

Coursera Capstone

Applied Data Science Capstone

Project Report
On

Opening Juice Bars in Dhaka, Bangladesh

By

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Introduction

Fresh fruits and vegetables can change everything. They boost our immune system, they protect us against cancer, and they help with weight management. Once consumers become aware and experience the amazing feeling that accompanies a healthy diet, their buying habits change forever. As education is making consumers extremely health conscious and hungry for a revamped diet, juice bars can be handy to meet the needs of those in their communities. However, in crowded cities like Dhaka, peoples are not habituated with taking fruits in general.

Education is changing everything. More than ever, people are aware that it is on the cusp of alarming unhealthy eating habits. In busy city life, people are aware of healthy lifestyle and food habits and rapidly changing preferences of consumers. Eventually, Juices and smoothies are becoming a vital part of consumer health and convenience.

In densely populated area like Dhaka, settings up multiple juice bar is promising. But location is a good indicator for this type of business to grow faster. It requires serious consideration of analysis of neighborhoods and a better location as well.

Business Plan

This capstone project will analyze the neighborhood of Dhaka city and help investors to come up with best locations to setup multiple Juice Bar in the city. Using data science methodology and machine learning techniques specially clustering, this projects aims to find best locations for opening multiple Juice Bar in Dhaka City by analyzing neighborhoods.

Data

Performance of machine learning algorithms highly depend of proper datasets. This project will require following datasets.

- List of neighborhood of Dhaka city
- Location information of the neighborhoods for better visualization
- Venue data specially related to Juice Bar Industries in Dhaka.

Data Acquisition

Data will be collected from multiple sources available in web using popular Python packages.

- Neighborhood data is not so much publicly available for Dhaka city. However, The Wikipedia page (https://en.wikipedia.org/wiki/Category:Neighbourhoods_in_Dhaka) of Dhaka, Bangladesh contains 42 neighborhoods. I will use BeautifulSoup and Python requests packages for scrapping.
- The geographical coordinates for the neighborhoods will be extracted using Python Geocoder Packages which will give latitude and longitude information.
- And finally venues information will be collected using Foursquare API. Foursquare has 150+ million places and used by large amount of developers around the Globe.