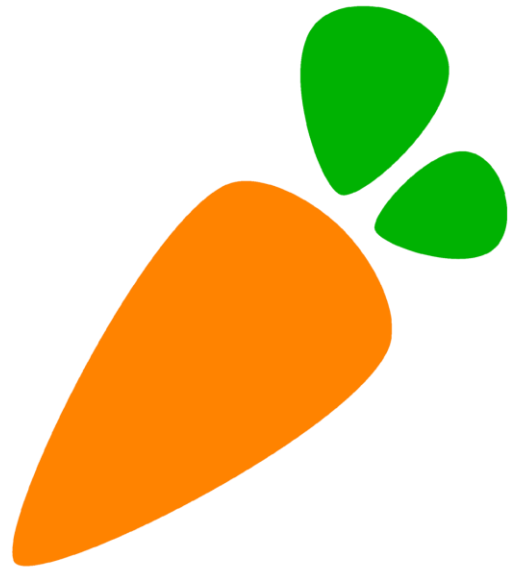




Data Analytics Portfolio

Mwayi Sosola, 2024



INSTACART

Grocery basket analysis with customer
profiling and spending behaviour study



PROJECT OVERVIEW

OBJECTIVES

- Discover information about sales patterns
- Conduct data and exploratory analysis to extract insights
- Develop customer profiles based on demographics and ordering habits

DATA

- Datasets encompass details on orders, products, and departments sourced from actual Instacart data in 2017, accessed from Kaggle
- Fictitious customer data supplied by Career Foundry
- Retail Data
- Financial Data

SKILLS & TOOLS

Skills:

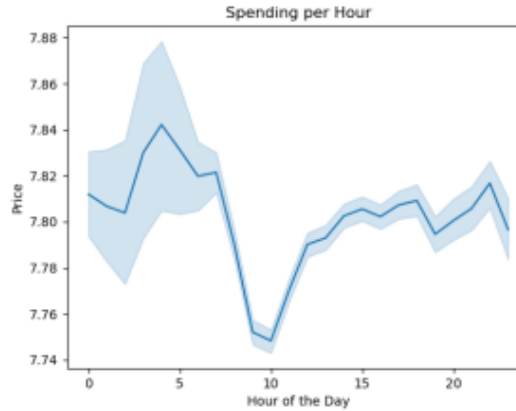
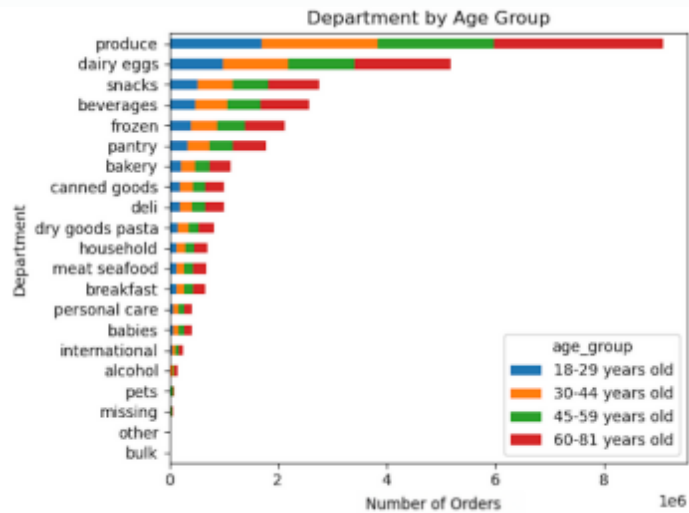
- Data Wrangling
- Data Merging
- Deriving Variables
- Grouping & Aggregating Data
- Visualizations & Reporting

Tools used:

- Python, Jupyter Notebook
- MS Excel: graphs, pivot tables
- CANVA



ANALYSIS



- Busiest Days:
 - Saturday, Sunday & Monday
- Busiest Hours:
 - From 03:00 to 07:00
- Popular Departments:
 - Produce
 - Dairy/Eggs
 - Snacks
 - Beverages



RECOMMENDATIONS

- Targeting Instacart newcomers to cultivate regular customer relationships and boost sales during low-traffic periods throughout the week or specific times of the day
- Targeting higher-income customers in the early morning, with a peak at 4 am
- Concentrating efforts on the highest sales regions for customer base expansion, tailoring advertisements to specific age groups in different regions
- Targeting lower-income customers with a targeted marketing campaign on beverages and snacks to increase engagement
- Promo campaign to boost weekday shopping for increased orders in the early morning hours, specifically between 12 am and 6 am
- Emphasis on targeted campaigns encouraging consumers to make purchases during the early morning period
- New pricing range
 - Meagre range > \$1-5
 - Low range > \$6-10
 - Medium range > \$11-15
 - New category "High range" > above \$16



[Presentation](#)

Thank you

