# Market Basket Analysis

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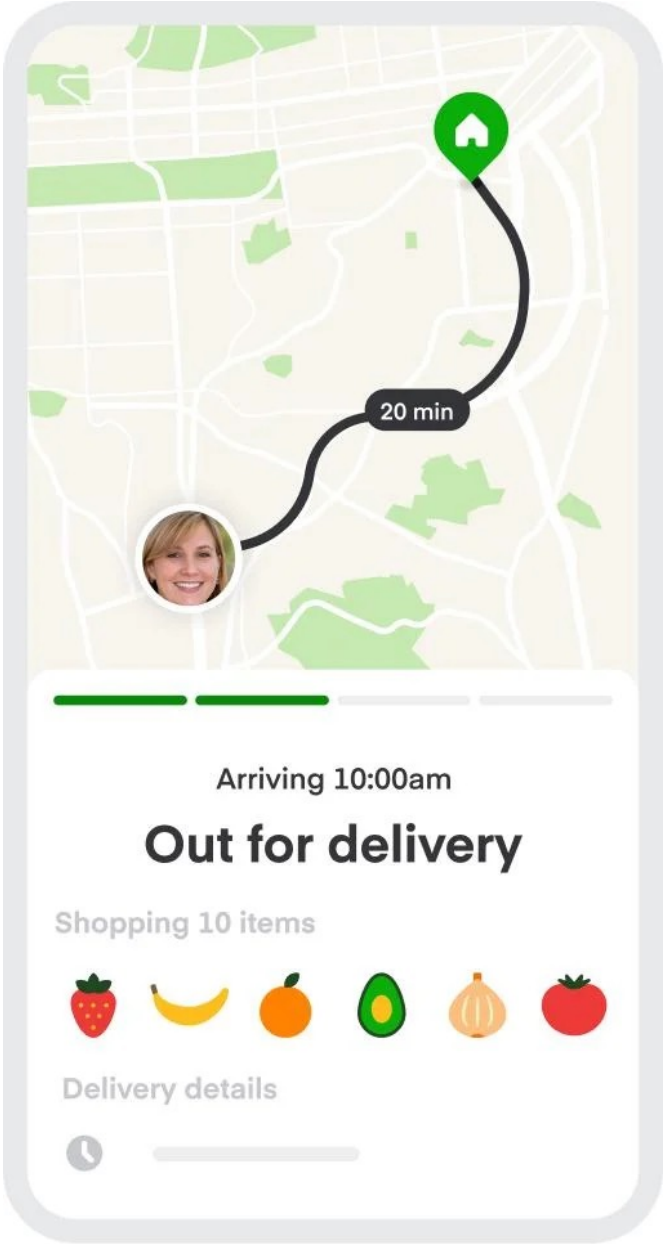
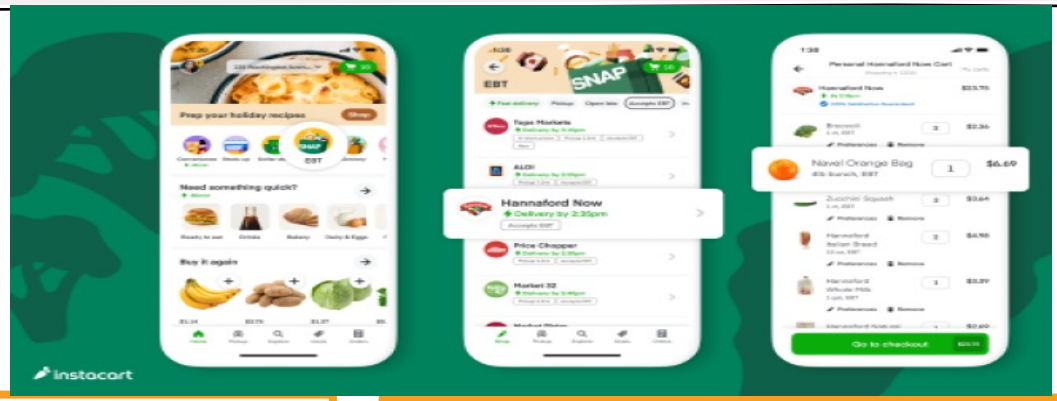
We, Instacart, delivery groceries to your door!!!



