



Instacart Market Basket Analysis

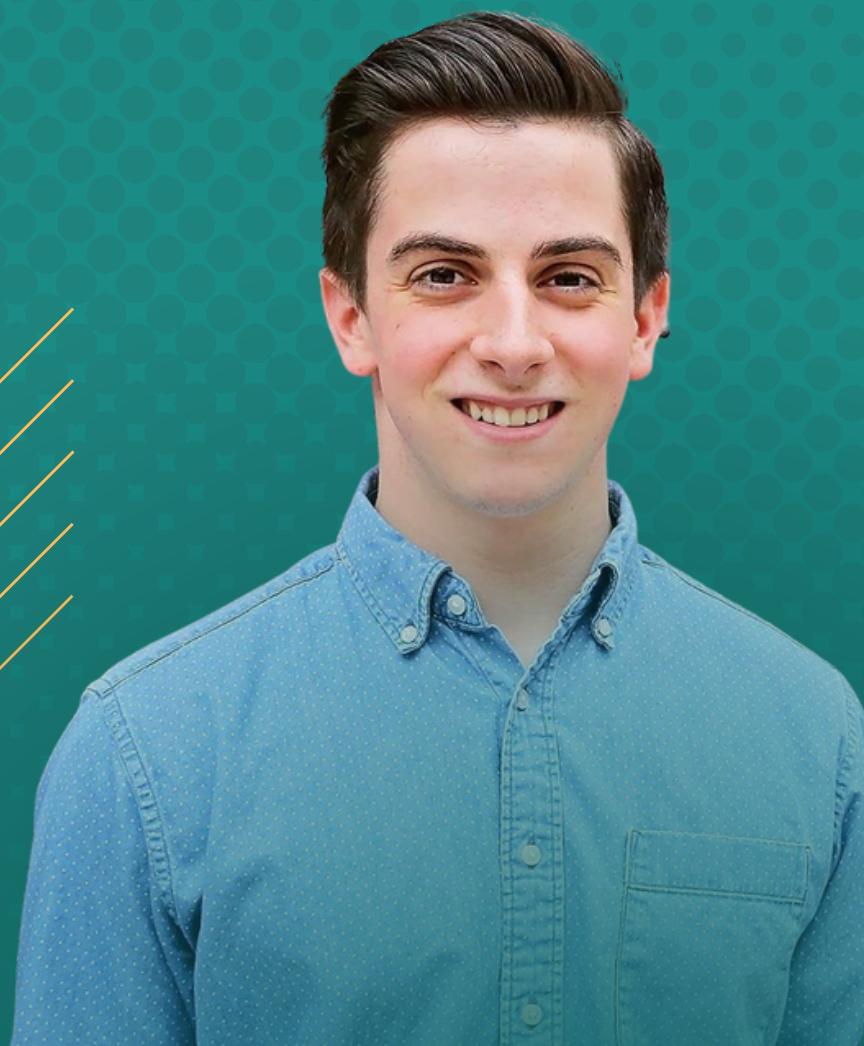
Insights & Recommendations

By: Brandon Menendez



Who am I?

Brandon Menendez



- 01.** Experienced E-Commerce Grocery Category Manager
- 02.** Data Science Student at the Flatiron School
- 03.** Passionate about creating better online shopping experiences



Agenda



-  Overview & Business Problem
-  Data Understanding
-  Market Basket Analysis & Insights
-  Recommendations
-  Looking Forward & Future Steps

Overview & Business Problem

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KEY FINDINGS



Business Problem



Merchandising



Add to Cart &
Recommendations



Cross
Promotion

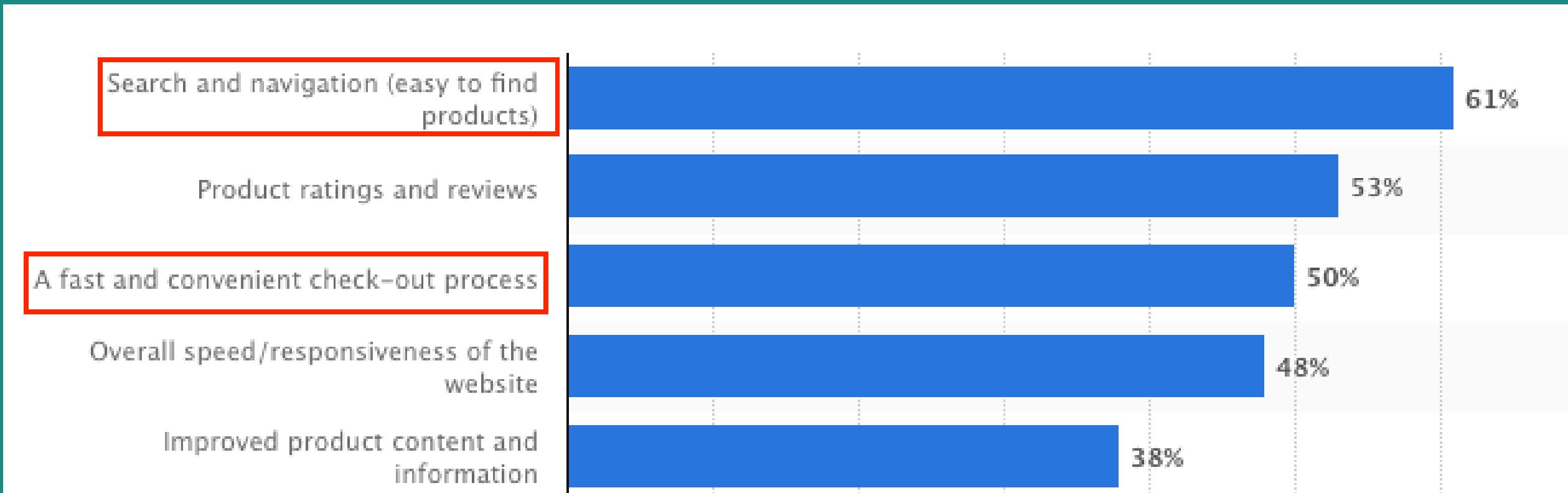
The Power of Recommendation

- 35% Purchases from recommendations
- 88% Orders contain re-orders

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The Power of Effective Merchandising



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Promotions & Grocery Shopping



