



Enhancing Customer Satisfaction & Driving Sales Growth

--Strategic Insights for Instacart

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Meet Our Team:



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Agenda

Executive Summary

Business Problem

Customer Analysis

- > Customer Profiles Analysis
- > Customer Behaviors Analysis

Competitor Analysis

Business Analysis

- > Products Analysis
- > Sales and Patterns Analysis

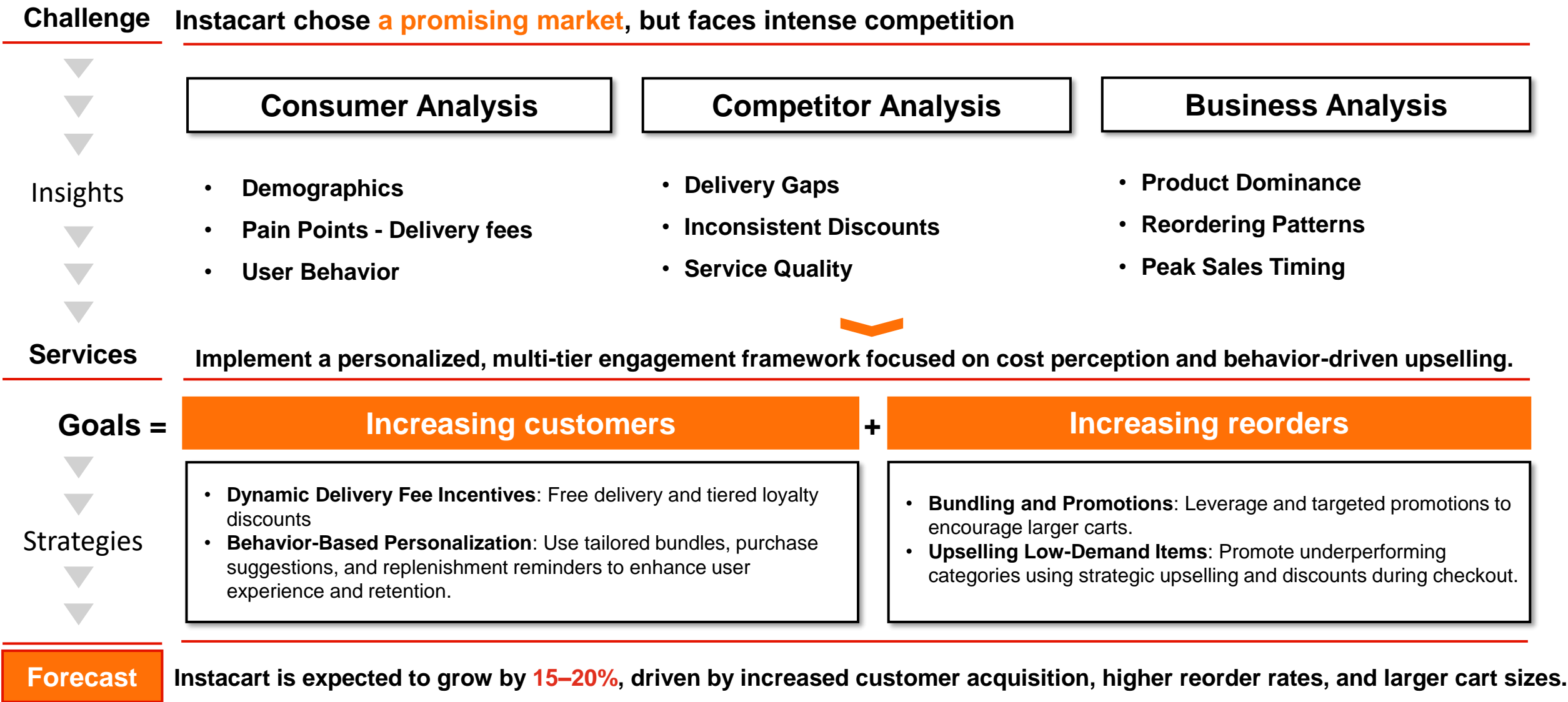
Expansion Strategies

- > Increase customers
- > Increase reorders

Conclusion



Summary:



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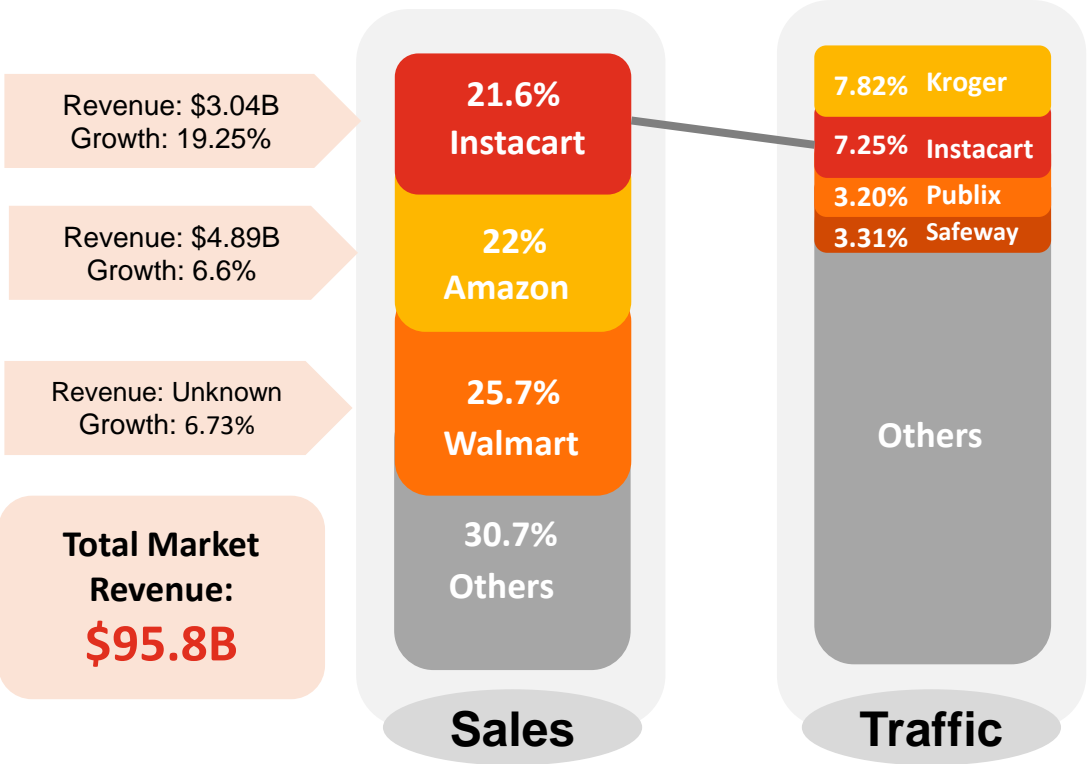
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Business Problem:

Market Share Landscape

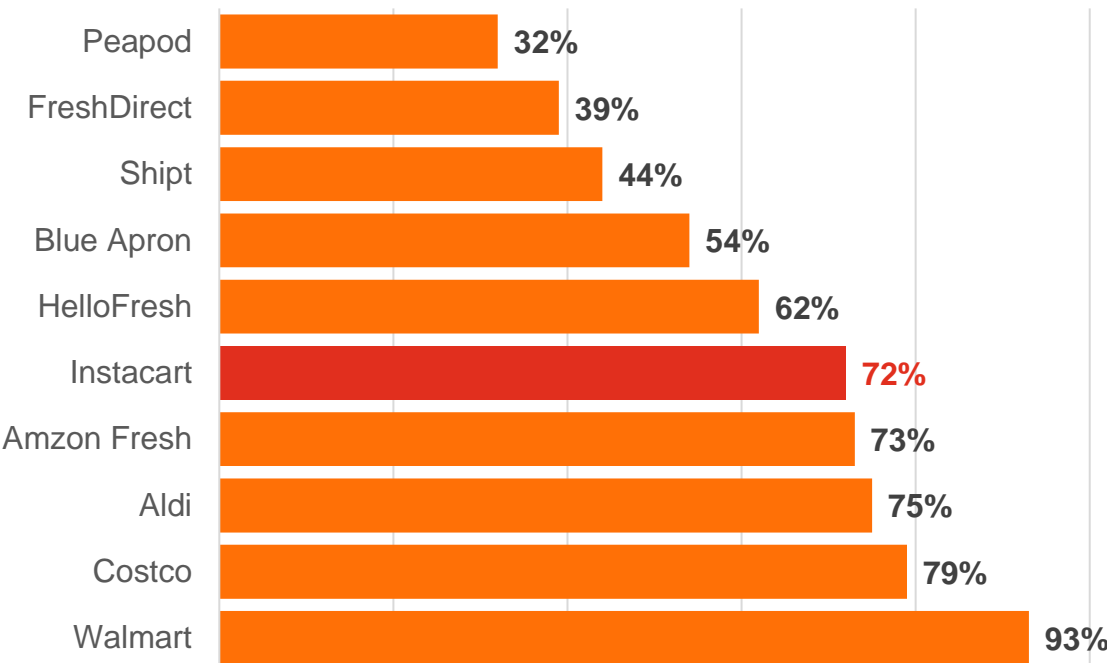
2023 Online Grocery Market Share



- Shows strong potential to expand it's sales
- Traffic share indicates room for improvement in driving user engagement.

Brand awareness Landscape

2023 Leading online grocery brands ranked by brand awareness in US



- Close to Amazon Fresh
- Ahead of smaller competitors
- Provide a competitive edge for customer acquisition and retention

Business overview & goal:

Business Overview

A leading nationwide grocery delivery company

Instacart is one of the leading online grocery platforms that partners with over 1,400 retailers, covering 85% of the U.S. grocery market, to deliver fresh and essential items directly to customers' doors.

Known for its convenient same-day delivery service, Instacart integrates with major retailers like Costco, Kroger, and Publix, providing flexible shopping options through an intuitive app and website.

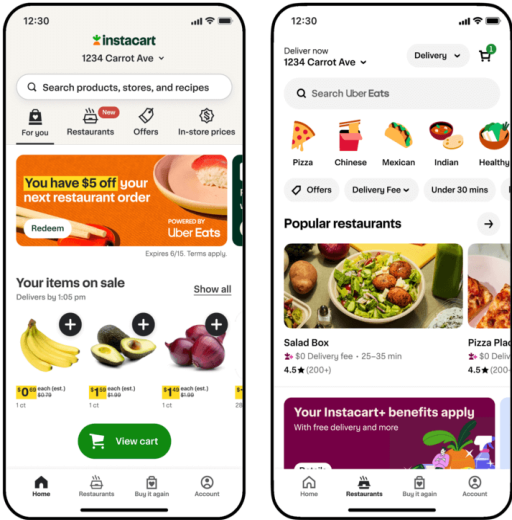
1,400
retailers

85%
of the U.S.
grocery
market

TOP 5
grocery
delivery
company

GOALS

- 01 Leveraging customer and competitor insights
- 02 Analyzing opportunities for product bundling and promotions
- 03 Providing expansion strategies and developing a machine learning algorithm to predict and enhance purchase behavior



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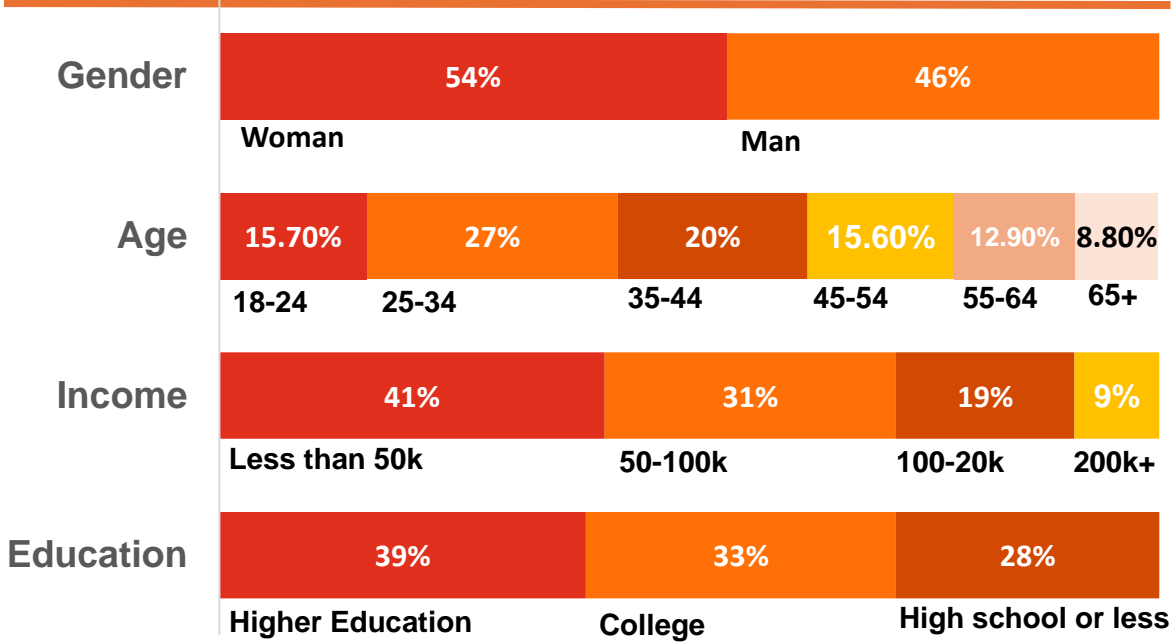
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Customer Profiles Analysis:

Target customers are young, moderately-income individuals, primarily women



Target customers profile based on 3 dimensions



Sarah, 29

Current: Young Professionals

City: Austin, TX
Income: \$50-100k (Middle Income)
Criteria: Convenience and Free Delivery
Occasions to Buy: Weekly grocery shopping after work



Pat, 42

Potential: Middle-aged Homemakers/Working Women

City: Atlanta, GA
Income: \$100-200k (Upper-Middle Income)
Criteria: Freshness and Coupons
Occasions to Buy: Planning family meals and school snacks

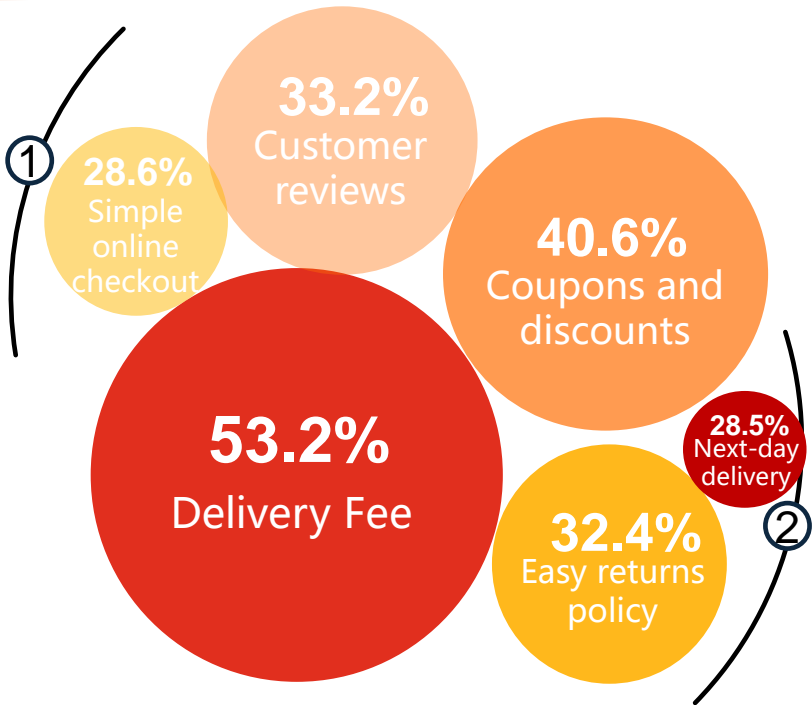


Tom, 35

Potential: Moderate-income Functional Consumers

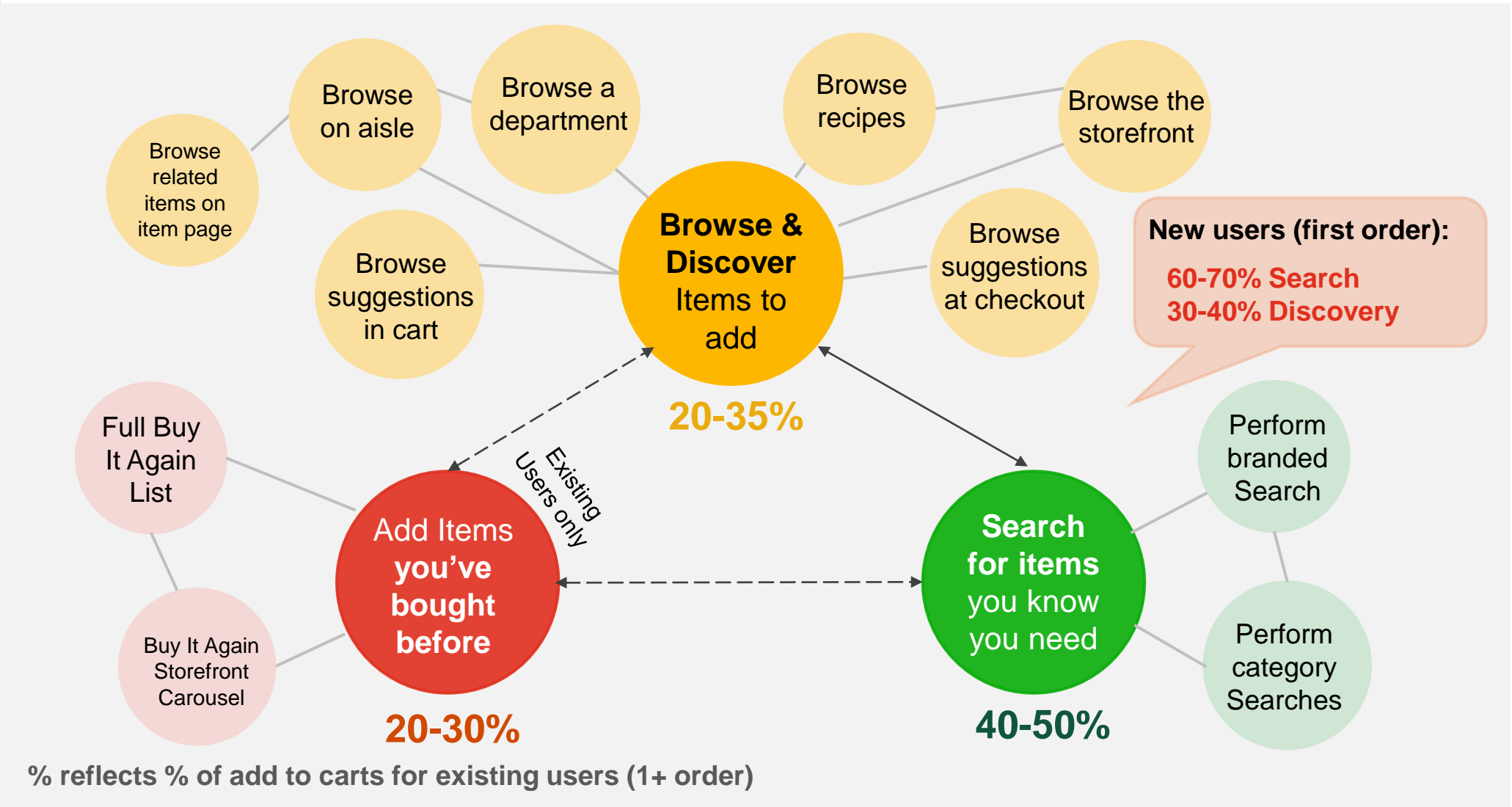
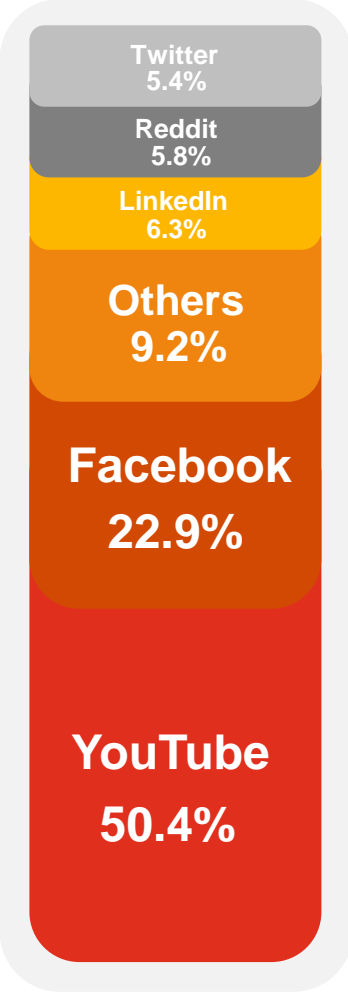
City: Chicago, IL
Income: Less than \$50k (Moderate Income)
Criteria: Simple Checkout and Next-Day Delivery
Occasions to Buy: Stocking up essentials bi-weekly

