## 1. INTRODUCTION

## 1.1 BACKGROUND

Auckland is a large metropolitan city in the North Island of New Zealand. The most populous urban area in the country, Auckland has an urban population of about 1,467,800 (June 2019), which is 29.9 percent of New Zealand's population. Auckland ranked third in a survey of the quality of life of 215 major cities of the world (2015 data).

Low fruit and vegetable intake are a risk factor for global mortality. Globally, approximately 1.7 million (2.8 percent) of deaths worldwide are attributed to low fruit and vegetable consumption.

## 1.2 BUSINESS PROBLEM

The objective of this project is to analyse and find out the best locations in the city of Auckland, New Zealand to open a new Fruits and Vegetable store. Data science methodologies, statistical and machine learning techniques like clustering are being used in this project to provide solutions to answer the business question: "If an investor is planning to open a new Fruits and Vegetable store in the city of Auckland, New Zealand, where would you recommend them to open it?"

## 1.3 TARGET AUDIENCE OF THIS PROJECT

This project is particularly useful to the investors who would like to open or invest in Vegetable and Fruit stores in the city of Auckland, New Zealand. It was found that Food and vegetable industry have no major players with a market share of greater than 5% in New Zealand, also they eat 1,800 tonnes of fruit and vegetables per day. A recent survey by the 5 + A Day Charitable Trust found that New Zealanders are rated among the highest consumers of fruit and vegetables globally. A 2015 joint study between Auckland, Otago and Oxford Universities investigated the potential impact of price subsidies on fruit and vegetables in New Zealand. It found that a 20 percent subsidy on fruit and vegetables, with the resulting impact on affordability, could prevent or postpone around 560 deaths a year. So being one of the busiest cities in New Zealand, Auckland is the best city to start with the project.

5 + A Day is a charitable trust set up to encourage New Zealanders to eat five or more servings of colourful, fresh fruit and vegetables every day. In New Zealand, almost one-third of adults are obese, with a further 35 percent being overweight. Considering these factors this is the right time to attain a monopoly in Fruits and Vegetable market in the Auckland city as the consumption increases with growing population and based on the dietary recommendations.