

# Instacart

AN ONLINE GROCERY STORE  
WOULD LIKE TO UNCOVER MORE  
INFORMATION REGARDING THEIR  
SALES PATTERN AND CUSTOMER  
PURCHASING BEHAVIORS THAT  
CAN BE PROFILED USING  
EXISTING DATA.



## Objectives

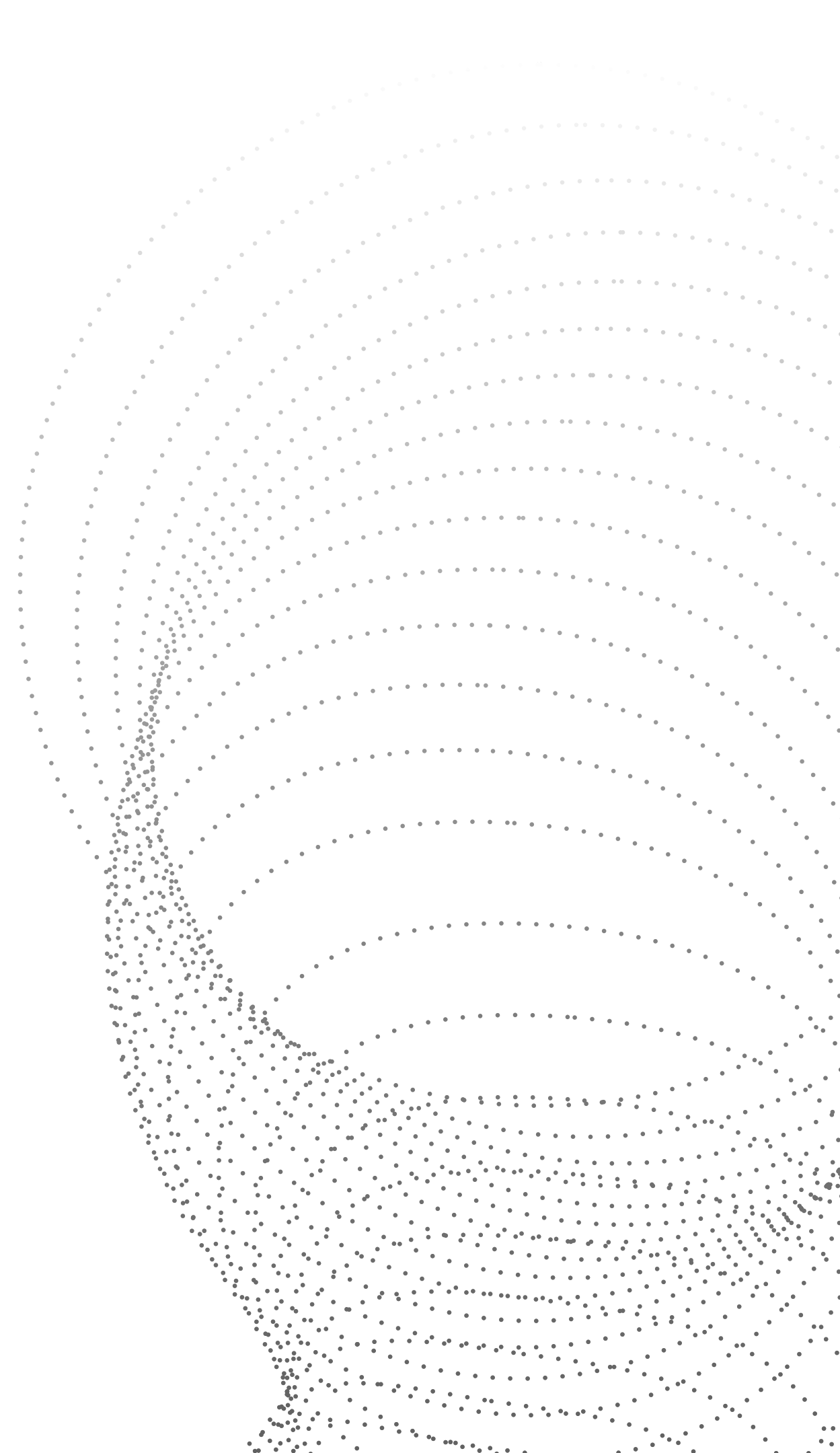
Instacart is considering a marketing strategy that intends to target different customers with applicable marketing campaigns to see whether they have an effect on the sale of their products.