Key Factors (KPC) Influencing Customer Preferences



Customer Behaviors Analysis:

Traffic Sources of Instacart



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Competitor Analysis:

KPC Comparison with Target Competitors

	 Instacart	 Walmart+	 Amazon Fresh	
Delivery Fee	Only good for occasional users	Membership, variable per-order fees reduce predictability	High upfront cost but significant savings with bundled benefits.	Tier 1 (Target Service)
Coupons & Discounts	Partner-dependent, inconsistent, limited retailer deal	Frequent rollbacks, wide supplier discounts	delivering significant discounts	
Customer Review	Convenient but inconsistent service quality.	praised for affordability but criticized for app clutter.	High ratings for speed, integration, and reliability.	
Returns Policy	Must return items to the partnered store	Offers 90 days, online/drop off	Offer free and convenient returns within 30 days for most items	
Checkout Method	Supports digital methods, offering flexibility for diverse users.	Supports a broader range of methods	Most seamless payment experience	
Delivery Time	Fastest in urban areas, slower or unavailable in rural area	2–4 hours in urban area, fastest in rural areas	Consistent same/next-day service, next-day delivery	Tier 2

Challenges

Delivery Coverage Gaps Limited or slower delivery in rural areas compared to competitors	Inconsistent Discount Strategy Partner-dependent coupons lack the appeal of Walmart's frequent offers or Amazon's Prime savings.
Fragmented Return Policy Retailer-dependent returns are less convenient compared to Walmart's flexibility and Amazon's seamless process.	Service Quality Variability Regional inconsistency in service undermines customer satisfaction.
Pricing Perception Membership costs less appealing for frequent shoppers compared to bundled benefits from competitors.	

Source: Instacart Website; Amazon Fresh Website; Walmart+ Website

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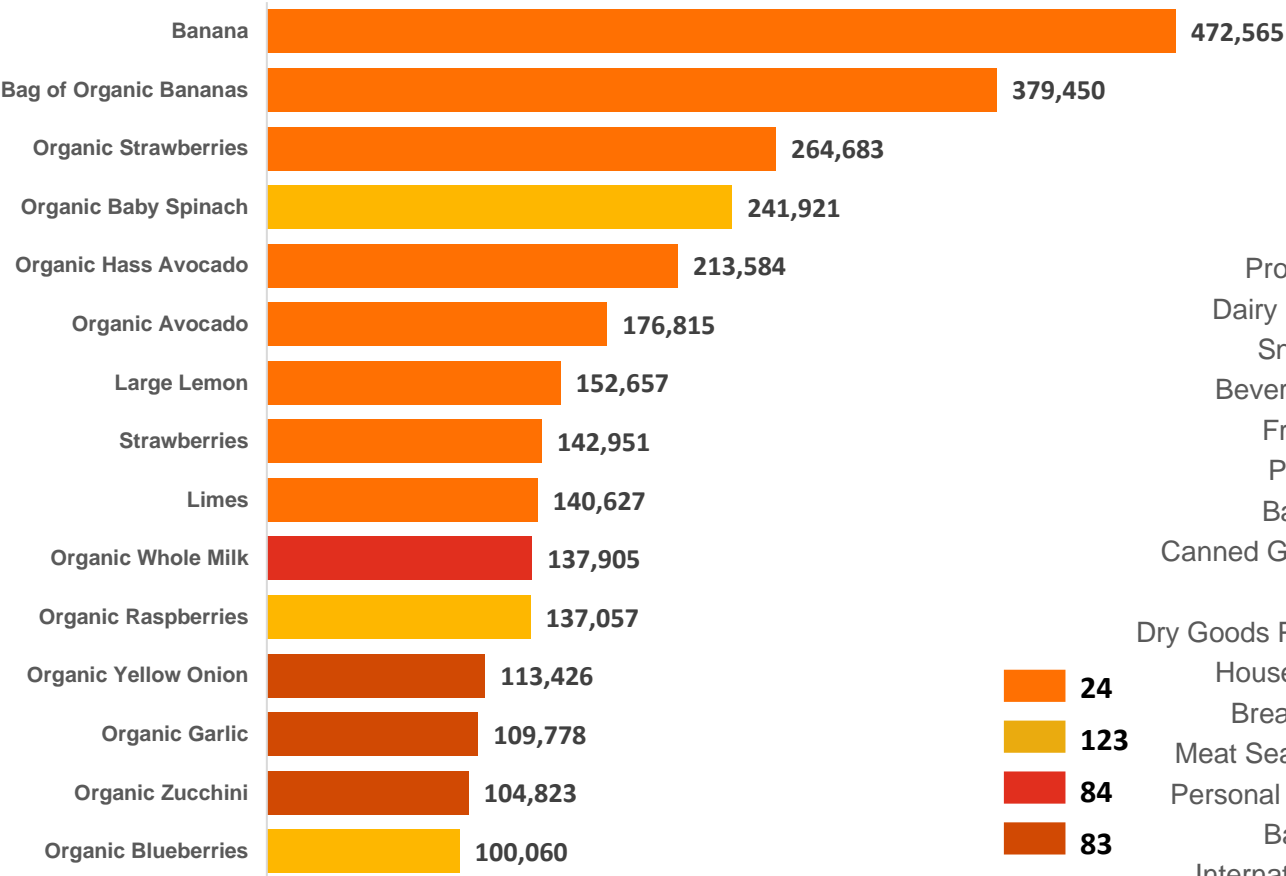
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Products Analysis:

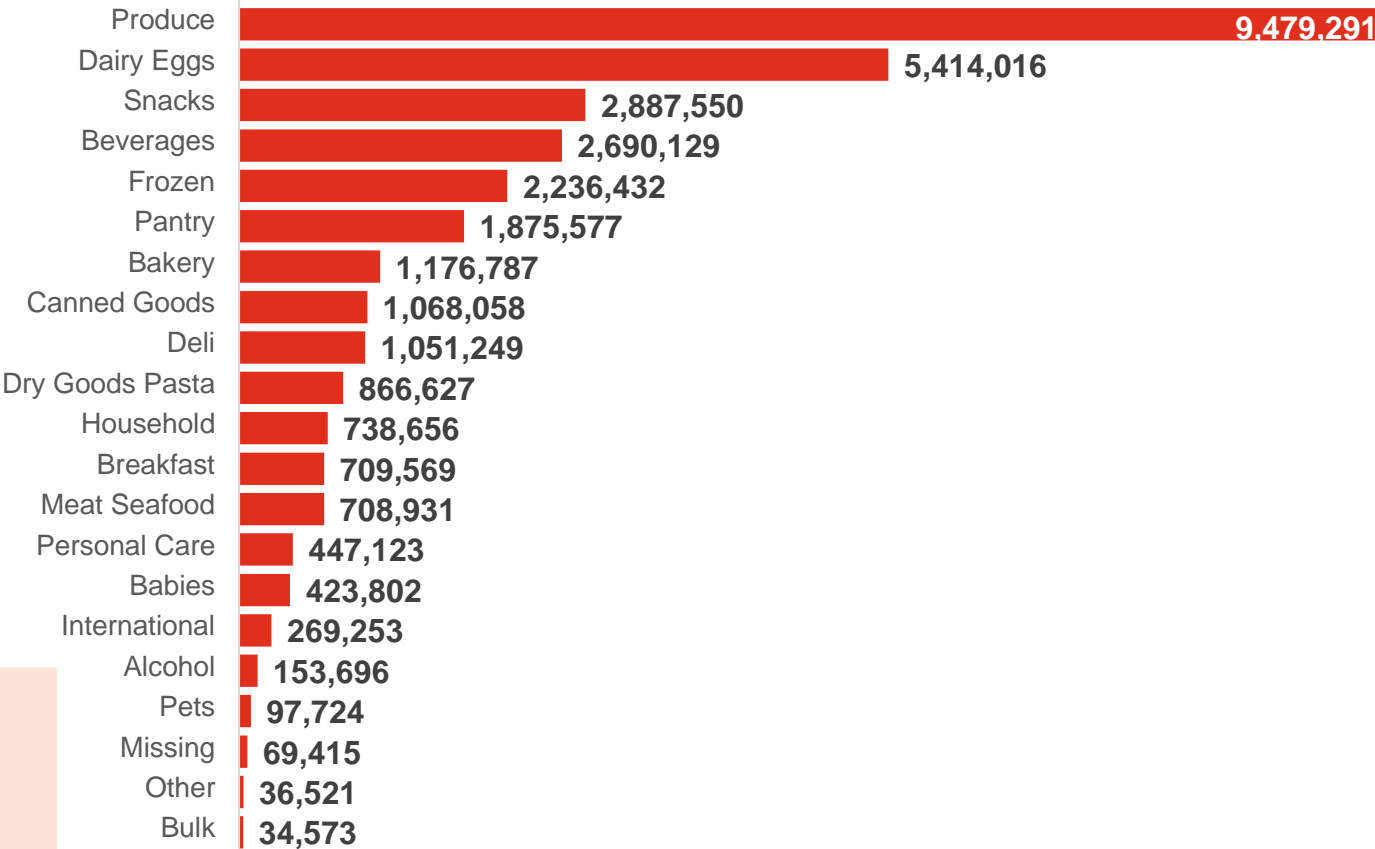
Product Frequency



- Bananas being the most purchased product, followed by other organic items like strawberries, spinach, and avocados.
- Revealing a strong customer preference for fresh produce and organic products, with organic items dominating the top ranks.

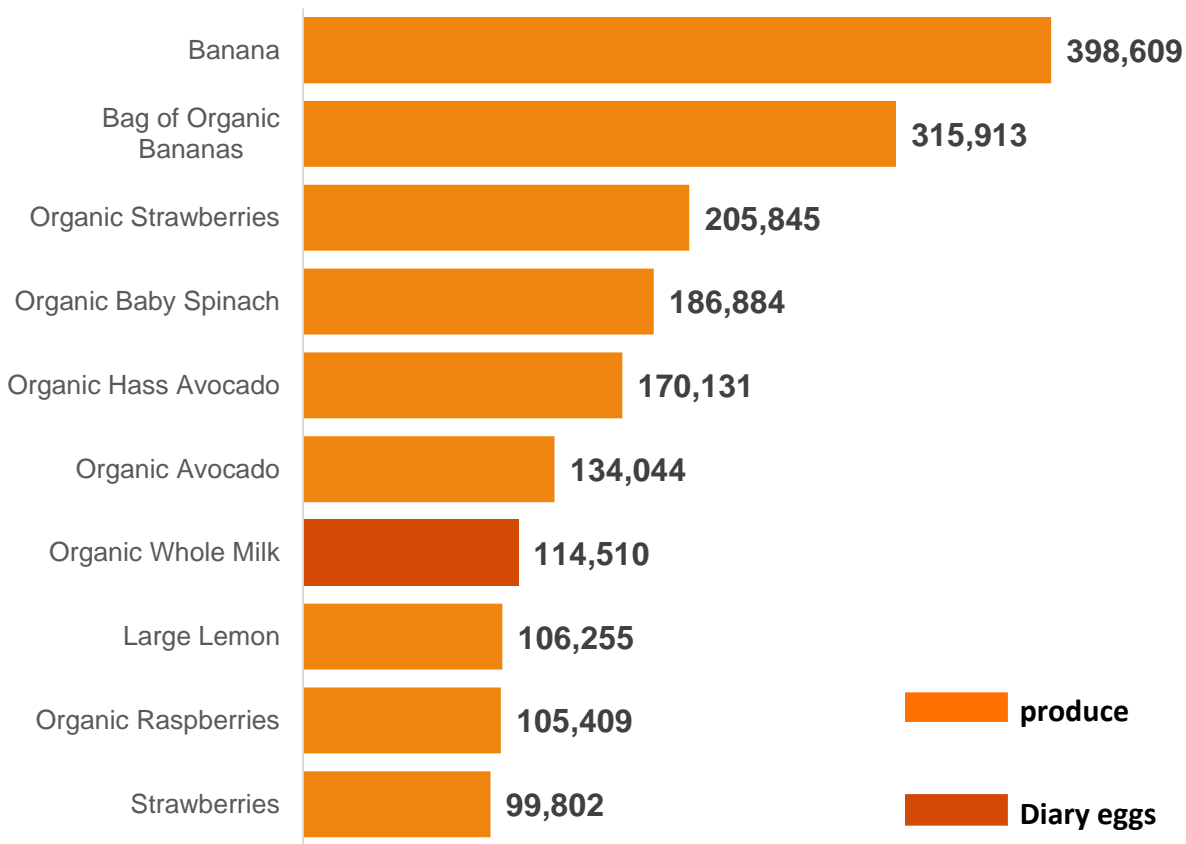
- The produce department dominates with nearly 9.5 million products sold.
- The lower-ranked departments include alcohol, pets, and bulk items, indicating comparatively less demand. Clearly demonstrating a high customer preference for fresh produce and essential groceries.

