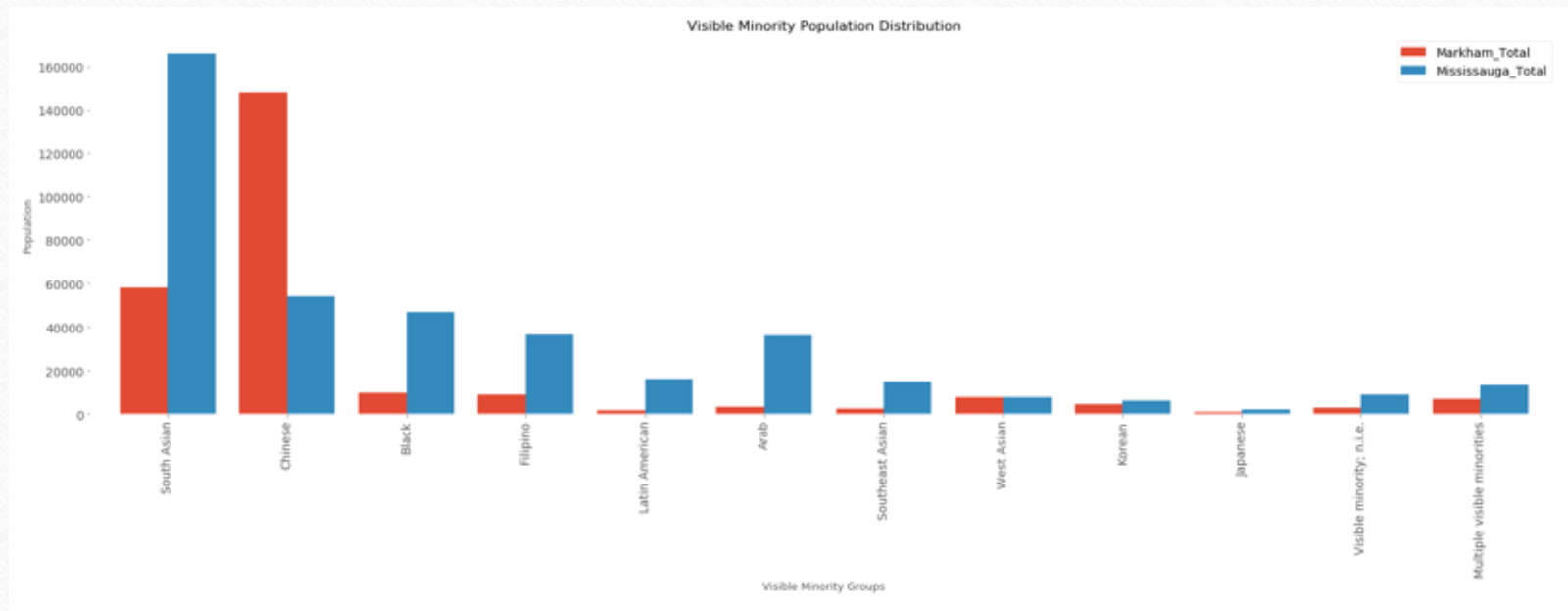
Markham vs Mississauga★

Analysis – Crime



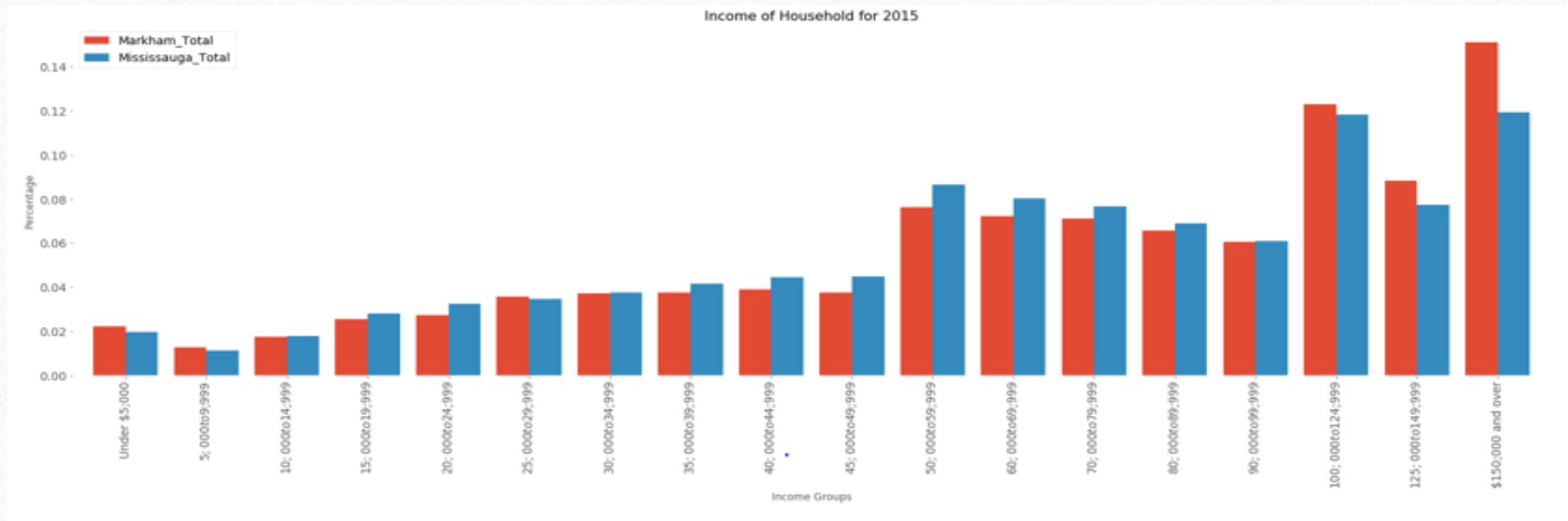
Markham vs Mississauga

Analysis – Visible Minority Population



Markham vs Mississauga

Analysis – Household Income



Markham vs Mississauga

Analysis – Competitor

	Neighbourhood	Neighbourhood Latitude	Neighbourhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Berczy Village, Caledon, Angus Glen, Cathedral...	43.934625	-79.333338	Canada Post	43.935445	-79.317189	Post Office
1	Berczy Village, Caledon, Angus Glen, Cathedral...	43.934625	-79.333338	Canada Post	43.894090	-79.291939	Post Office
2	Berczy Village, Caledon, Angus Glen, Cathedral...	43.934625	-79.333338	Canada Post	43.895254	-79.361142	Post Office
3	Markham Southeast, Amabels, Legacy, Rouge Fal...	43.840285	-79.289179	FedEx	43.828930	-79.298988	Post Office
4	Markham Southeast, Amabels, Legacy, Rouge Fal...	43.840285	-79.289179	The UPS Store	43.817823	-79.289981	Post Office
5	Markham Southeast, Amabels, Legacy, Rouge Fal...	43.840285	-79.289179	Milliken Walk Post Office	43.825325	-79.277483	Post Office
6	Markham Southeast, Amabels, Legacy, Rouge Fal...	43.840285	-79.289179	Canada Post	43.833413	-79.308280	Post Office
7	Markham Southeast, Amabels, Legacy, Rouge Fal...	43.840285	-79.289179	Post Office at Rosell Pharma Plus	43.881488	-79.228988	Post Office
8	Markham Southeast, Amabels, Legacy, Rouge Fal...	43.840285	-79.289179	Loomis Express / DHL	43.835784	-79.315171	Post Office
9	Markham Southeast, Amabels, Legacy, Rouge Fal...	43.840285	-79.289179	Canada Post	43.840047	-79.322535	Post Office