## Key Questions

- What are the busiest days of the week?
- Are there particular times of the day when people spend the most money?
- Are there certain types of products that are more popular than others?
- Is there a connection between age and family status in terms of ordering habits?

## Dataset

The Instacart Online Grocery Shopping Dataset 2017



# Instacart Analysis Process

## DATA PREPARATION

- Create new dataframes
  - Rename columns
  - Fix mixed-type variables
- Remove missing values
  - Remove duplicates
- Combine and export data

## CONDUCT ANALYSIS

- if-statements
- user-defined functions,
  - loc() function
  - for-loops
- Group Data
- Aggregating Data

## VISUALIZE INSIGHTS

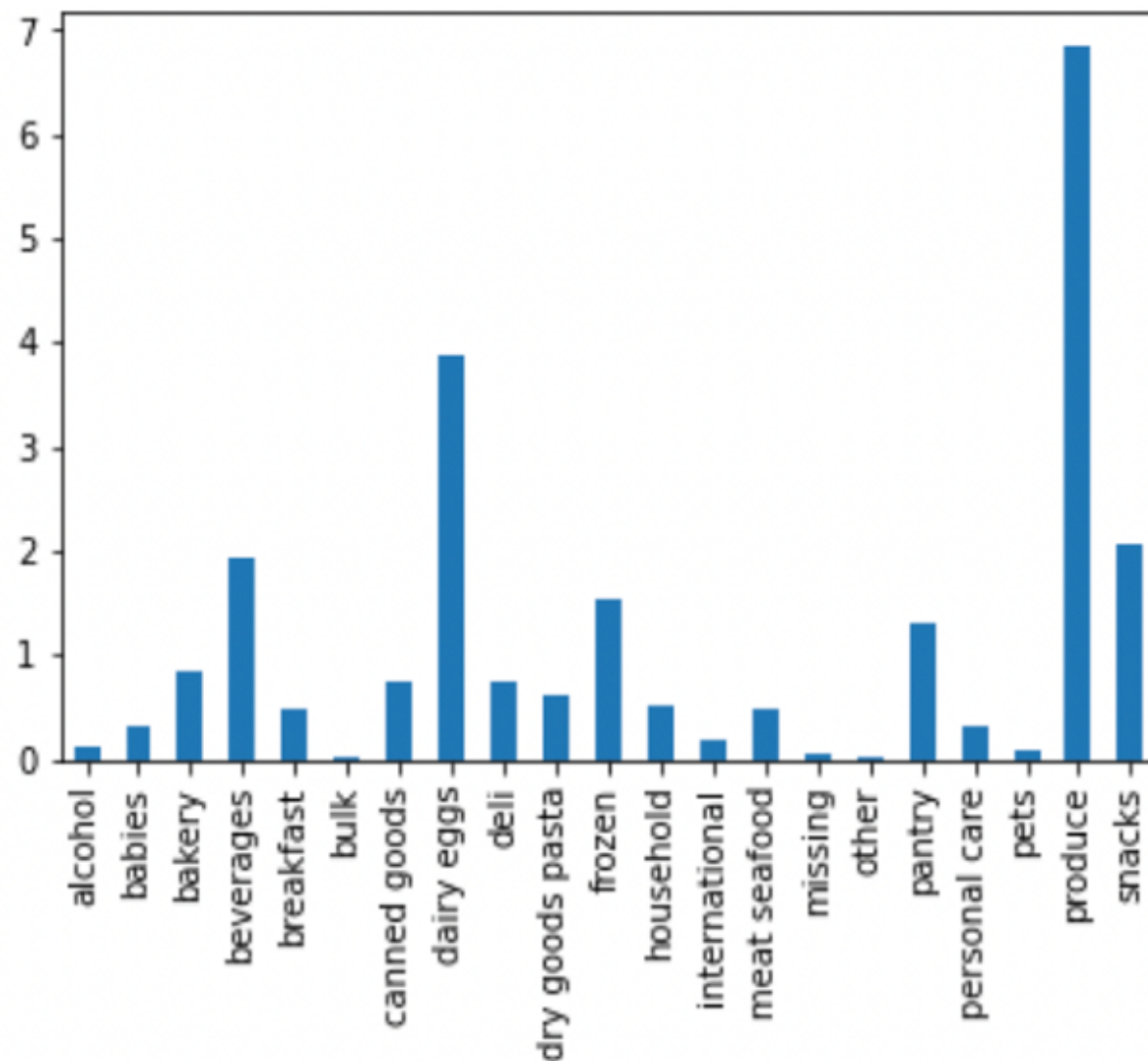
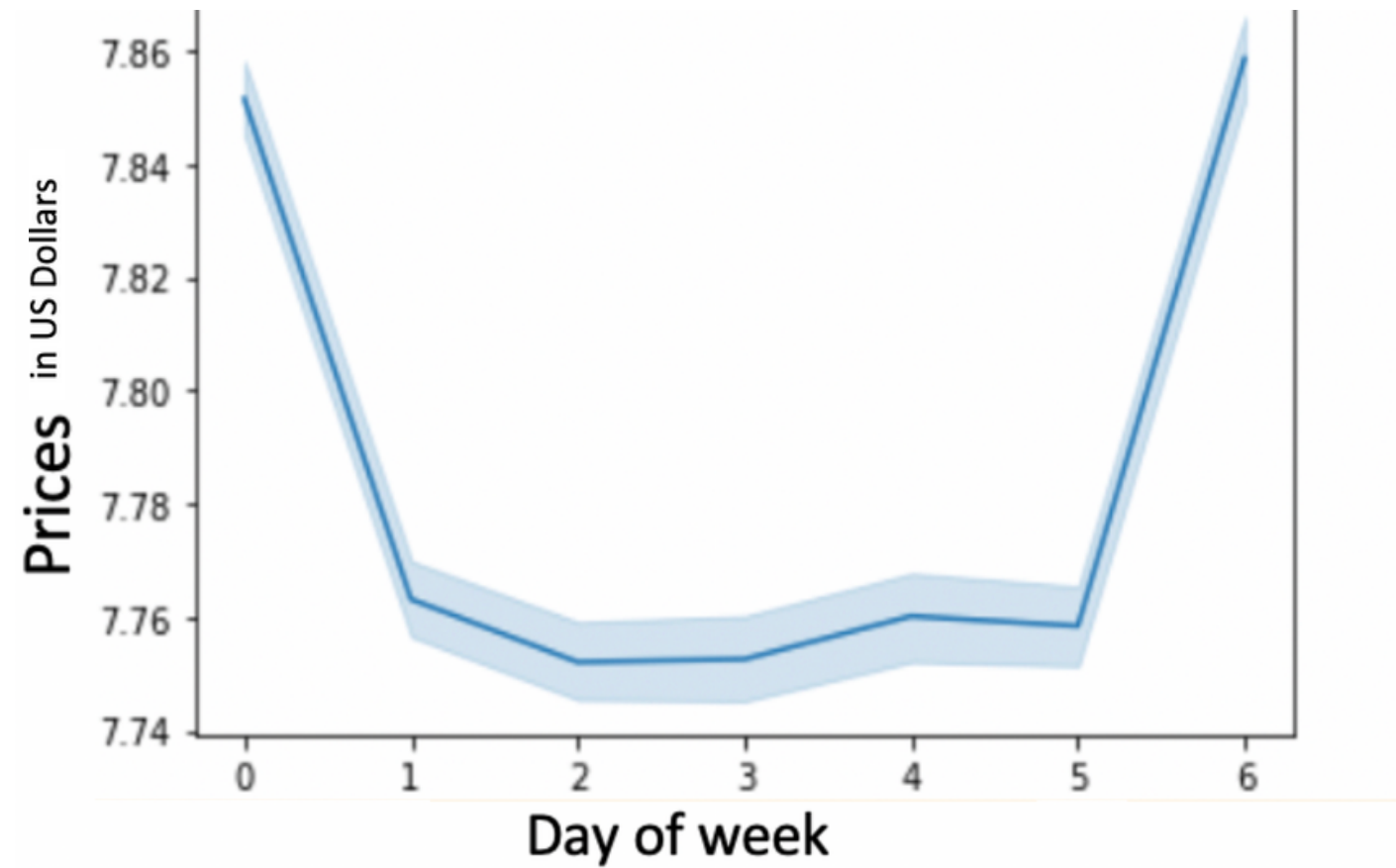
- Create histograms bar charts, line charts, and scatterplots
- Analyze order behavior of different customer groups
- Create new columns and flags for customer profile

Tools used: PostgreSQL  
'Python\_Project' [Github](#)