# Instacart's Strategy




## Competitive Advantage

"OneStopShop"
Groceries + Alcohol

## User Engagement & Retention

$25K Competition:
New Recommender Model

Product Developments:
Alcohol Review&
Instacart Pickup

## Expansion Outside US

Instacart Canada

?

**Does our data support the alcohol expansion? If so, what marketing insights can we collect from data?**

**YES => Continue**

**NO => Pivot**

THIS DATASET:

200K+ Users

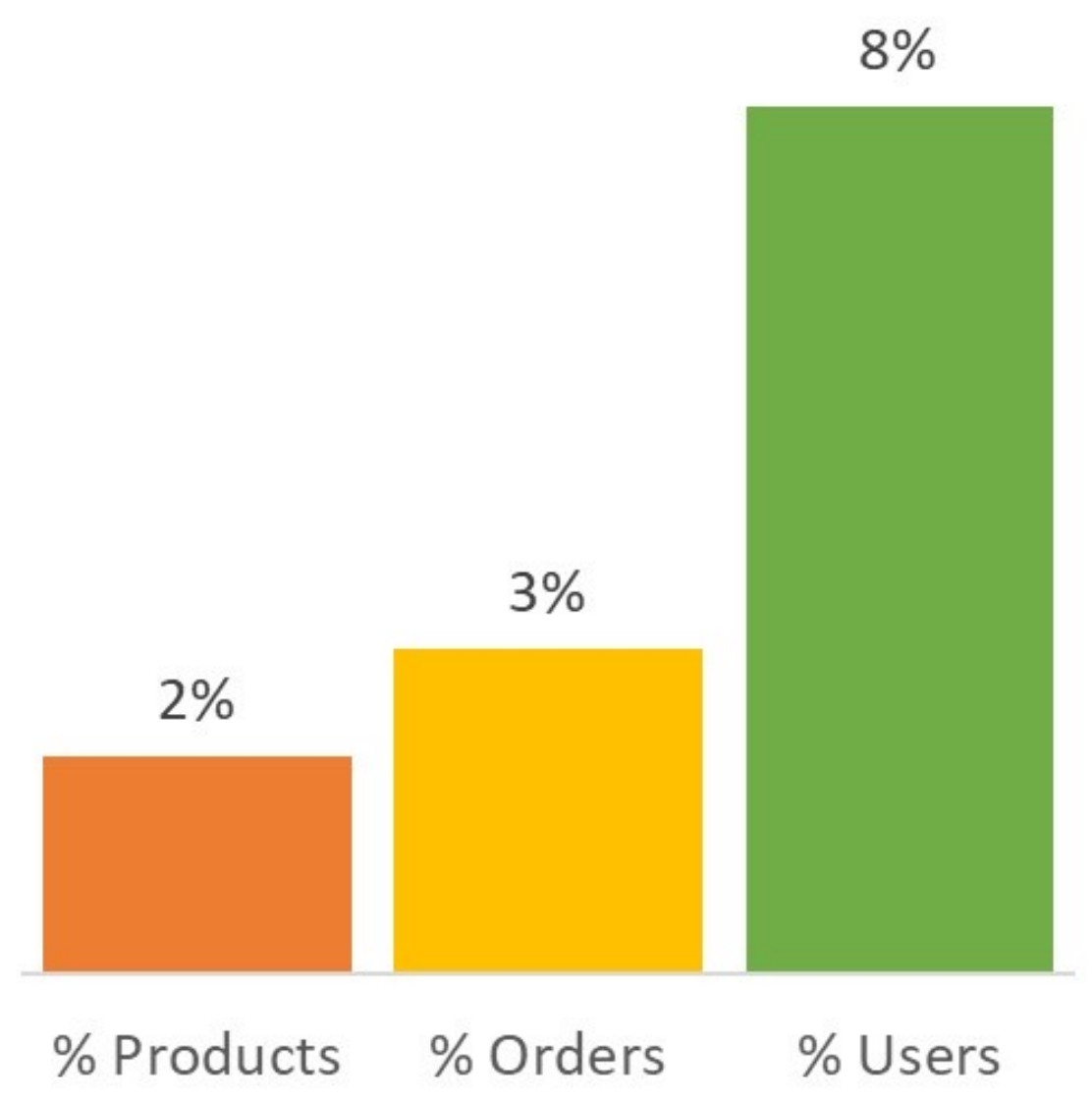
3+ Million Orders

# SUMMARY STEPS

Step 1: Data Wrangling (Merge - SQL, Data upload (Jupyter Notebook), Data cleaning (Python), Storage (AWS)