Data Overview

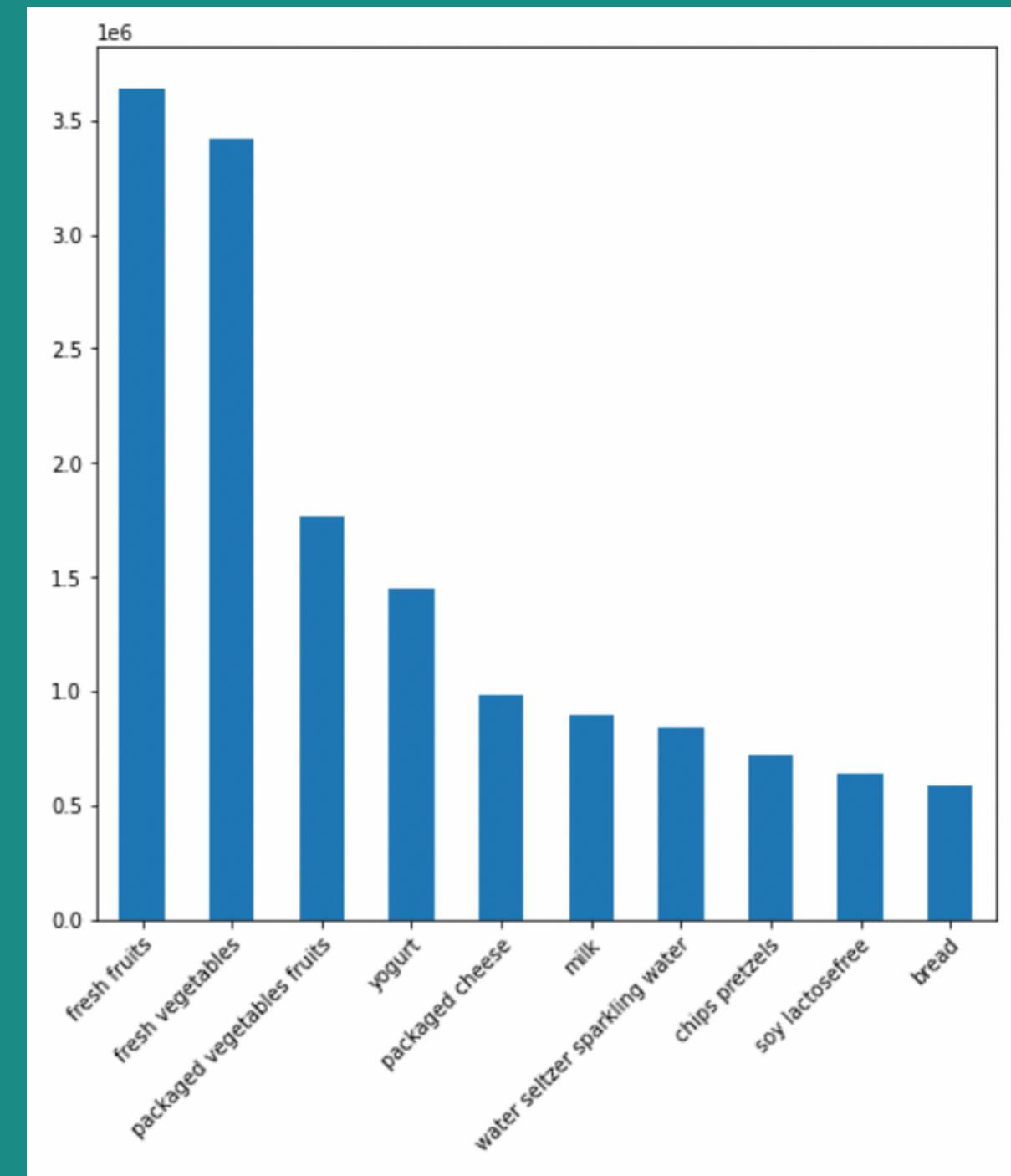
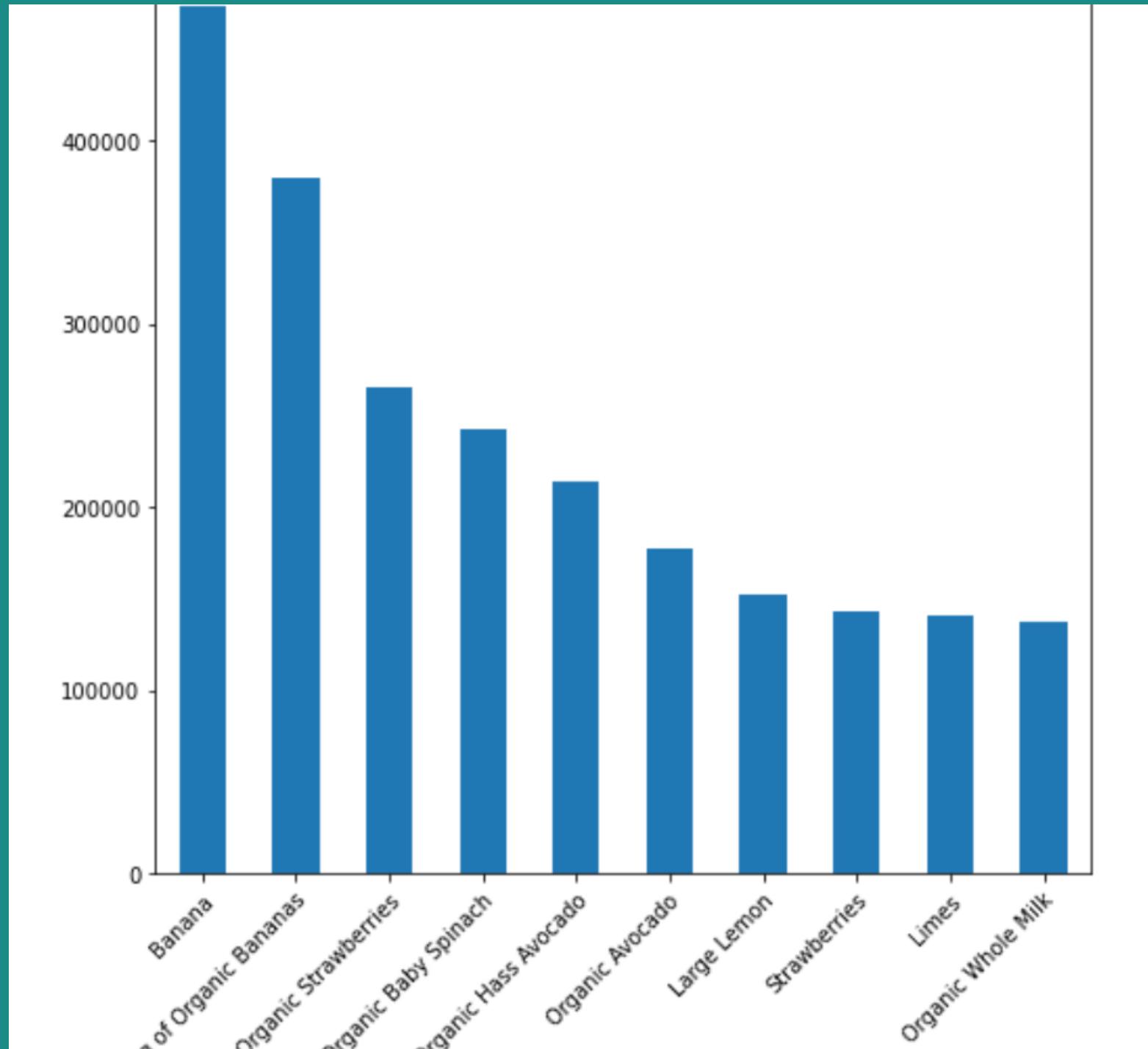