Products Sold by Departments



Product Analysis:

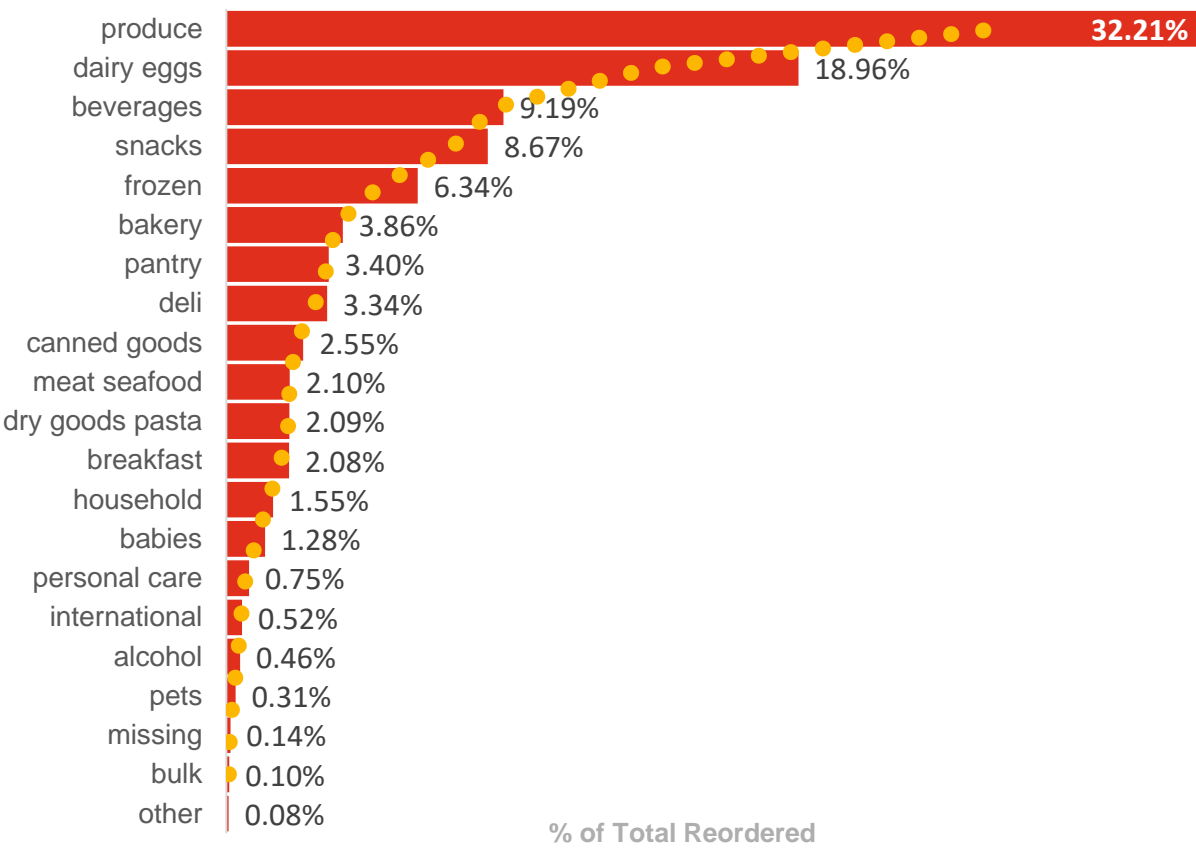
Top 10 Re-Ordered Products



- **Bananas** lead reorders with nearly 400,000 orders
- Produce dominates the list, while dairy eggs feature with Organic Whole Milk at 114,510 reorders.
- **Consumer Preferences:** Fresh and organic essentials are highly preferred, emphasizing the demand for staples in the produce and dairy categories.

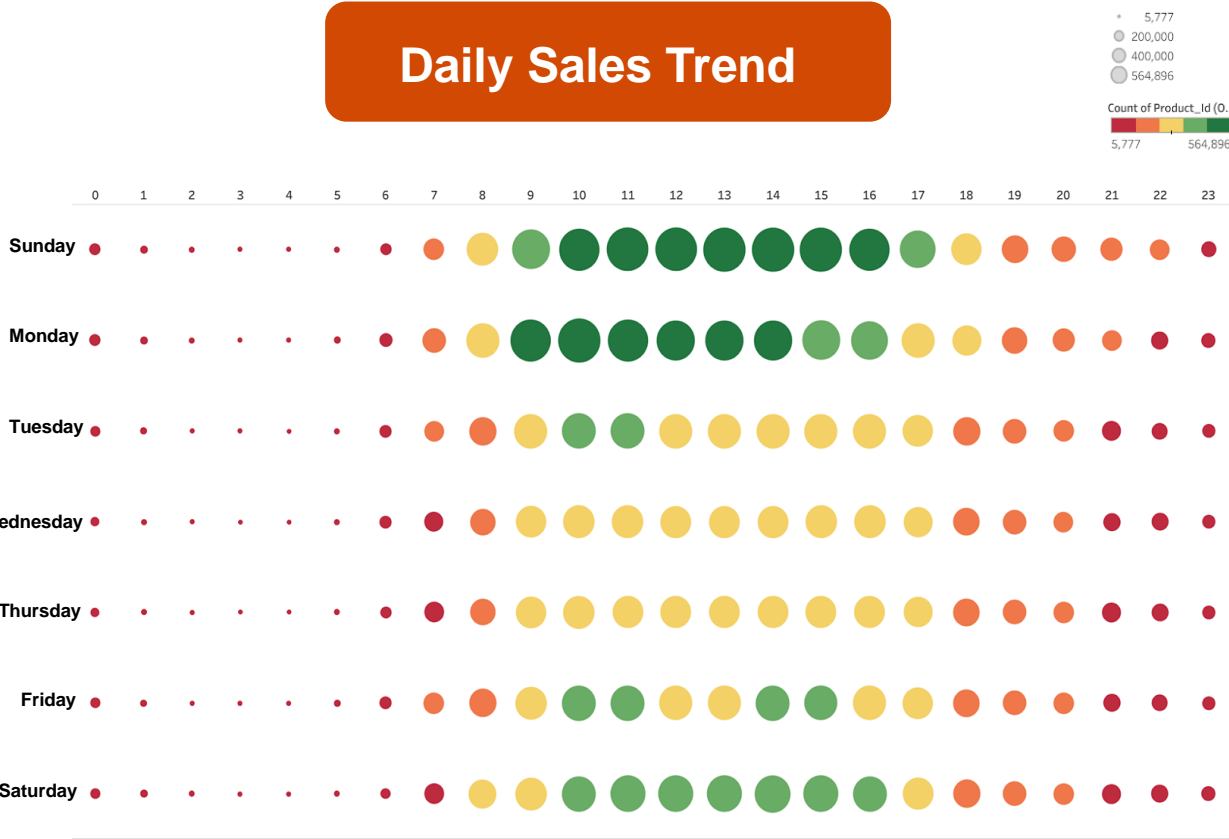
- **Produce** leads reordering followed by Dairy Eggs and Beverages reflecting strong demand for fresh and essential items.
- Categories like Frozen, Bakery, and Deli contribute modestly, while items like Alcohol and Bulk have minimal reordering
- **Consumer Preferences:** Reorders are concentrated on **fresh essentials**