Step 2: EDA (Visualization - Python, MS-Excel, PowerBI; Validation (SQL)

Step 3: Recommender Model (Python, Statistics)




**Alcohol Proportion to Totals**

**Despite 2%**

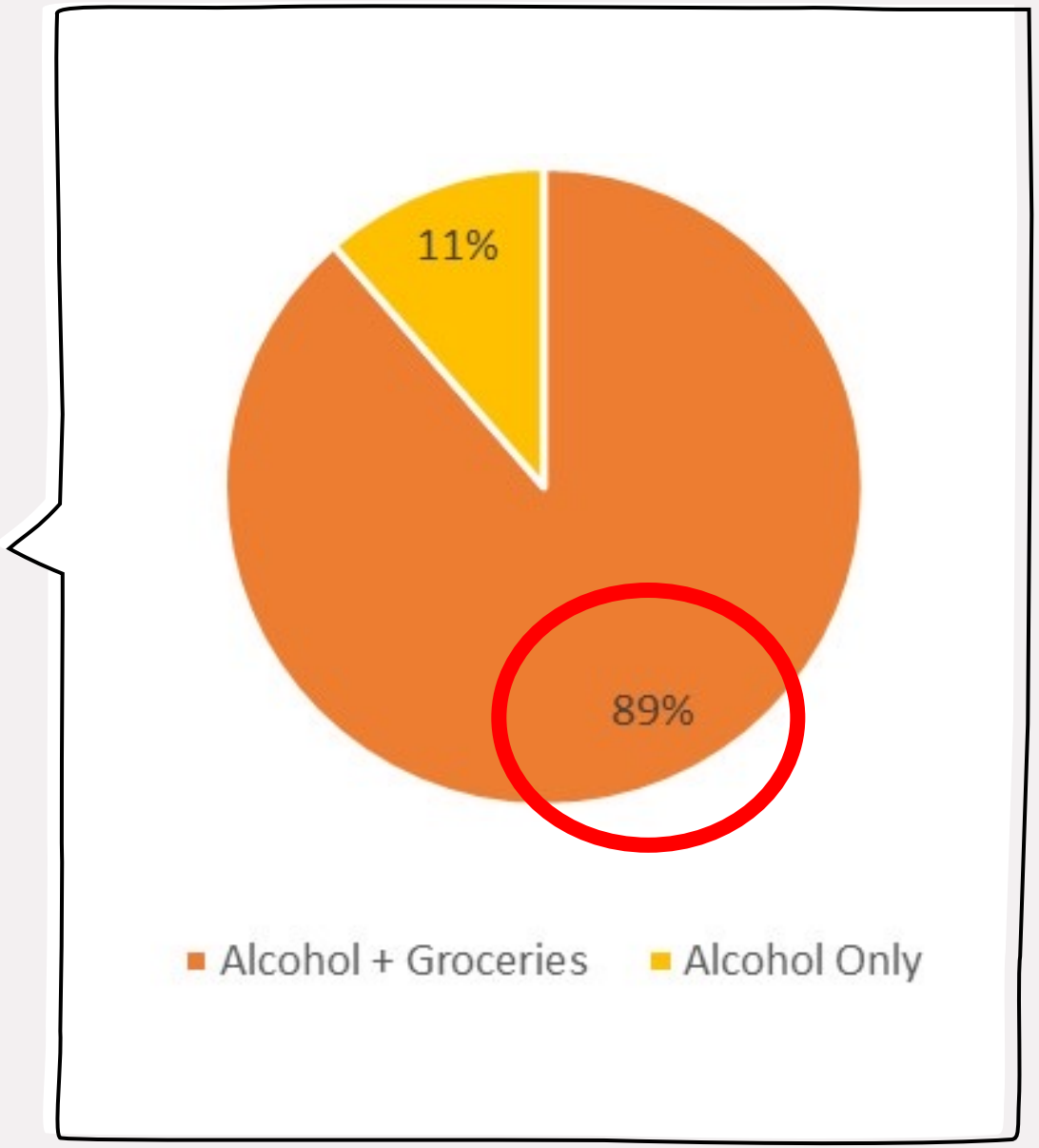
