

An abstract digital artwork featuring a complex arrangement of glowing, translucent cubes and lines. The cubes are interconnected, creating a sense of depth and perspective. Bright, starburst-like light sources are positioned at various vertices and intersections, casting long, thin rays of light across the dark, textured background. The overall color palette is dominated by deep blues, teals, and blacks, with highlights of white and light blue from the glowing elements.

Business Proposal

IBM CAPSTONE PROJECT

Proposition

A new startup comprising a small team of 10 individuals would like guidance on possible locations for their new company. The group has decided between Toronto, Canada and New York City as possibilities. New York is a major metropolis with a population of 18,804,000. It has five boroughs that are uniquely differentiated from one another based upon surrounding demographics and service potentialities of each neighborhood. Price is significant in this market as it is a highly sought location for businesses. Toronto, Canada's population is around 6,197,000 people. It is noted for its multi-cultural experiences and close proximity to theatres, restaurants and local shopping. Most notably, its compared to New York City as having a similar appeal to many who have visited.

The ultimate premise of this proposal is to provide the client with data that will guide their team's decision in picking the ultimate location for their startup based upon their top choice preferences in a location. The conclusion of this proposal will detail the final results of our analysis and visualizations that will assist the executive stakeholders in their decision making. The methodology that will be used is Foursquare location data to predetermine the most significant attributes that are most beneficial to our clients location choice.

Methodology

The methodology that will be utilized for this project will involve using Front Square API. The API will be called to show comparisons between the two locations and determine which would be most beneficial to the client's goals. The data will be cleansed, wrangled and proportioned to analyze the top ten locations based upon the preferences listed in the discussion.

Several methods will be used to perform the data analysis for this project in especially the use of clustering to visualize the location demographics, competitive advantage and proximity to other businesses. Kmeans clustering will provide much of the information needed to focus on the best location possibilities available to this client.

The Ideal Locations for New Startup

TOP TEN MOST IMPORTANT LOCATION PREFERENCES



Proximity to Business and Services

Most startups would like to be close to services rather than commuting long distances.



Infrastructure

Infrastructure is massively important. No one will feel productive in a building that has poor maintenance or is structurally unsound.



Parking

This is paramount if a vast majority of the workforce is commuting. However, if in NYC public transit is a safe bet.



Demographics

The overall demographics of the community is important especially if its a young company looking to target a specific customer base.



Competition

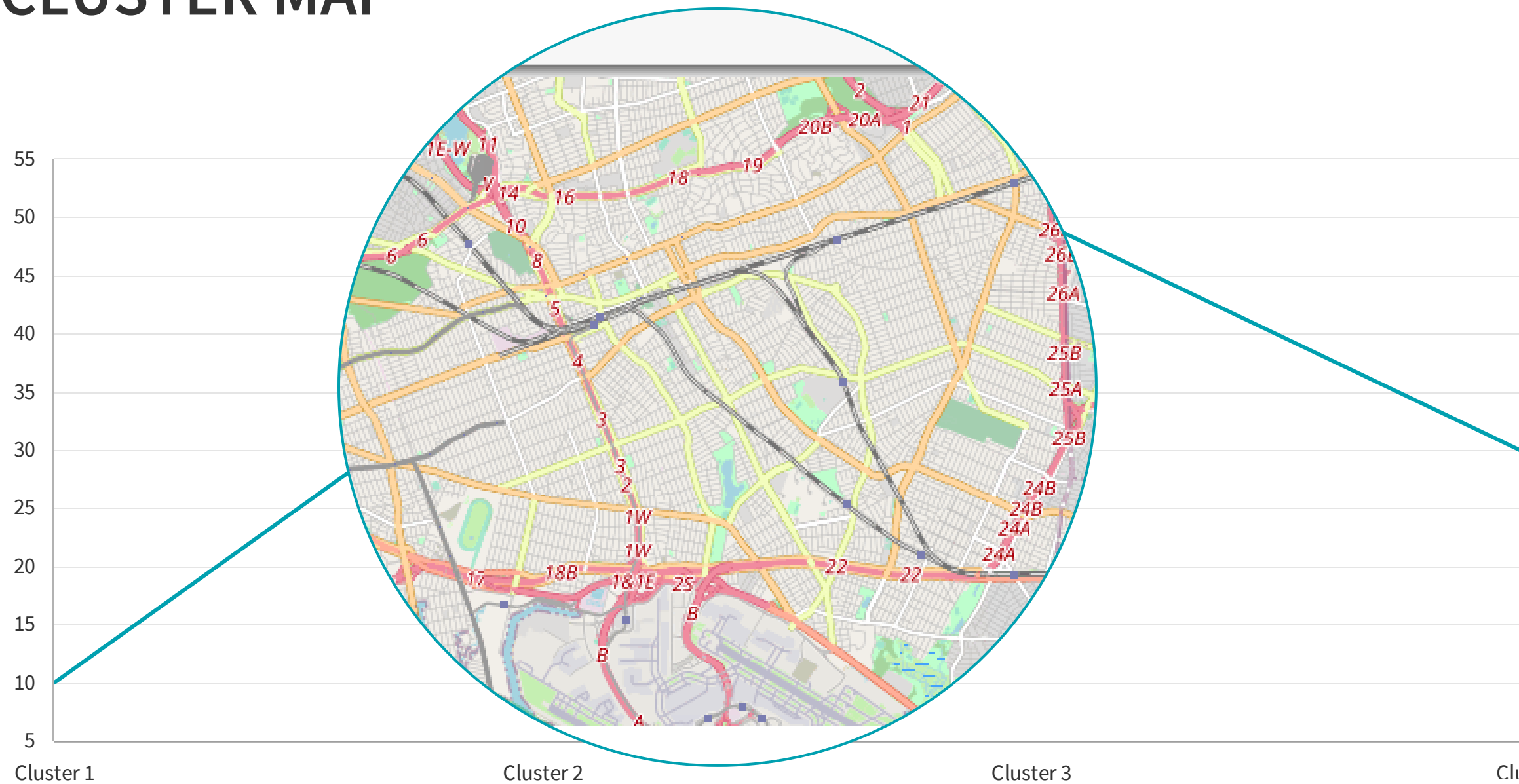
The business can benefit immensely if its in close contact with potential customers of the competition.



