

Smart Security Devices

Canadian Market
Viability



Federicton Canada

The target city





The Problem

Finding the next neighbourhood to target in Federiction.

- With the concept of IOT (Internet of Things) where all our devices are connected to each other via internet connections, technology companies have been exploring the market of smart home alarm systems.
- Companies who sell “Smart” Security devices mainly offer their services through a smartphone app which is connected to other devices such as the Home security alarm and micro alarms which can be set off by a potential victim before he or she is attacked
- Companies need to grow and expand to become more profitable and provide value to a larger market. Not every “Smart Home” company is backed by a tech giant hence for some companies deep analysis needed to identify the next market to expand to

Datasets

The data was taken from the following sources

- 1. Crime by neighbourhood 2017 / Crime par quartier 2017
http://datafredericton.opendata.arcgis.com/datasets/0ff4acd0a2a14096984f85c06fe4e38e_0
- 2. Fredericton - City, New Brunswick, Canada
<http://www.city-data.com/canada/Fredericton-City.html>
- 3. Fredericton - Wikipedia
<https://en.wikipedia.org/wiki/Fredericton>
- 4. Fredericton - City, New Brunswick, Canada
<http://www.city-data.com/canada/Fredericton-City.html>



Objectives

The aim of this presentation is to Identify the following:

- To identify the best neighbourhood for home security devices
- To identify the best neighbourhood for the wearable devices.



Methodology



Step by step

- Import required libraries and packages.
- Load each datasets.
- Explore each datasets with descriptive statistics
- The top 5 neighbourhoods and crimes were identified and the best location based on the cross-reference of both were used.
- Use Foursquare data to explore specific locations of interests.
- Perform K-means clustering algorithm.
- Produce useful visualization of key results.

Libraries used

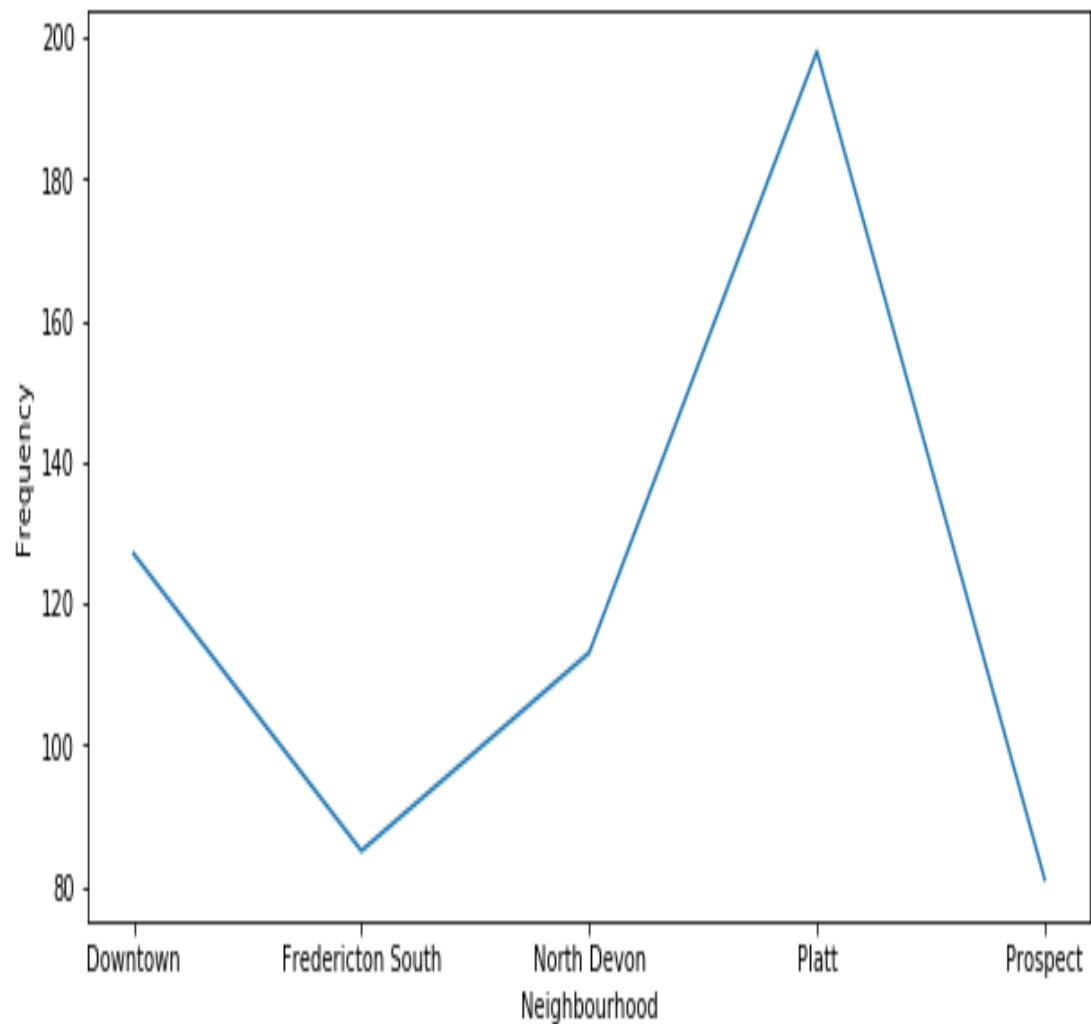
- Pandas
- Sci-kit Learn
- Seaborn

Key Findings

Descriptive statistics

-

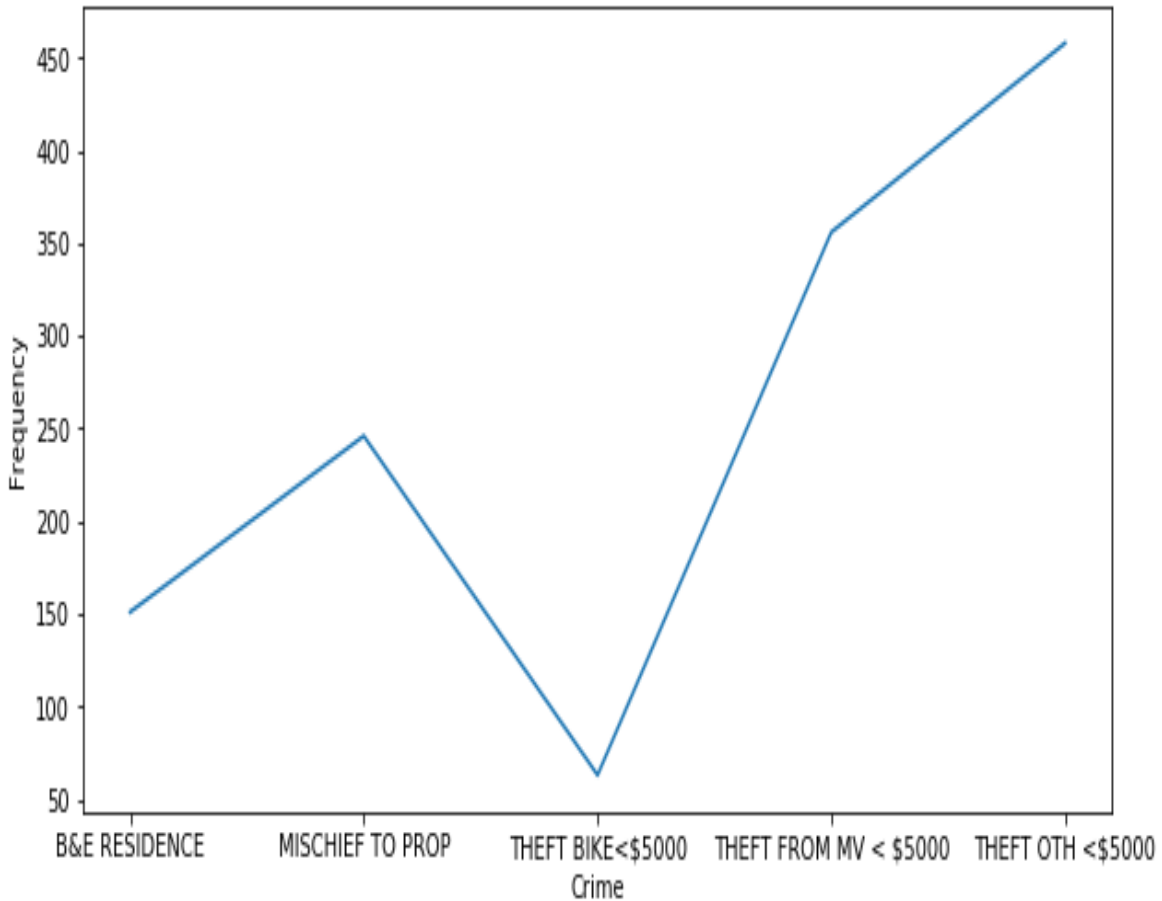
	Frequency
count	66.000000
mean	22.121212
std	34.879359
min	1.000000
25%	3.000000
50%	9.000000
75%	23.250000
max	198.000000



Key Findings

The key findings of this project were the top 5 Neighbourhoods in terms of crime Frequency

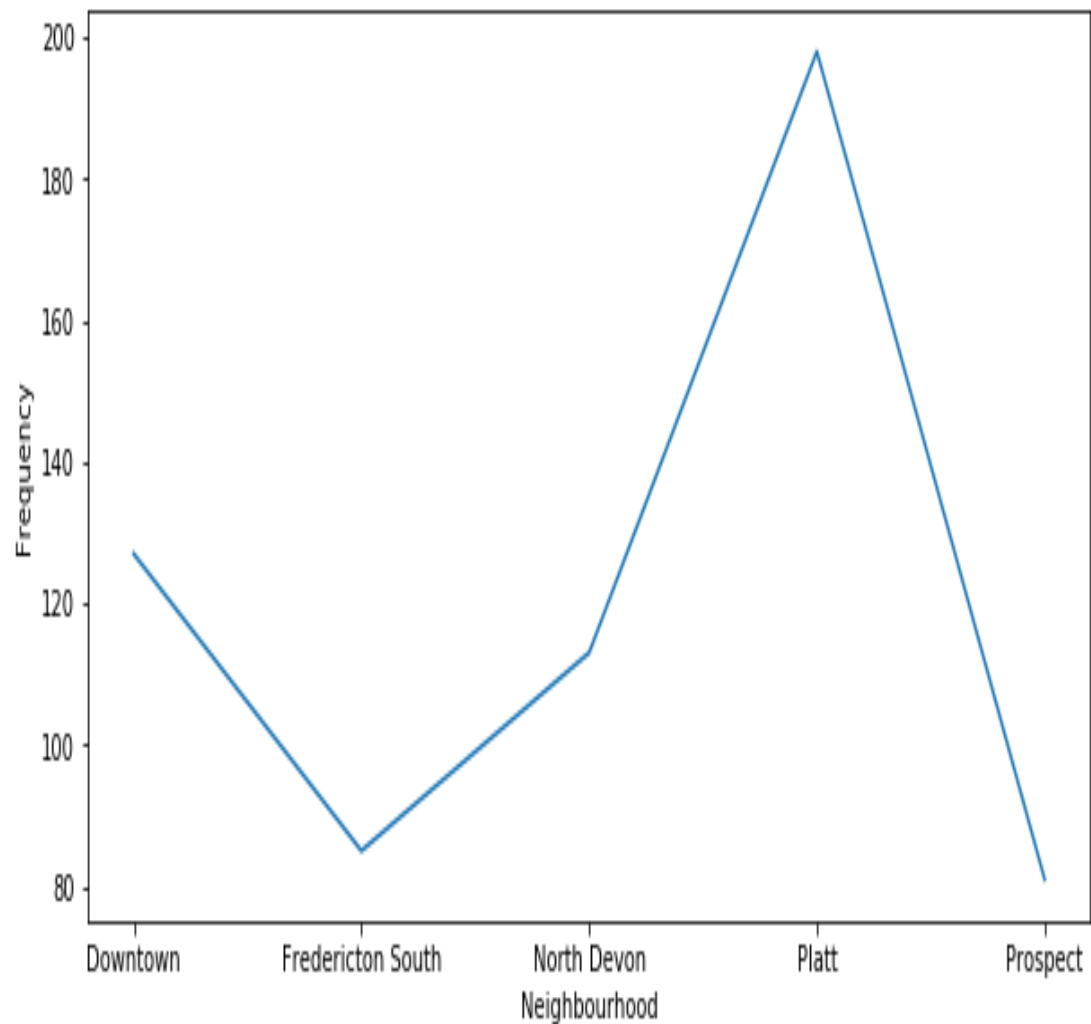
- 1 Platt
- 2 Downtown
- 3 North Devon Neighbourhood
- 4 Fredericton South
- 5 Prospect



Key Findings

The key findings of this project were the top 5 Crimes in terms of crime Frequency

- 1 THEFT OTH <\$5000
- 2 THEFT FROM MV <\$5000
- 3 MISCHIEF TO PROP
- 4 B&E RESIDENCE(Our Prime Target)
- 5 THEFT BIKE <\$5000 Crime