10	Markham Southeast, Amabels, Legacy, Rouge Fal...	43.840285	-79.289179	Rosell	43.881280	-79.228918	Pharmacy
11	Culver Southeast, Crosby, Milliken Mills, Brown...	43.831899	-79.328545	Canada Post	43.840047	-79.322535	Post Office

	Neighbourhood	Neighbourhood Latitude	Neighbourhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Mississauga Valley, East Oakville	43.599425	-79.839455	Canada Post	43.593398	-79.844408	Post Office
1	Mississauga Valley, East Oakville	43.599425	-79.839455	Canada Post	43.581112	-79.849935	Post Office
2	Mississauga Valley, East Oakville	43.599425	-79.839455	Fedex	43.634880	-79.514148	Post Office
3	Mississauga Valley, East Oakville	43.599425	-79.839455	Canada Post	43.588177	-79.880621	Post Office
4	Mississauga Valley, East Oakville	43.599425	-79.839455	Shoppers Drug Mart	43.625622	-79.834745	Pharmacy
5	West Oakville, Fairview, City Centre, East Cra...	43.578945	-79.832868	Canada Post	43.581112	-79.849935	Post Office
6	West Oakville, Fairview, City Centre, East Cra...	43.578945	-79.832868	Canada Post	43.593398	-79.844408	Post Office
7	West Oakville, Fairview, City Centre, East Cra...	43.578945	-79.832868	Canada Post	43.588177	-79.880621	Post Office
8	West Oakville, Fairview, City Centre, East Cra...	43.578945	-79.832868	UPS Store #14	43.615035	-79.881122	Post Office
9	West Oakville, Fairview, City Centre, East Cra...	43.592332	-79.851714	Canada Post	43.581112	-79.849935	Post Office
10	West Oakville, Fairview, City Centre, East Cra...	43.592332	-79.851714	Canada Post	43.593398	-79.844408	Post Office
11	West Oakville, Fairview, City Centre, East Cra...	43.592332	-79.851714	Canada Post	43.592890	-79.872900	Post Office