## Legend

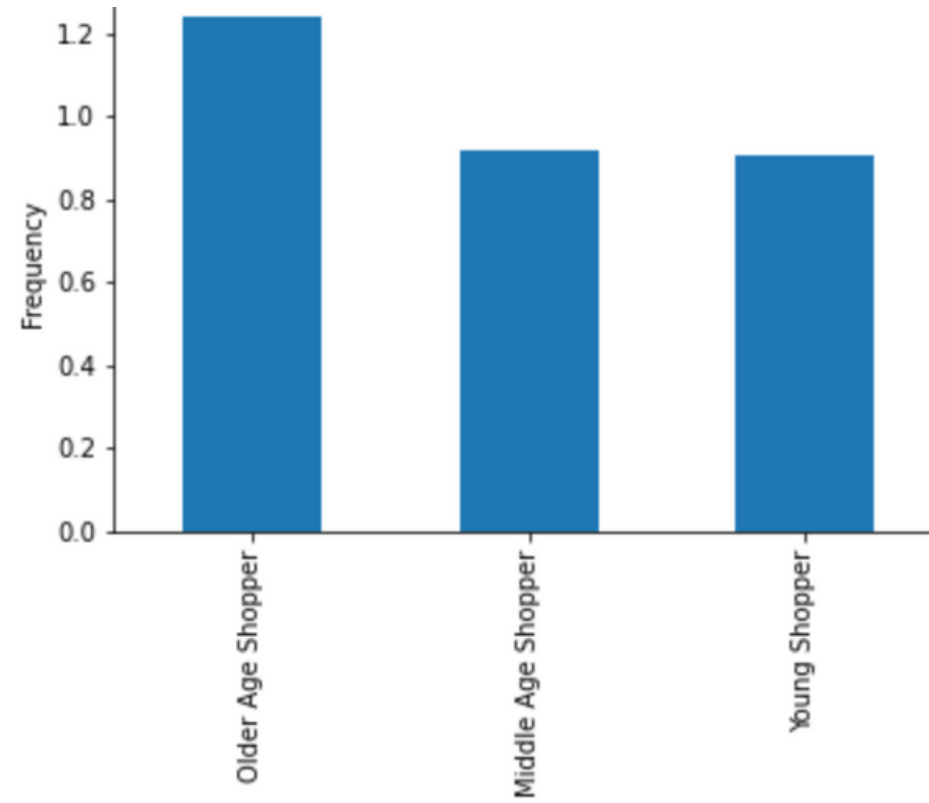
0 = Saturday  
1 = Sunday  
2 = Monday  
3 = Tuesday  
4 = Wednesday  
5 = Thursday  
6 = Friday



# Customers spending habits

Customers tend to shop more on the weekends: Sundays, and Saturdays which is most likely due to families stocking up food products over the weekend.