**Inventory 8% Users buy Alcohol**

**Low Supply**

**HIGH Demand**

89% ***of orders with alcohol, also have groceries***

**HIGH Cross-Selling between alcohol & nonalcohol products**

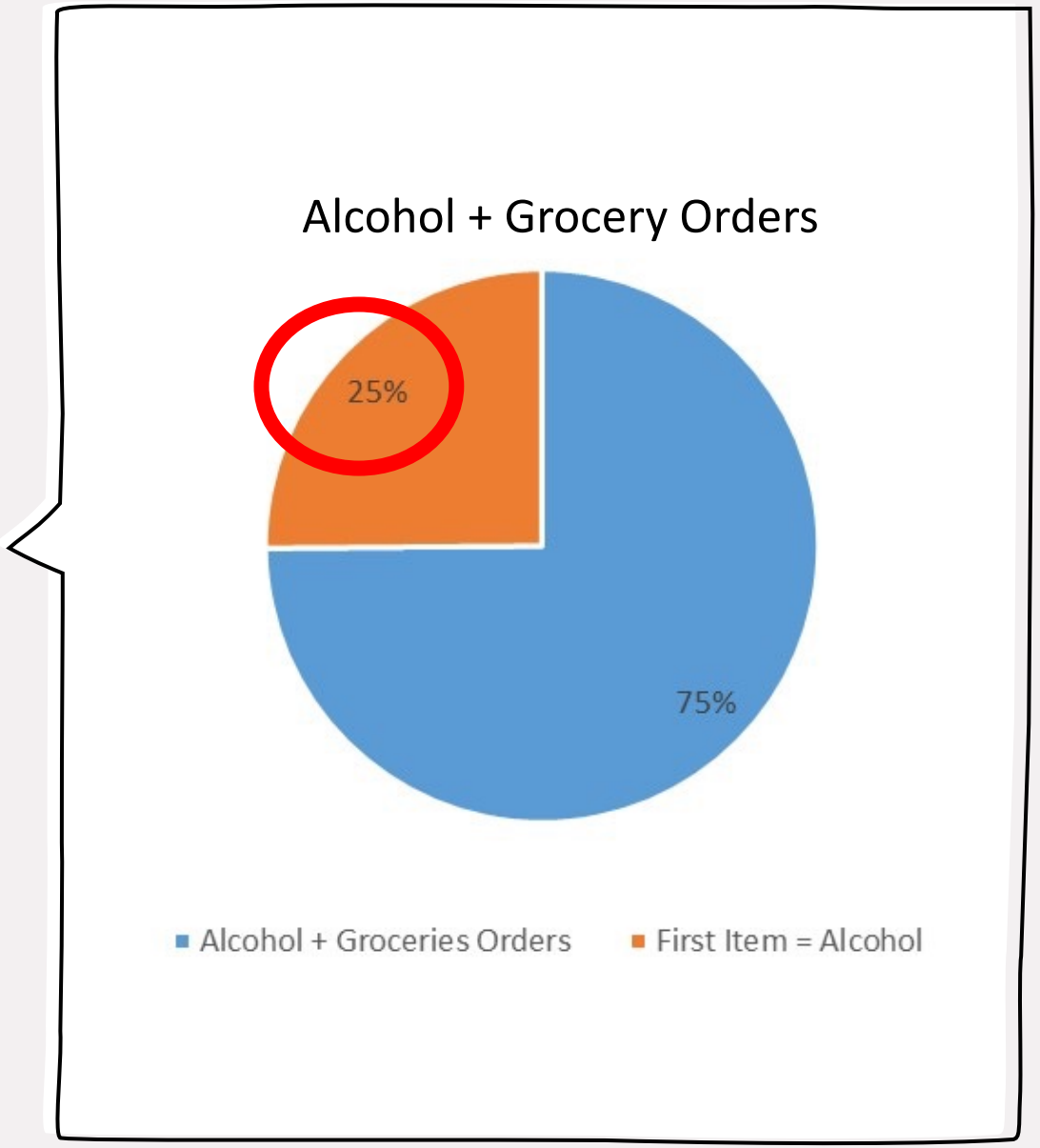


