Instacart

Grocery Basket Analysis

Overview

COMPANY

Instacart is an online grocery store that operates through an application and want to uncover more information about their sales pattern.

OBJECTIVE

Analyze the data based on customer's purchasing behaviour and suggest Instacart some marketing strategies.

DATASET

There are open source data sets from Instacart including customers, departments, orders, products information

Analysis

Data Understanding and Preparation

- Importing Python libraries and data.

- Data wrangling and subsetting.

- Data consistency check for duplicate and missing values.

Analysis

- Combining and exporting data and analyze the results.

- Deriving new variables to create customer profiles.
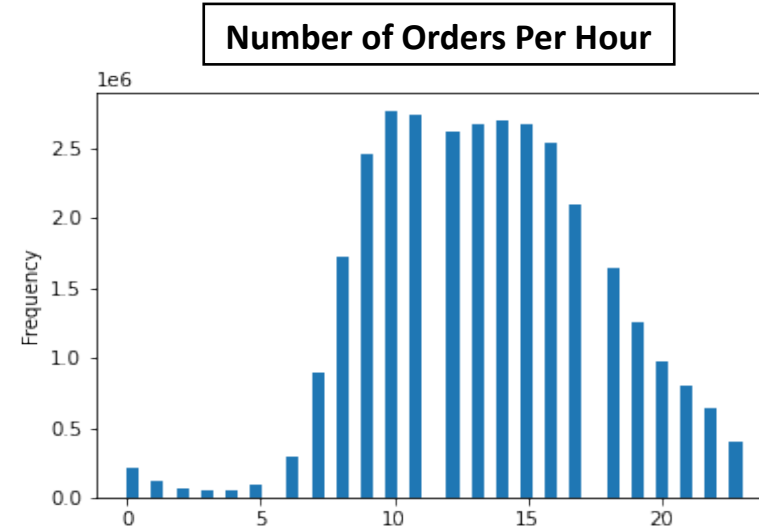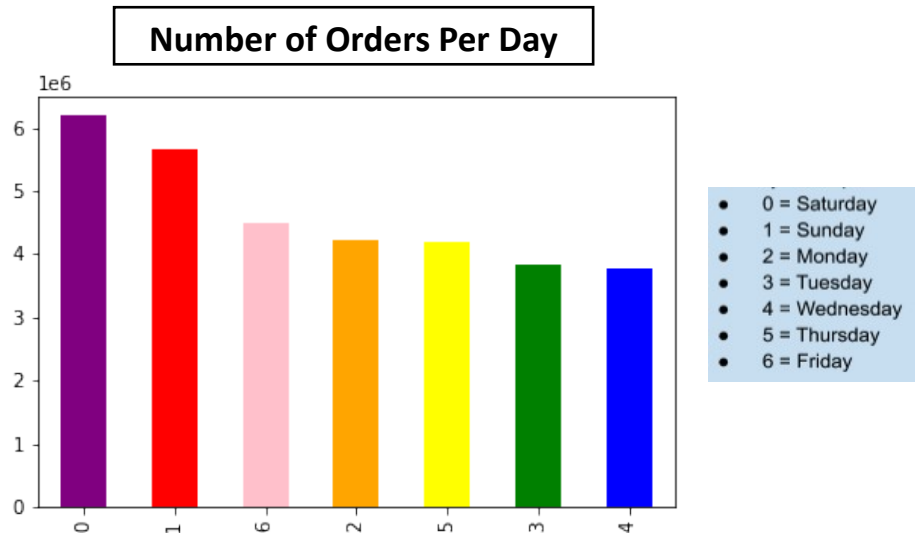
- Grouping and aggregating data.

Visualizations

- Below visualizations are created using python to present the insights.

1. Bar plot
2. Line plot
3. Histogram

Findings

We can see the weekend is more busiest with orders, I would recommend ads be run on week days to help with Mon - Fri order volume..

With the most popular hours being 10am - 3pm & least popular hours being 10pm - 6am, company should focus on ads during 6pm - 10pm.

Number of Orders Per Day

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

Number of Orders Per Hour

Link to Repository