Department Wise Re-Ordering Frequency



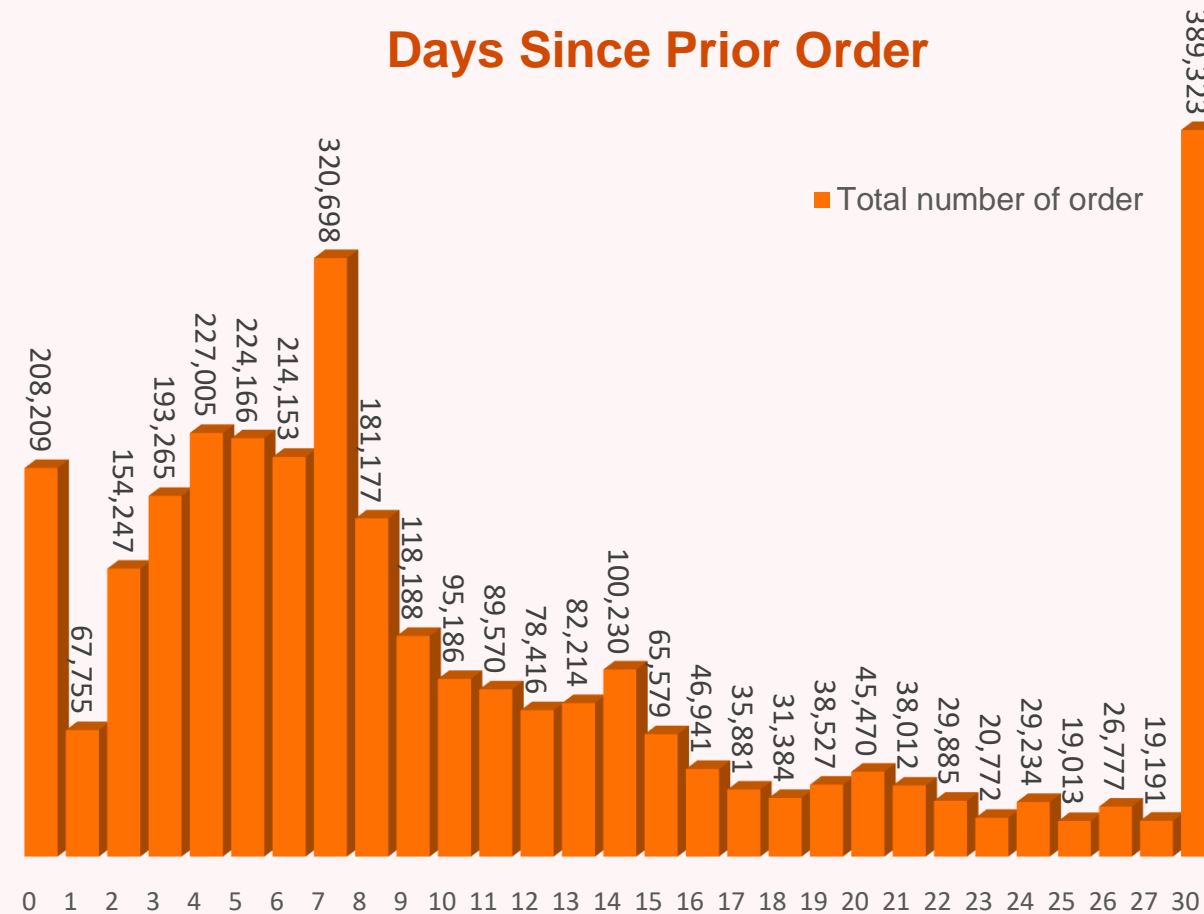
Sales and Patterns Analysis:

Daily Sales Trend



- **Peak Hours:** Sales are highest from **11:00 AM to 7:00 PM**, particularly on weekdays like Monday and Tuesday.
- **Weekend Trends:** Saturday and Sunday show broader sales peaks, extending into the evening.
- **Weekday Patterns:** Monday and Sunday dominate midday sales

Days Since Prior Order



- **Reordering Peaks:** Most reorders occur at **7-day** intervals, followed by **30-day** and **14-day cycles**, indicating weekly and monthly purchase habits.
- **Customer Segments:** Frequent buyers reorder within 1–6 days, while reorders significantly decline beyond 30 days.

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Increasing Customers:

Proposed Strategy

Dynamic Delivery Fee Incentives

Free delivery for first-time users, tiered loyalty discounts, and region-specific pricing.

Behavior-Based Personalization

Bundles and tutorials for new users; purchase history-based suggestions and replenishment reminders for returning users.

Maximize High-Impact Platforms

Targeted YouTube ads highlighting savings and convenience; Facebook retargeting for abandoned carts.