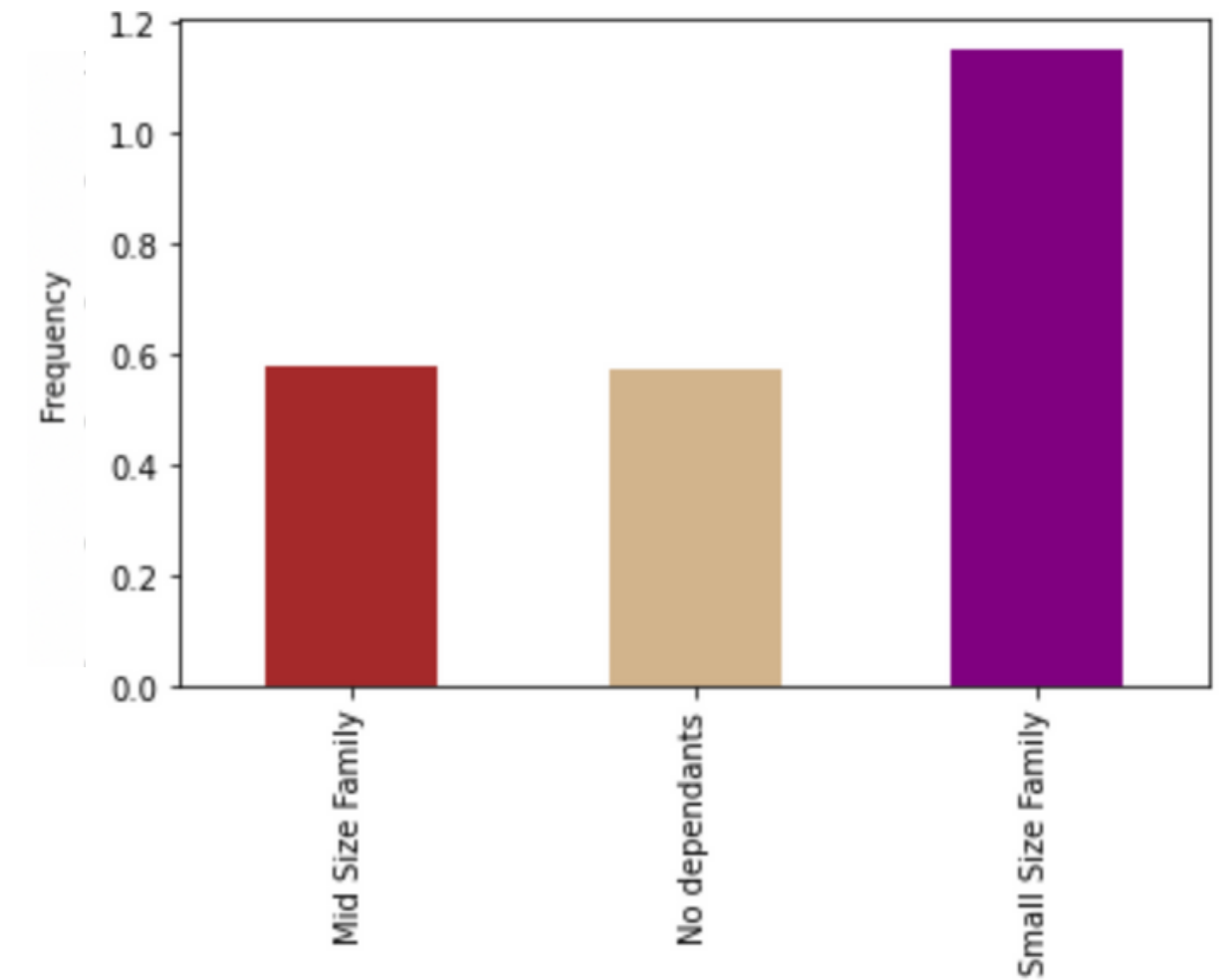
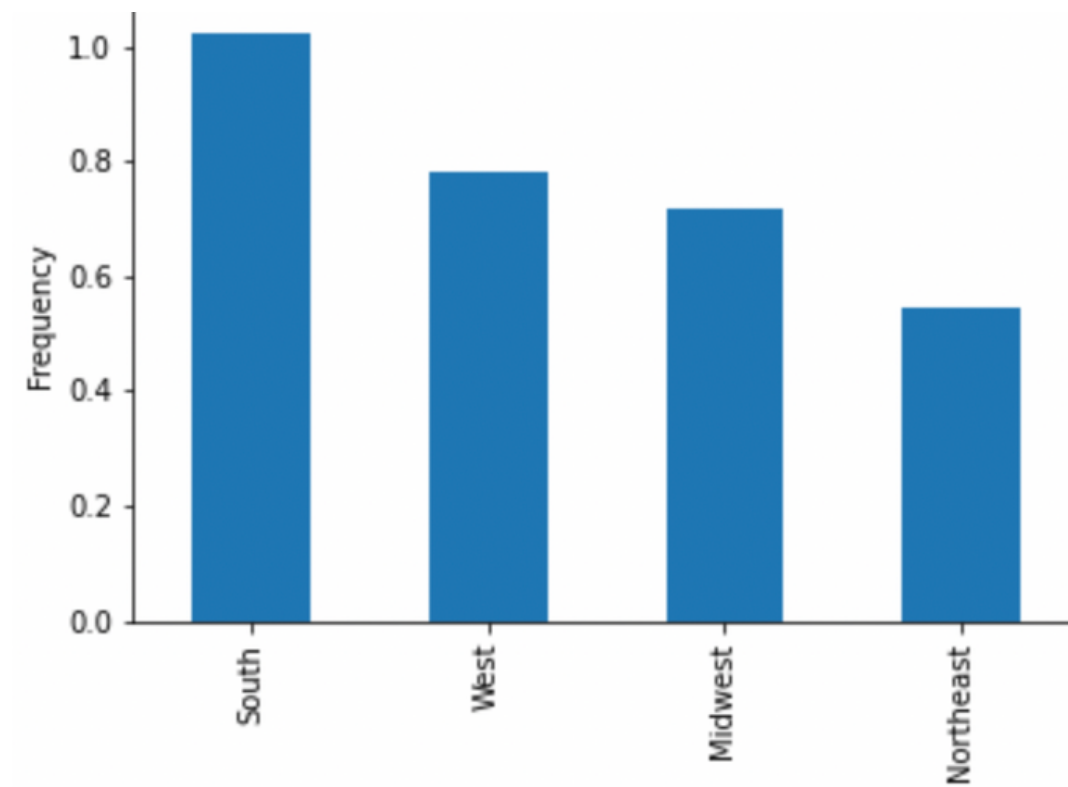
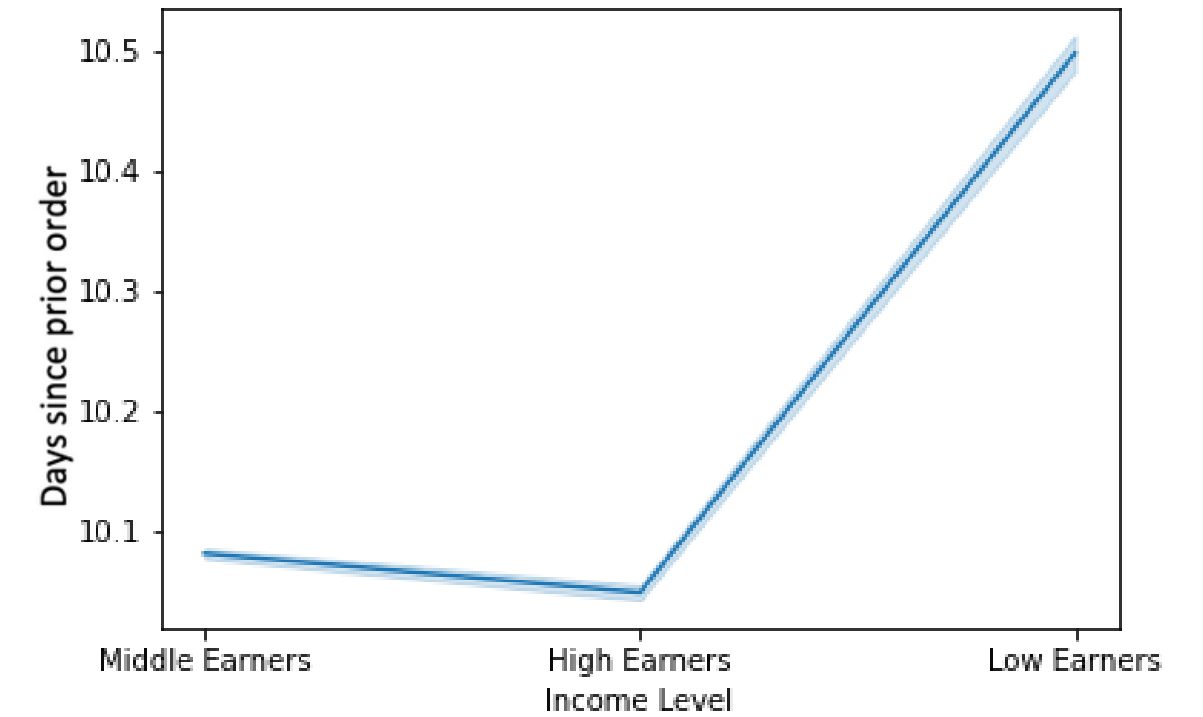
Customers also spend the majority of their money in the produce section of Instacart's departments, followed by dairy eggs then snacks.



## CUSTOMER PROFILE

Instacart's customers tend to:

- Has a small size family
- Consist of Older age shoppers
- High-income earners tend to frequently place more orders
- Live in the South and West region



# Instacart Final Analysis

## CUSTOMER PROFILE ANALYSIS

Shoppers who range from 56 years of age and above tend to shop more through Instacart, followed by middle age shoppers. This explanation could be due to economic status from household status, as well as several external variables.

Instacart's data indicates that shoppers tend to spend more money in the produce section of the grocery store. The produce department sales pattern must stay relatively consistent with revenue trends, therefore influencing Instacart's products.