Foot Traffic

Dependent upon the location the potential to acquire new customers is magnified with high traffic location.

CLUSTER MAP



Neighborhood	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue
East Elmhurst	2	Donut Shop	Caribbean Restaurant	Coffee Shop	Flower Shop	Chinese Restaurant	Latin American Restaurant	Lake	Gym	Garden
Jamaica Center	2	Mobile Phone Shop	Coffee Shop	Caribbean Restaurant	Pizza Place	Performing Arts Venue	Mexican Restaurant	Sandwich Place	Donut Shop	
Floral Park	2	Indian Restaurant	Grocery Store	Pizza Place	Hobby Shop	Basketball Court	Fast Food Restaurant	Empanada Restaurant	Event Space	Fabric Store
Bellaire	2	IT Services	Laundromat	Convenience Store	Construction & Landscaping	Coffee Shop	Chinese Restaurant	Bus Station	Moving Target	Recreation
Jamaica Hills	2	Pharmacy	Fried Chicken Joint	Indian Restaurant	Donut Shop	Fast Food Restaurant	Chinese Restaurant	Halal Restaurant	Pet Store	Recreation



1	Fast Food Restaurant	Vietnamese Restaurant	Train Station	Hobby Shop	Hakka Restaurant	Grocery Store	E
1	Breakfast Spot	Rental Car Location	Electronics Store	Pizza Place	Medical Center	Mexican Restaurant	
1	Coffee Shop	Korean Restaurant	Convenience Store	Indian Restaurant	Hakka Restaurant	Grocery Store	E
1	Thai Restaurant	Athletics & Sports	Bakery	Bank	Hakka Restaurant	Fried Chicken Joint	
1	Playground	Vietnamese Restaurant	Coffee Shop	Hakka Restaurant	Grocery Store	General Entertainment	F
1	Discount Store	Coffee Shop	Hobby Shop	Bus Station	Department Store	Convenience Store	
1	Bakery	Bus Line	Intersection	Soccer Field	Bus Station	Fast Food Restaurant	
1	American Restaurant	Motel	Movie Theater	College Stadium	Hakka Restaurant	Grocery Store	E
1	General Entertainment	Skating Rink	Café	College Stadium	Vietnamese Restaurant	Coffee Shop	
1	Indian Restaurant	Vietnamese Restaurant	Latin American Restaurant	Pet Store	Chinese Restaurant	College Stadium	
1	Bakery	Smoke Shop	Breakfast Spot	Middle Eastern Restaurant	Vietnamese Restaurant	College Stadium	



Discussion



- The most important objectives is location and proximity to competition, services and general entertainment.
- Analysis of the data concludes that Bellaire in New York's Queens borough is the most suited for their objectives.

Demographics analyzed exclusively of the data suggests that many of the inhabitants of the area in professional management occupations with diversity represented from a vast range of countries.

Discussion Continued~



- Most of the area has range of services including IT support services that would present a competitive advantage to the client.
- Transportation can be utilized in the form of public or private means. Parking can be secured through paid or free services.
- There is a decent amount of foot traffic to the top venues within this area or cluster that provide a variety of restaurants, grocery and business services that could become potential clients for the startup.

A photograph of a wooden desk in a high-rise apartment. On the desk is a laptop displaying a nature wallpaper, a smartphone, and a black coffee cup. In the background, a dense urban skyline is visible through a window.

CONCLUSIONS

Data Analysis Results

Conclusion

- The Bellaire location is preferable to the client's needs as evidenced by the data indicating that all points discussed were met by the location.
- Scarborough provided some services, but was lacking in competitive technical businesses in the various locations.
- Many of the client's employees could benefit from access to services within the area including parking.
- There a number of civil engineering projects in place to upgrade infrastructure in the Bellaire neighborhood.
- The demographics are diverse providing a significant opportunity for potential clients.