

2Market: Customer Behavior & Marketing Strategy Analysis

Problem

2Market is a global grocery retailer operating both online and in-store. The company was investing heavily in advertising but lacked clarity on a core question: Are we acquiring more customers - or the right customers?

Marketing success was measured by conversions, while product teams cared about spend. Leadership couldn't tell which channels actually generated revenue.

My goal was to connect customer demographics → acquisition channel → purchasing behavior and identify the highest-leverage growth strategy.

Building a Unified Customer View

I merged customer demographics, purchase behavior, and advertising exposure into a single dataset and built an interactive dashboard to evaluate real business tradeoffs rather than isolated metrics.

The dashboard, linked [here](#), allowed slicing performance across:

- geography
- demographics
- product category
- acquisition platform
- discounts & repeat visits

Key Findings

1. Customer demographics explain far less than expected
 - Mapped to these charts:
 - Customer Demographics: Age - Shows tight clustering around 50 years with relatively normal distribution
 - Customer Demographics: Income - Shows the income distribution with average marker
 - Customer Demographics: Marital Status - Shows distribution across marital categories
 - Customer Demographics: By Location - The world map showing CA, US, GER, ME, and IND regions
 - Key insight: The age chart's tight concentration around age 50 and the relatively uniform distributions across income/marital status support the claim that traditional demographic segmentation isn't predictive of spending behavior.
 - Interpretation: traditional persona marketing (e.g., "young families vs retirees") is unlikely to meaningfully change purchasing behavior.

- Geography mattered far more than demographic attributes - certain countries consistently generated higher spending customers.
- Decision implication: shift segmentation from demographic targeting → behavioral targeting.

2. Revenue is driven by geography, not product preference

- Mapped to this chart:
 - Product Spending by Country - The stacked bar chart showing spending across different countries (Alcohol, Meat, Commodities, Fish, Chocolates, Vegetables)
- Key insight:
 - The product spending chart shows a consistent pattern: Alcohol dominates spending across all countries, while vegetables remain lowest
 - This holds regardless of age, marital status, or income
 - Spain and South Africa customers consistently produced the highest total spend
- Interpretation: customers don't spend more because of different tastes, they spend more because of purchasing power
- Decision implication: expansion strategy should prioritize markets similar to high-spend countries rather than introducing new product categories

3. Conversion rate is not the right marketing metric

- Mapped to these charts:
 - Advertising Information - Shows average customer value by channel (Twitter, Bulkmail, Instagram, Facebook, Brochure)
 - Success of Advertising Platforms - Shows conversion counts by platform across years 2012-2014 (Brochure, Bulkmail, Facebook, Instagram, Twitter)
- Key insight:
 - The advertising charts show social platforms (Instagram, Twitter) have strong conversions - but the more important observation:
 - Customers acquired through certain platforms generate significantly higher total spend
- Interpretation: the best platform isn't the one that gets purchases, it's the one that acquires high-value customers
- Decision implication: optimize marketing for revenue per acquired customer, not conversion volume

4. Discounts increase visits - but not proportionally

- Mapped to charts: Discounts and spending patterns
- Key insight:
 - The discount histogram shows most customers redeem very few discounts, while a small group redeems many
 - The visit vs discount plot reveals a weak positive relationship: discounts increase visits slightly, but returns diminish quickly
- Interpretation: discounts drive engagement but are not a strong revenue growth lever - they mainly shift purchase timing
- Decision implication: use discounts as retention tools, not acquisition strategy

Recommendation

If responsible for growth strategy, I would:

1. Shift marketing spend toward Instagram in high-spend regions
2. Expand geographically into countries similar to Spain-like markets
3. Stop optimizing campaigns around demographic personas
4. Replace “conversion rate” KPI with revenue per acquired customer
5. Use discounts selectively to retain customers rather than drive acquisition

Expected Impact

Without increasing budget, reallocating spend toward high-value acquisition channels would increase revenue efficiency - acquiring fewer but higher-spending customers.

What I'd Do Next

To make this production-ready:

- Run channel holdout experiments to measure causal revenue lift
- Track repeat purchase rate by acquisition channel
- Separate unit quantity vs price effects on product demand
- Model customer lifetime value by platform

Takeaway

- The company started by asking: “Which ads convert best?”
- The data showed the real question was: “Which channels bring customers we actually want?”
- This reframed marketing from performance reporting to customer quality optimization - a significantly higher-leverage growth strategy.

APPENDIX:



