**Capstone Project**

**The Battle of Neighborhoods**

**Report**

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1. **Introduction**

**1.1 Background**

It is found that people in the UK shift houses a lot. But what causes them to move their houses? Shifting is a very tedious and painstaking process, there must be a strong reason behind their movement. According to a survey which included 1,000 people, slightly more than half said that the chief motivation was for upping sticks. Other popular reasons for moving were access to shops and amenities (35 per cent), being close to family/friends (32 per cent), reducing running costs (31 per cent) and needing a bigger home (30 per cent).

Each year, approximately 4-5% of the population will move to a different city or county in the UK.

London being the city of choice, is quickly increasing in population density. On a yearly basis, nearly 200,000 people move from elsewhere in the UK to live in London, while only 25,000 move the opposite way.

**1.2 Problem**

A survey of 2,00 people by “Which?” has shown that 18 per cent of the people have trouble finding a home in an ideal area which ticks all the right boxes.

Neighborhood can play a very important role in choosing a home and so this is a problem that I wish to solve.

**1.3 Aim**

Aim of this project is to find clusters of neighborhoods which are suitable for people to move in.

**2. Data Requisites**

**2.1 Acquiring Data**

The data required for this project is compiled from various data sources. The first data source comprises of the London Crime Data which shows the crime per borough in London.

The dataset contains the following columns:

* **lsoa\_code:** code for Lower Super Output Area in Greater London.
* **borough:** Common name for London Borough
* **major\_category:** High level categorization of crime.
* **minor\_category:** Low level categorizations of crime within major category.
* **value:** Monthly reported count of categorical crime in a given Borough.
* **year:** Year of reported counts, 2008-2016
* **month:** Month of reported counts, 1-12