Markham vs Mississauga

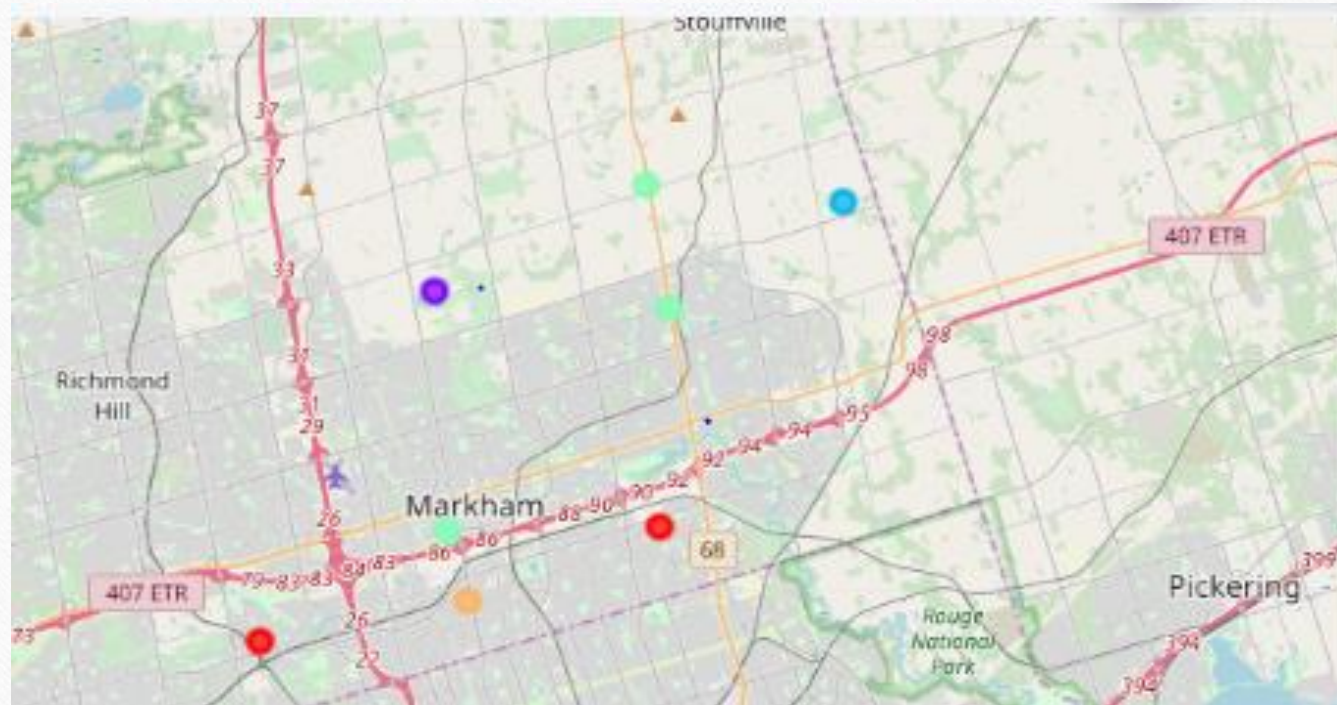
Result

Methodology Category	"Winner"
Age Group Distribution	Mississauga
Crime Rate	Markham
Visible Minority Population	Markham
Household Income	Markham
Competitor Around	Both



Markham

Explore Markham



Recommendation

- Open their first international branch in **Markham**
 - Safer neighbour environment
 - Larger Chinese resident population
 - Public Transit available (airport, highways, etc.)

Q & A

Questions?

Resources

- [1] <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3519036&Geo2=PR&Code2=35&SearchText=Markham&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=3519036&TABID=1&type=0>
- [2] <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3521005&Geo2=PR&Code2=35&Data=Count&SearchText=Mississauga&SearchType=Begins&SearchPR=01&TABID=1&B1=All>
- [3] <https://www.yrp.ca/en/about/statistical-reports.asp>.
- [4] <http://safecitymississauga.on.ca/wp-content/uploads/2019/02/2017-Safest-City-Report-1.pdf>
- [5] https://en.wikipedia.org/wiki/Markham,_Ontario
- [6] <https://en.wikipedia.org/wiki/Mississauga>