

Geospatial Analysis of Hong Kong for Optimal Sportswear Store Location

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1. Introduction

This project aims to assist in choosing the optimal location in Hong Kong for a sportswear store. The sportswear market has been growing in Hong Kong due to more active lifestyles, the proliferation of gyms and certain related fashion trends (e.g. athleisure, activewear). Starting a sportswear business seems promising, but assuming that one's business model involves brick-and-mortar stores, a sportswear store's location is a crucial success factor.

In this data analytics project, the primary metric used to assess an area's potential will be its number of fitness, clothing or shopping-related venues. Another metric will be each area's most common venue types. A greater number of venues in an area implies greater interest in fitness lifestyles and/or fashion, and the presence of a "fitness/fashion ecosystem."

The project intends to help existing sportswear companies looking to optimize their current location strategy, new start-ups looking to enter the market, and Hong Kong sportswear market analysts.

2. Data

This project will utilize the below data sources:

- Hong Kong Constituency Areas GeoJson: Border data for each of Hong Kong's Constituency Areas and corresponding Districts
 - o Sourced: Hong Kong Geodata Store <<https://geodata.gov.hk/gs/view-dataset?uuid=ddd39cbe-5f10-4dbd-96e7-7a4883e37388&l=en&sidx=0>>
- Nominatim Geocoder API: Coordinates (latitude & longitude) of Hong Kong areas
- Foursquare API: Venue data for each of Hong Kong's areas

The Hong Kong Constituency Areas GeoJson provides a lot of useful data, including each of Hong Kong's Constituency Areas in 2019, the Districts they belong to, and the coordinates for their borders. We will use the names of each Constituency Area and

District to find the coordinates and venues from the Nominatim Geocoder and Foursquare API's. This will be the basis of our analysis. Furthermore, the border data from the GeoJson will be used for generating our choropleth map, where border lines enclose each area and allow for shading of the area.