THE DATA

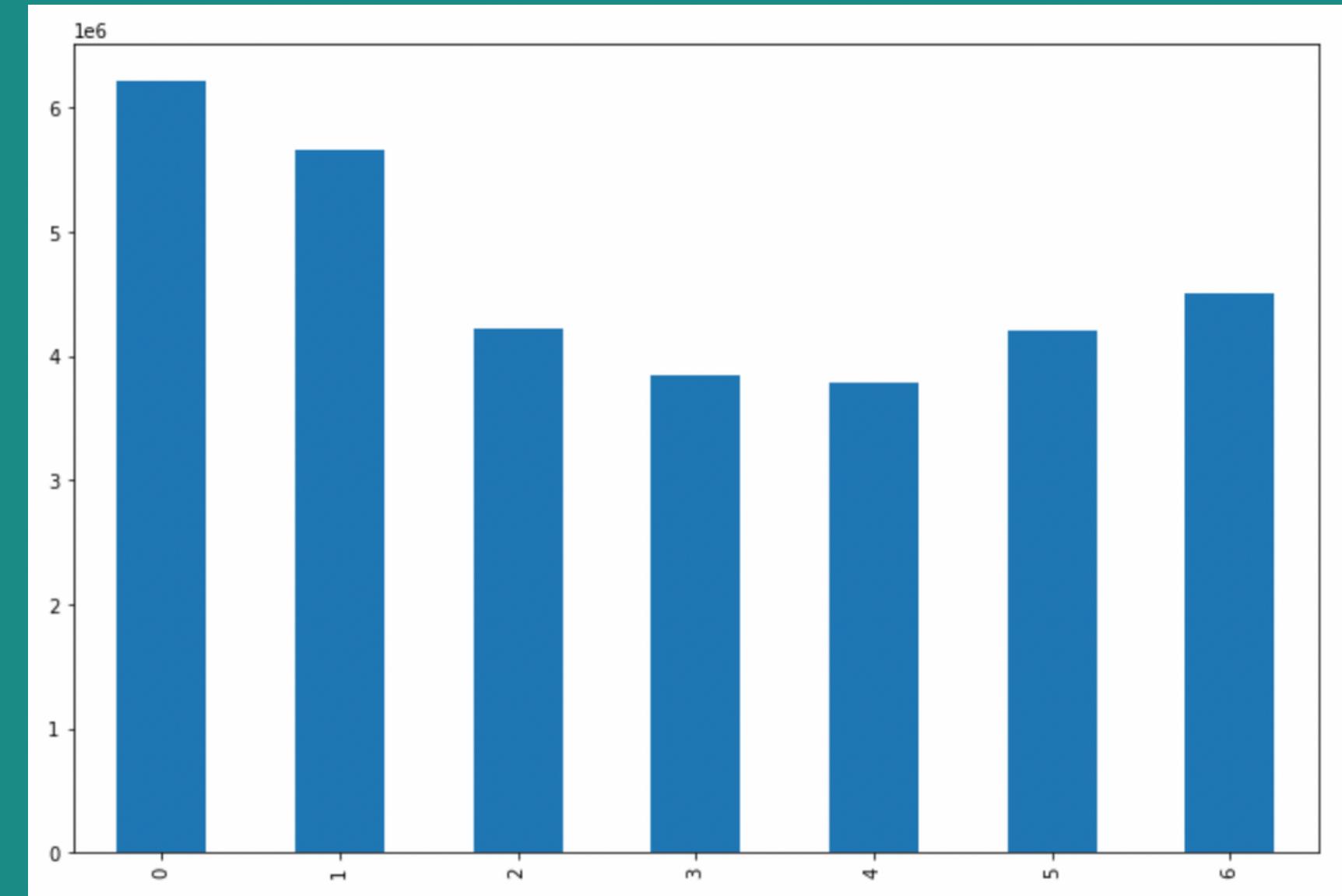
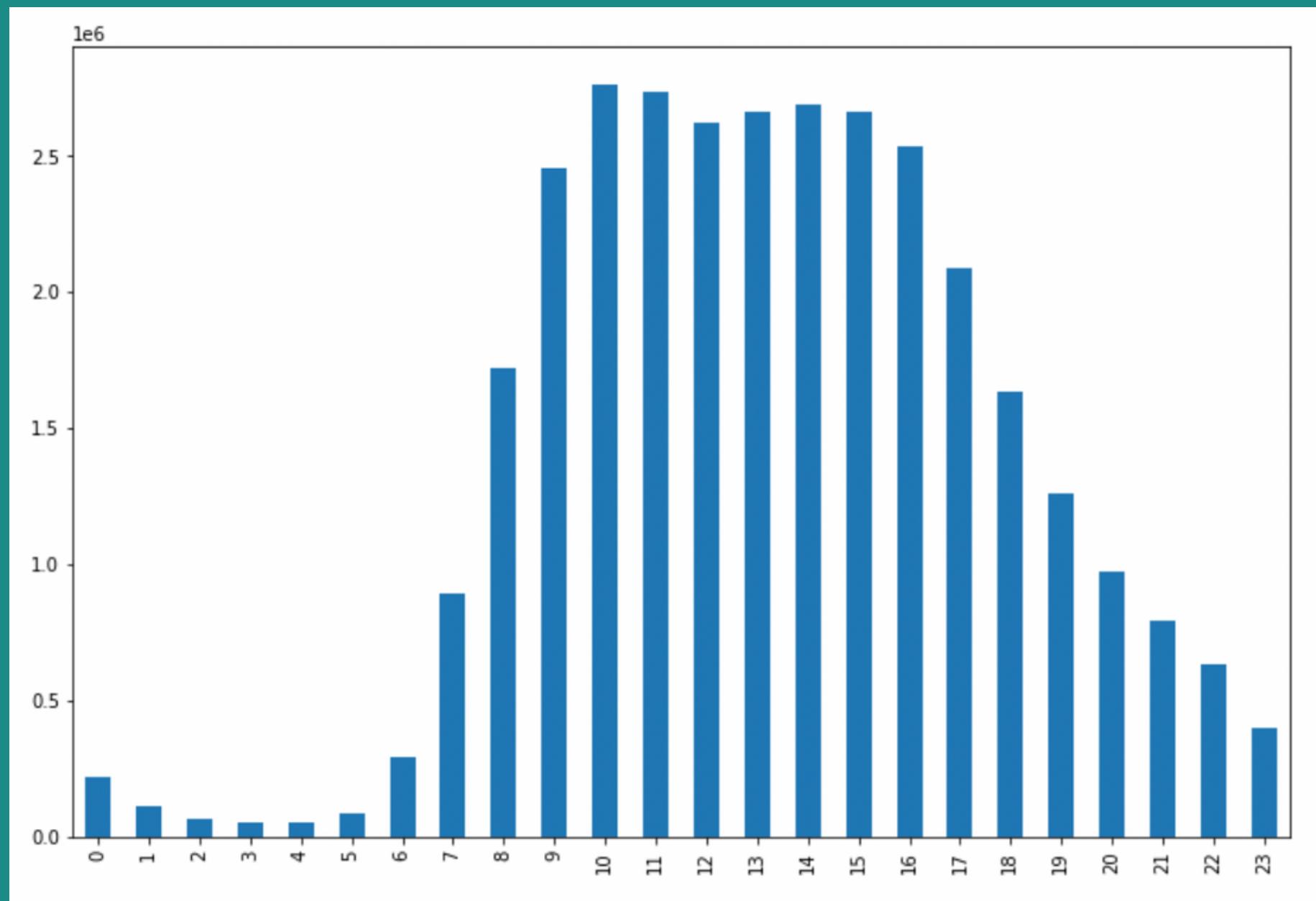
- 206K Unique Customers
- 49K Unique SKUs
- 3.2M Total Orders Analyzed



