Capstone Project -The Battle of the Neighborhoods

IBM: Applied Data Science

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Introduction: Business Problem

- The project aims to maximize the potential of start-ups to start a business in the city of Markham by demonstrating the growing prosperity of the city. In their development, economy and talent of choice. Then, the city of Markham as the home of life and most of the cities that launch their families endanger their own capital, time, and effort, and only for businessmen who are ready to bet on their future. I will succeed. To maintain talent within Canada, the federal government has devised a new program called Global Talent Stream. This helps fast-growing Canadian tech companies recruit and retain highly skilled talent from around the world.

Introduction: Business Problem Con’t

- I chose the city of Markham. It leverages Four Square location data to solve imaginary business opportunities for startup technology companies. Reasons to choose a background for Markham City in Markham City. Markham is located in the Greater Toronto Area in southern Ontario, about 30km northeast of downtown Toronto. Markham changed its status from the town of Markham to the city of Markham on July 1, 2012. It produces nearly 22% of the workforce and has over 1000 technology and life sciences companies. Most high-tech companies such as IBM, Honda Canada, Hyundai, AMD, Johnson and Johnson, Avaya, Motorola, Oracle, Toshiba, Huawei, Honeywell, CDI, Toshiba, GE Energy, Informatics, Nexeya Lenovo, Genesys. This also means that the market is very competitive. Because it is highly developed, it also has a high city cost to do business. Therefore, new business ventures and expansions need to be carefully analyzed to mitigate risk and regain ROI. Markham is in the process of building and developing its own downtown with more entertainment districts, restaurants and community parks with high-rise condominiums, and a university.

Data

- **Based on business issues**
- The most important factors that influence the decision are:
- Number of existing schools in the neighborhood
- Community center for children and the elderly
- From school and kindergarten to high school, university and university
- Hotel golf course and restaurant with all the space to engage in business-related activities
- To define the neighborhood, we decided to use a grid of spaced locations around the center of downtown Markham.
- You need to extract / generate the required information according to the data source.
- Candidate area centers are generated algorithmically, and the approximate addresses of those area centers are obtained using ** Google Maps API reverse geocoding.
- The number of restaurants in all neighborhoods and their types and locations are obtained using the ** Foursquare API **
- Let's create the latitude and longitude coordinates of the center of gravity of the candidate neighborhood. Create a grid of cells that covers the area of interest. A radius of 300,000 centered on the downtown city of Markham.

Thank you for watching!