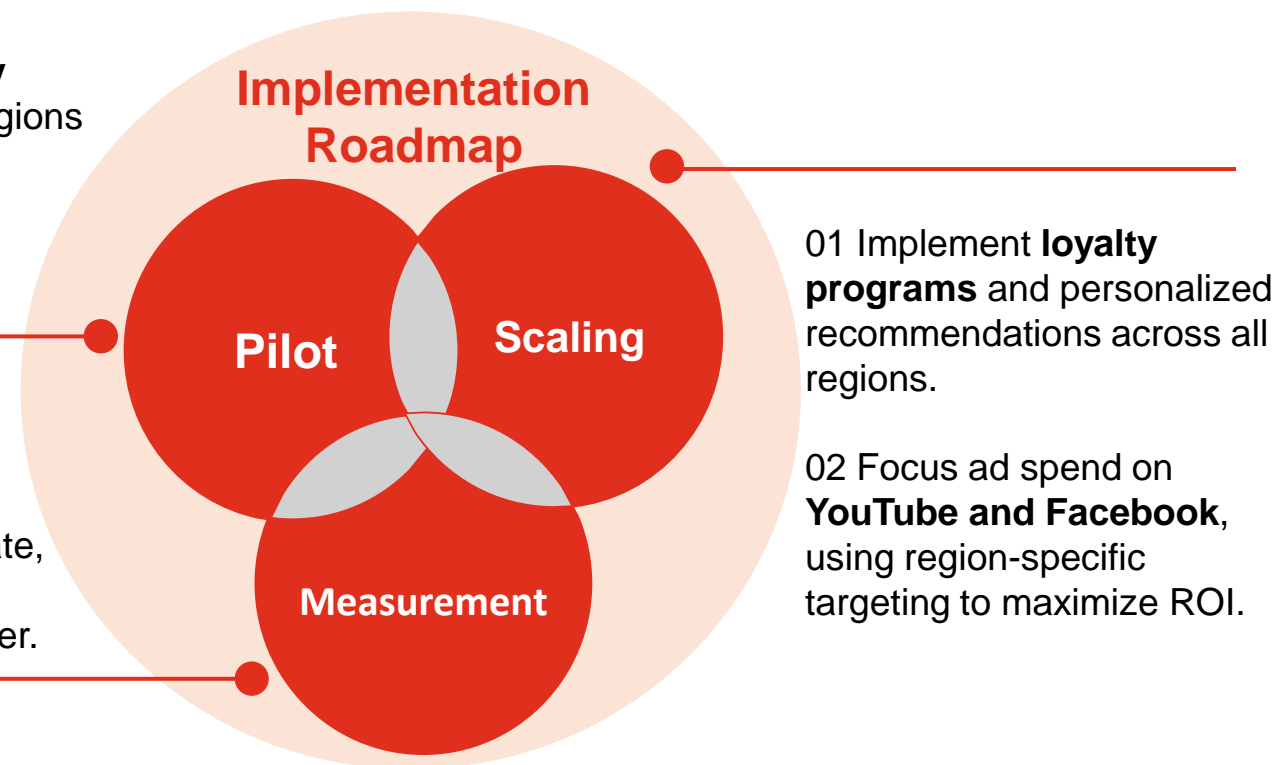
Expand High-Value Segments

Subscription plans for young professionals, family bundles for homemakers, and low-cost delivery for price-sensitive consumers.

This strategy aims to address customer cost sensitivity, enhance engagement through personalized experiences, and drive sustainable growth across diverse customer segments

01 Test **dynamic delivery fees** in urban and rural regions to measure engagement.
02 Run **A/B tests** on onboarding to optimize conversions.

KPIs: New customer acquisition rate, retention rate, average order value (AOV), and delivery margin per order.



Increasing Reorders:



Encourage Larger Reorders with Bundling Offers

01 Reorders are concentrated in **produce** (32.21%) and **dairy eggs** (18.96%).
02 **Recommendation:** Offer **bundles or discounts** on related items (e.g., bananas + organic milk + strawberries) to encourage customers to add more to their cart.

Bundling, Cart Expansion

Target High-Value Departments

01 Departments like **beverages** (9.19%) and **snacks** (8.67%) are secondary but still popular.
02 **Recommendation:** Promote these as **add-ons** during checkout or through targeted recommendations (e.g., “Customers who bought spinach also bought granola bars”).

Add-Ons, Targeted Promotions

Promote Weekly and Monthly Purchases

01 **Insight:** Many customers reorder at **7-day** and **30-day intervals**.
02 **Recommendation:** Provide **subscription options** or personalized reminders for frequently purchased items like organic produce and milk, with incentives for larger orders (e.g., free delivery above \$50).

Subscriptions, Reorder Incentives

Upsell and Cross-Sell Low-Reorder Items

01 **Insight:** Categories like **personal care**, **frozen**, and **bakery** are underrepresented in reorders.
02 **Recommendation:** Use **strategic upselling** during checkout (e.g., “Add frozen pizza for \$5 off”) to increase cart value.

Upselling, Underperforming Categories

Machine Learning Implementation to Increase AOV:

Algorithms Utilized:

Algorithm	Key Features	Strengths	Limitations
Apriori	Iterative itemset discovery	Simple, interpretable	Slower with large datasets
H-Mine	Memory-indexed pattern mining	Scalable for complexity	Complex implementation
FP-Growth	Compressed tree structure	Fast, handles large data	Higher memory requirement

Best Performer: FP-Growth

Contribution to Higher Average Basket Value:

- Quickly identifies co-purchased products to enhance cross-sell opportunities.
- Offers real-time product recommendations tailored to user behavior.
- Boosts relevance of promotions, driving increased spending per transaction.

Sample Recommendations from FP Growth:

Enter the product name: Organic Garlic		
Bought: Organic Garlic		
	product_id	product_name
0	47209	Organic Hass Avocado
1	22935	Organic Yellow Onion
2	13176	Bag of Organic Bananas
3	46667	Organic Ginger Root
4	21903	Organic Baby Spinach

Impact Highlights:

- Enhanced Recommendations:** Personalized, based on strong associations between product categories.
- Targeted Promotions:** Drives cross-selling by showcasing curated bundles.
- Real-Time Insights:** Boosts engagement through immediate product suggestions.

[Link to the Recommendation Algorithm Details](#)

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Challenges & Goals:

CHALLENGES

- **Data Maintenance and Scalability**
Managing a growing inventory IS a continuous challenge
- **Instacart requires real-time analysis of aisle**
- **Handling Data Gaps and Errors**
Missing or incorrect product
- **Balancing Simplicity with Granularity**
Striking the right balance is key to usability and operational efficiency

GOALS

- **Enhance Customer Experience**
Personalize recommendations by understanding customer preferences based on aisle-specific product purchases.
- **Inventory and Supply Chain Efficiency**
Improve supply chain management
- **Improved Data Quality**
01 Address inconsistencies like missing categories to ensure
02 complete and reliable data for operations and insights.
- **Insights for Marketing and Promotions**
01 Identify high-traffic aisles or frequently purchased
02 categories to run targeted promotions or bundle offers

CONCLUSION

- **Opportunities for Optimization**
Enhance digital platform with improved aisle navigation and search functionality.
- **Diverse Product Categories**
Instacart's ability to cater to diverse customer needs
- **Operational Efficiency**
Optimize inventory by identifying high-demand aisles and seasonal trends.
- **Actionable Business Strategies**
Target high-traffic categories for promotions and marketing campaigns.

THANK YOU!
QUESTIONS?