Capstone 1 Project Proposal
Grocery Shopping Online Data

Overview

The online market started slow many years ago. Over time, more and more categories have been added to the marked. Groceries came later to the market, because of the nature of the products. Nowadays it is very common for grocery stores to offer ordering online and pickup in store or delivery. The customer preferences change. The organization of stores change to reflect customer habits.

Many retailers offer online ordering. Going online, one can find classification of best stores, which stores offer ordering, how fast delivering is and all other questions a customer may have about online shopping.

Customers preferences changed. They want the best possible product for the best possible price. They want the product to be fresh. They want the product now.

Problem

Customers have habits that may change little or more over time. We want to improve customer experience shopping online, and (may be) in the store.
- We can investigate which products are often bought together.
- Which products are most often ordered online.
- How often a customer comes back to shop.

Client

The client for this survey is a grocery or department store that offers grocery to its customers. By answering the above questions, the client can change the way the incentives for customers can be given, and increase the traffic and revenue. The investigation may prompt which product could be offered in a strategic locations, so customers can increase their spending in store. We can find ways to motivate customers to come back to store to buy more products.

Data

The main data set is Instacart Online Grocery Shopping Dataset 2017. It contains more than 3, 000, 000 orders. The data includes date and time of order, how many prior

orders the customer has, all items in the order. The data is anonymized, so the stores or customers cannot be identified. This also means, the prize of the product is not listed. The data is in form of a database, with two tables.

LInk to data:

https://data.world/carlvlewis/instacart-online-grocery-shopping-dataset-2017

Project Outline

1. Clean data
2. Organize data to visualize relationships
3. Analyze data to train models to predict customer behaviors. Which products would be reordered; when will customer come back.

Final products

I.   Powerpoint Presentation;
II.   Jupyter notebook;
III. Jupyter report comments.