# Up Selling !!!!

**25% Orders where user chose alcohol first and then added groceries.**

**145,889 grocery units gained**

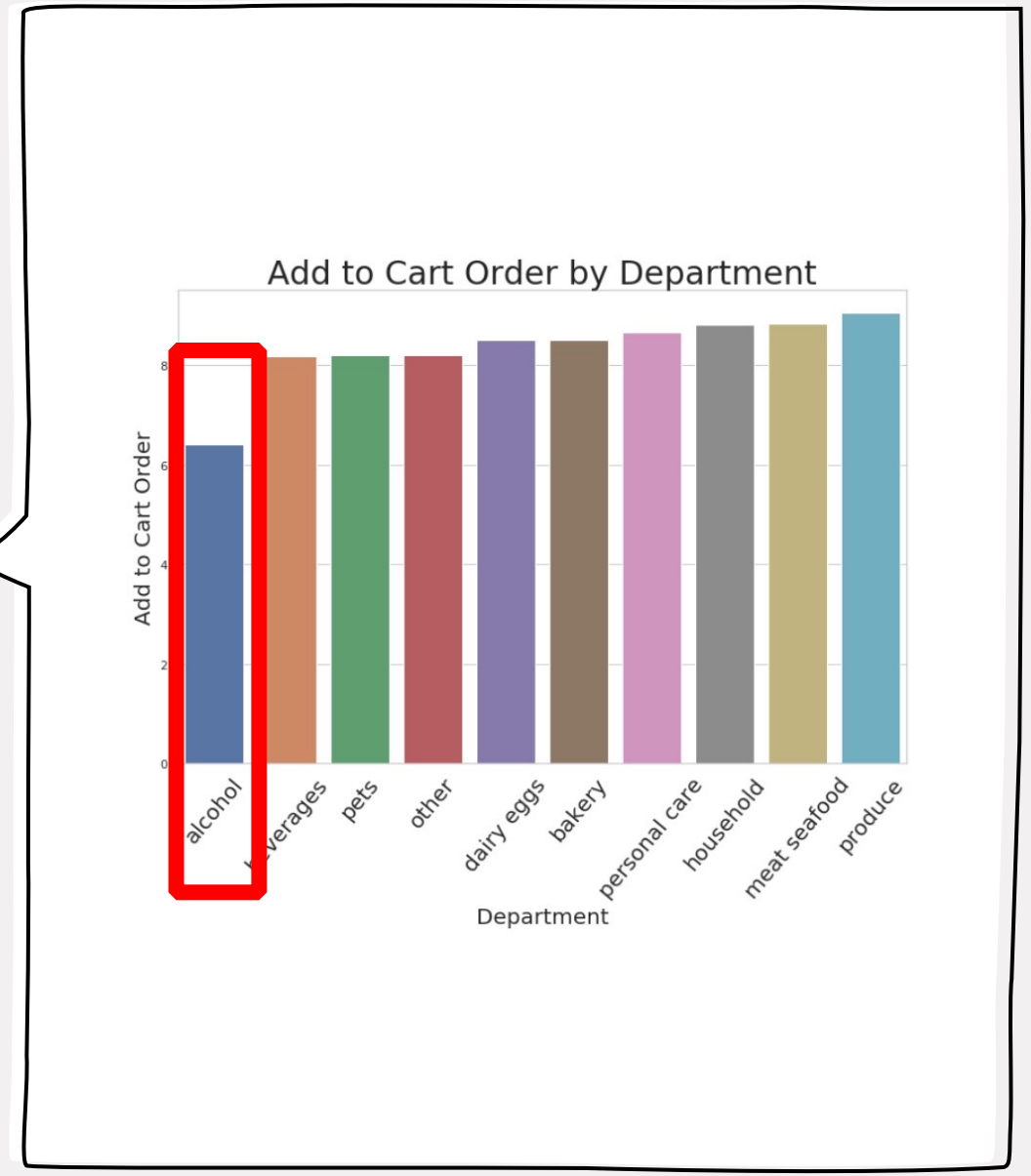