Product Insights



User Behavior Insights



User Insights

(Placeholder)

Market Basket Analysis



Apriori - Lift

	antecedents	consequents
11	(Organic Raspberries)	(Organic Strawberries)
7	(Organic Fuji Apple)	(Banana)
2	(Organic Raspberries)	(Bag of Organic Bananas)
1	(Organic Hass Avocado)	(Bag of Organic Bananas)
5	(Organic Avocado)	(Banana)
10	(Strawberries)	(Banana)
3	(Organic Strawberries)	(Bag of Organic Bananas)
4	(Large Lemon)	(Banana)
0	(Organic Baby Spinach)	(Bag of Organic Bananas)
9	(Organic Whole Milk)	(Banana)
8	(Organic Strawberries)	(Banana)
6	(Organic Baby Spinach)	(Banana)

Apriori - Confidence

	antecedents	consequents
11	(Organic Raspberries)	(Organic Strawberries)
7	(Organic Fuji Apple)	(Banana)
2	(Organic Raspberries)	(Bag of Organic Bananas)
1	(Organic Hass Avocado)	(Bag of Organic Bananas)
5	(Organic Avocado)	(Banana)
10	(Strawberries)	(Banana)
3	(Organic Strawberries)	(Bag of Organic Bananas)
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8	(Organic Strawberries)	(Banana)
6	(Organic Baby Spinach)	(Banana)

Results - LogReg

(Placeholder)

Recommendations

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Business Problem



Merchandising



Add to Cart &
Recommendations



Cross
Promotion

Next Steps

- Cross Merchandising
- Add to cart recommendations
- Targeted promotions

Looking Forward



- Excess inventory
- Display Ad Opportunity Cost
- Margin Optimization Analysis
- Reviews & Ratings



Thank You

For further inquiries, please send
your email to

bmenendez94@gmail.com

For more information, please check
out our website at

GitHub.com/brandmend

LinkedIn.com/in/brandonmenendez