Key Findings

The key findings of this project were the top 5 Neighbourhoods in terms of crime Frequency

1
Platt

2
Downtown

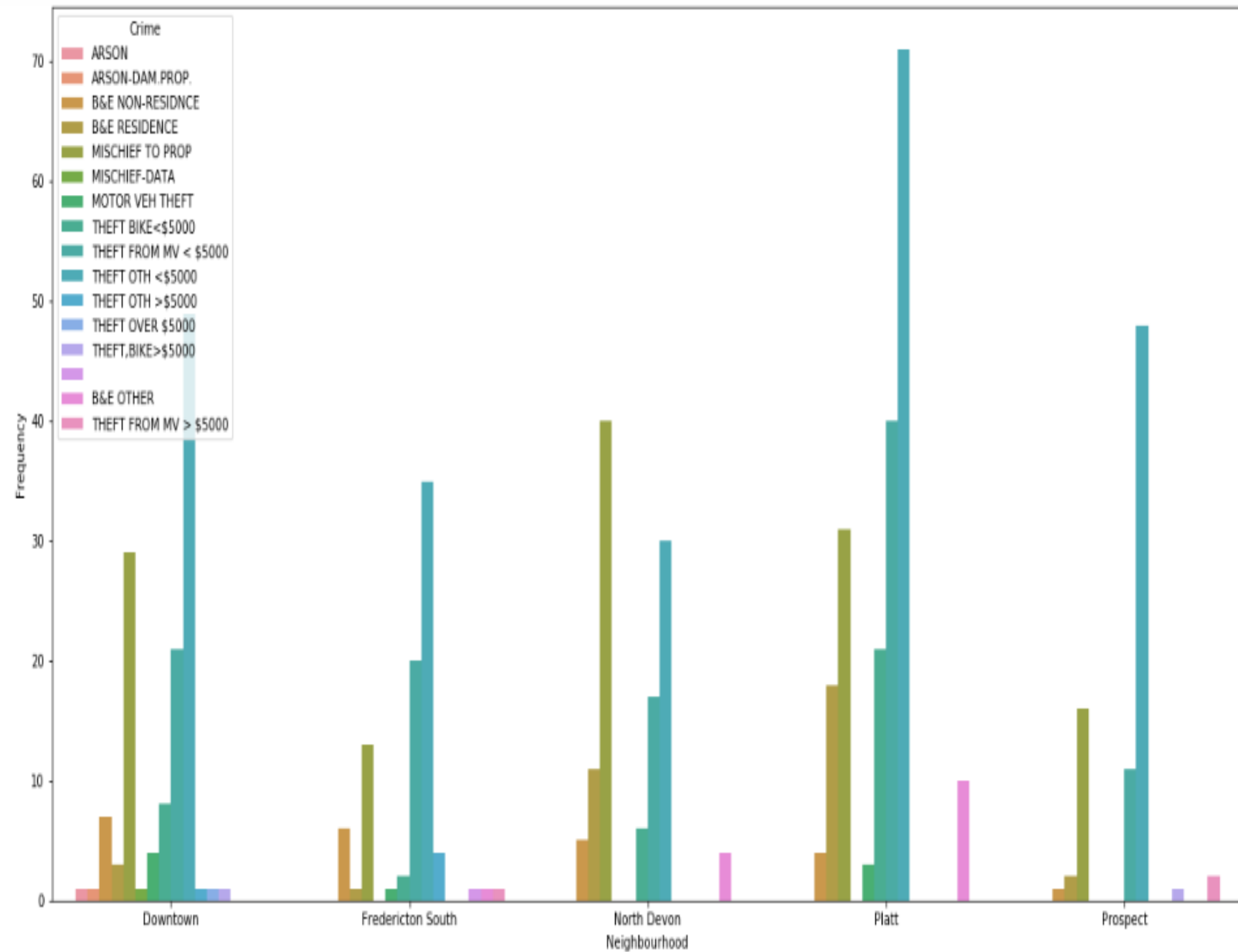
3
North Devon
Neighbourhood

4
Fredericton South

5
Prospect

The Prime Neighbourhood is...

North Devon Neighbourhood because it has the highest cases B&E Residence (Breaking & Entr Residence) while Platt cannot be ignored because it has the high crime occurrences hence both of them are to be chosen.



THANK YOU!