**HIGH selling potiental**



# POSITION IN CART →

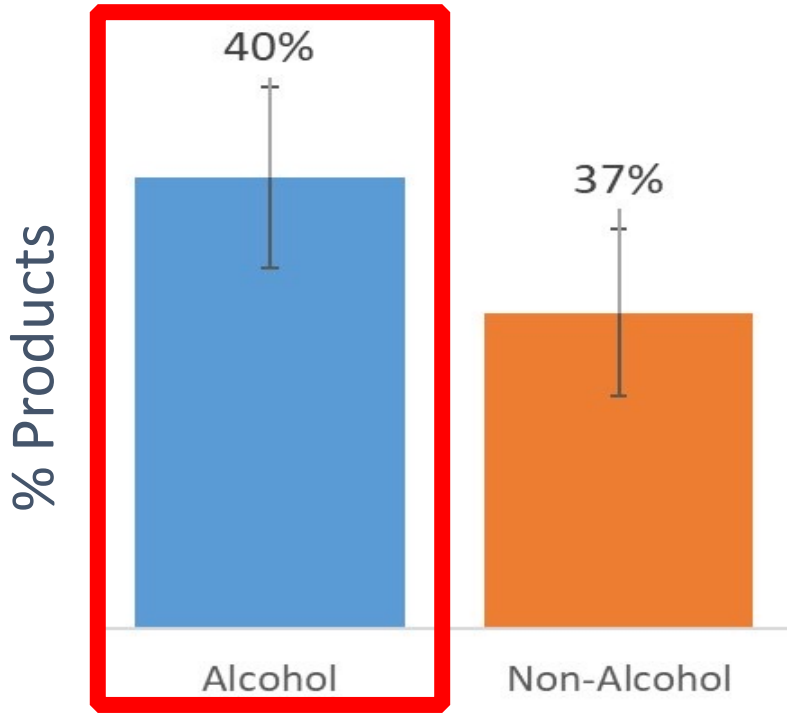
**LOWEST** **“add to cart order”**

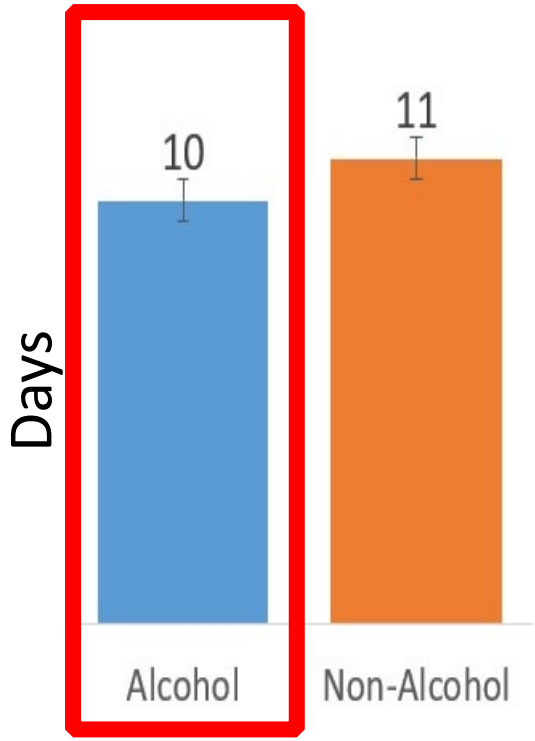
**Alcohol is one of the first items in cart**



Alcohol products 3% higher Alcohol orders made 1 day earlier reordered ratio

# Gap of Reordered Ratio Order



***Any marketing insights / opportunities discovered?***

✓ **Position in Cart** ✓ **Reordered Ratio** ✓ **Order Gap**

**Does our data support the alcohol expansion?**

✓ **Cross-Selling** ✓ **Up-Selling** ✓ **Demand (8% Users)**

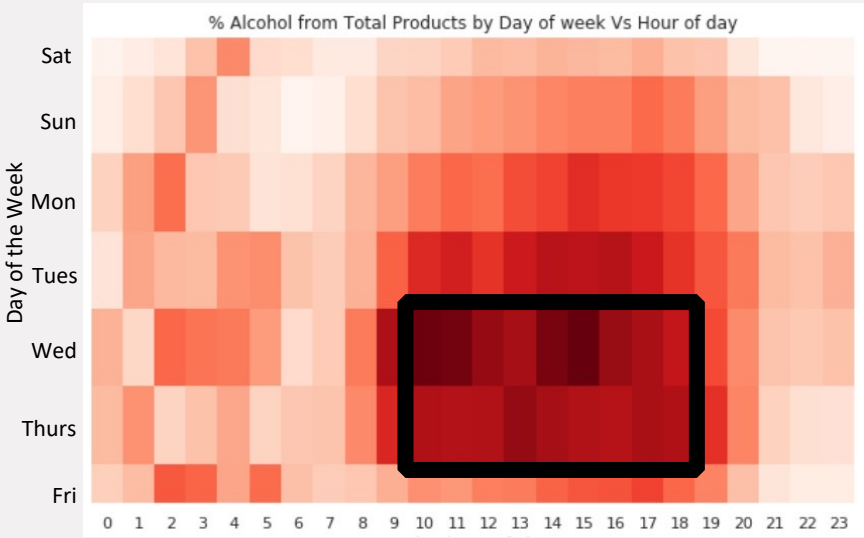
# TIME

**General Order Peak: Weekends AM**

**Alcohol Peak: Wednesday**

**Thursday PM**

**Marketing: Outreach timing**



## BEST SELLERS

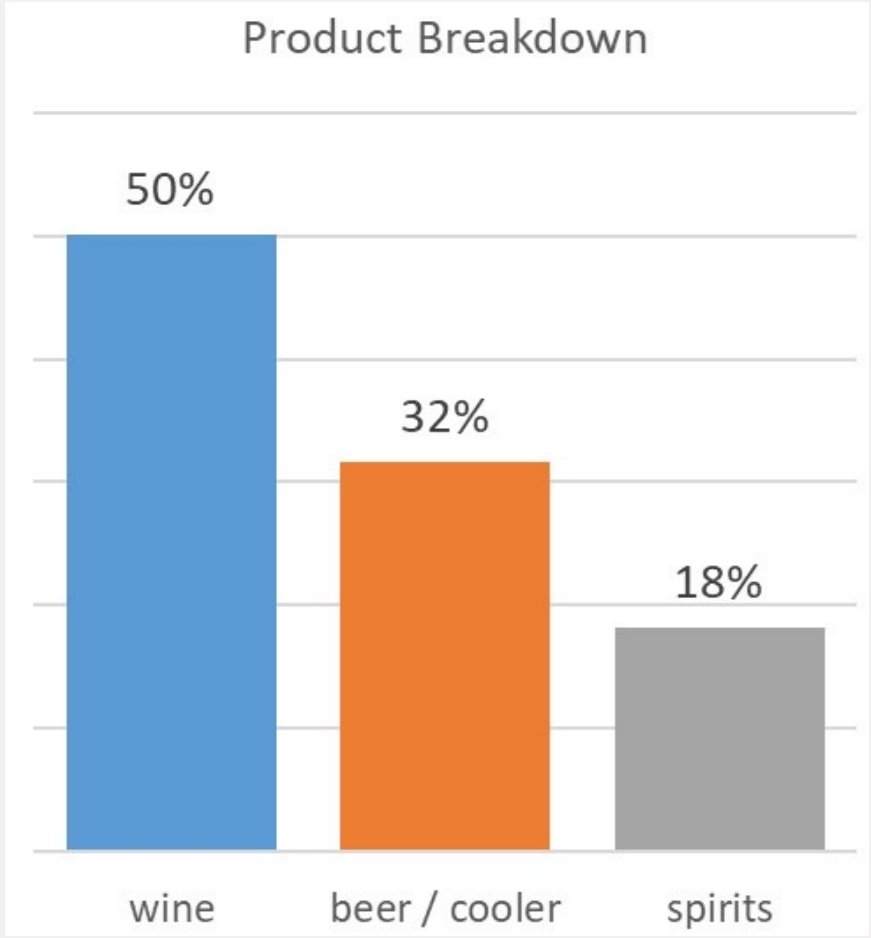
# 1 Wine
# 2 Beer & Coolers
# 3 Spirits

Marketing: Wine & Food Pairings

Retailer:
Inventory

Alcohol + Grocery Pairings (Recommender Model)
Tool Used: Machine Learning Method (Association Rule Learning )

Output: Product pairs by correlation within an order




# CONCLUSION

**Does the data support the alcohol expansion? ---> YES**

✓Demand (8% Users) ✓Cross-Selling
✓Up-Selling. ✓Position in Cart ✓Reordered Ratio
✓ Order Gap

**What marketing insights can we collect from data?**

- TIMING
- BEST SELLERS
- Alcohol & Grocery Pairs (Recommendation Model)