

# Customer Segmentation and Campaign Strategy for Giant Food

## Using Data Analysis to Improve Marketing Effectiveness

Module 2

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Supermarket

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# Background



# Background: About Giant Food



2015

The Giant Company

- The Giant Company (formerly known as Giant Food Stores) is a US regional supermarket chain that operates in several states in the Northeast United States, specifically Pennsylvania, Maryland, Virginia, and West Virginia under the Giant Brand.
- Founded in 1923, the supermarket chain has gone through many modernization initiatives in order to keep up with competitors and grow its brand. Starting in the early 2000, it has gone through many technological changes.
- In the context of this presentation, in 2015 it will try to modernize its marketing strategies. By 2014, it has allowed customers to shop in its over 200+ stores and 90+ gas stations. It also allows customers to order through Catalogs and its Website.
- As it's facing increased competition in retaining customers, it needs to continue to improve their marketing effectiveness.

# Business Problem





# Business Problem

Giant has been open a long time but only has started its digital transformation. Using the data they were already collecting, they decided to study its customers to better understand them.

The supermarket already has different ways to promote and sell their products.



However, without targeted campaigns the promotions are ineffective.



By properly understanding our customer, we can more effectively increase marketing efforts.



# Objectives and Goals

- Identify which customer segments currently respond positively to existing marketing campaigns
- Track campaign response rates and aim for a measurable increase in response within the next year
- Improve engagement through brochures, catalogs, discount codes, limited-time web promos, and targeted email initiatives
- Refine targeting strategies based on insights from customer data and continue measuring campaign effectiveness



# Questions to keep in mind

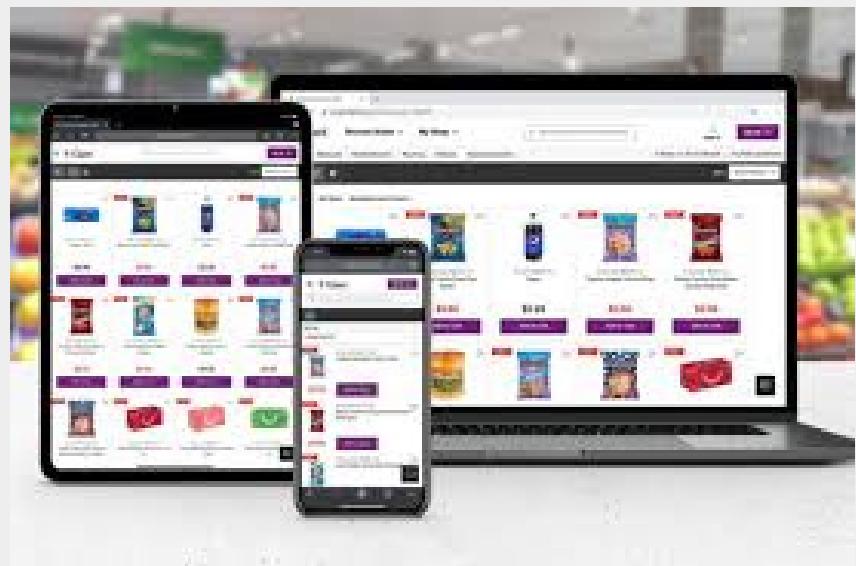
Who responds to campaigns?

Are demographics or behaviors related to response?

Can we group customers by value and engagement?

What are the most valuable segments?

# Data Overview

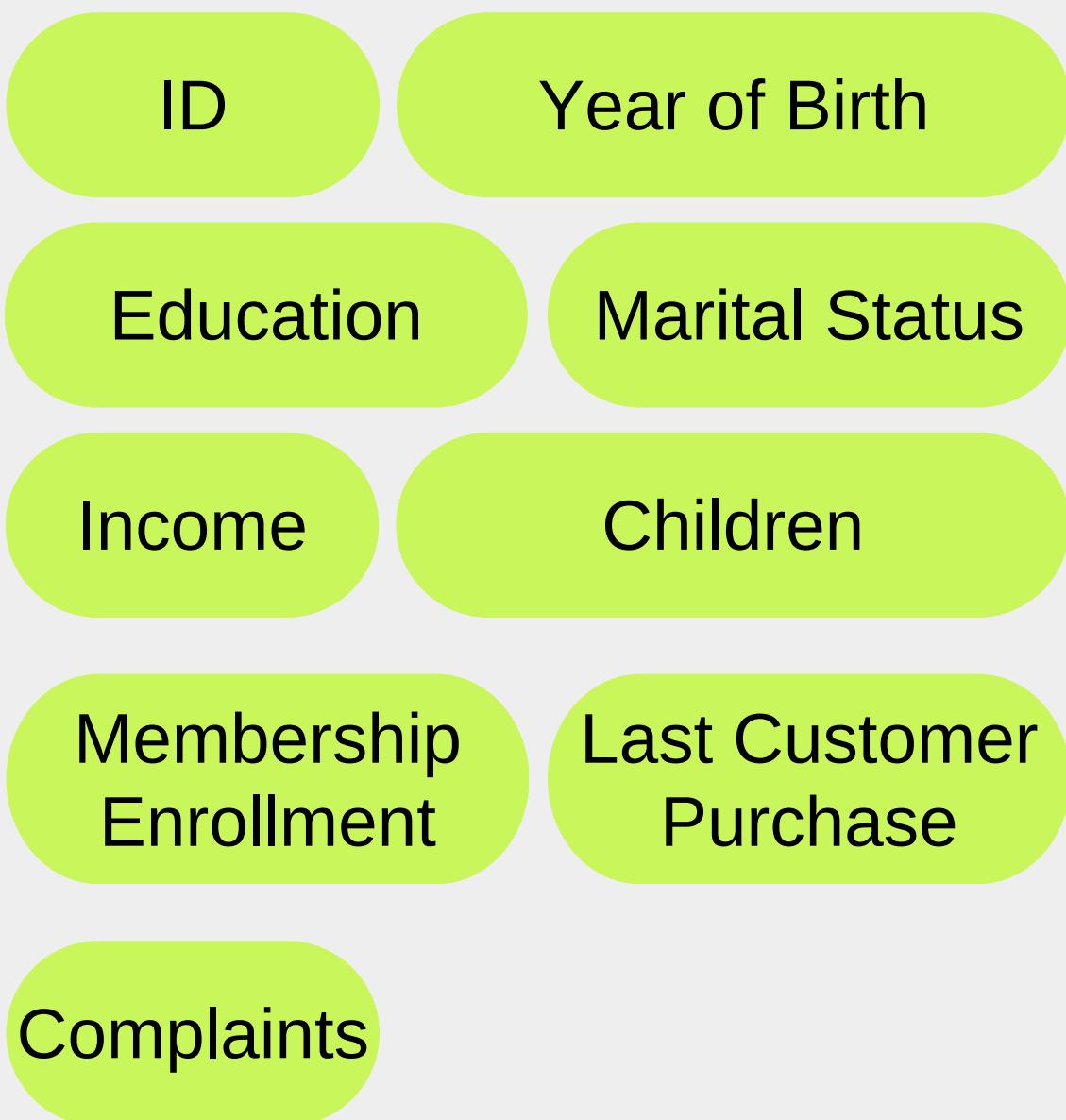




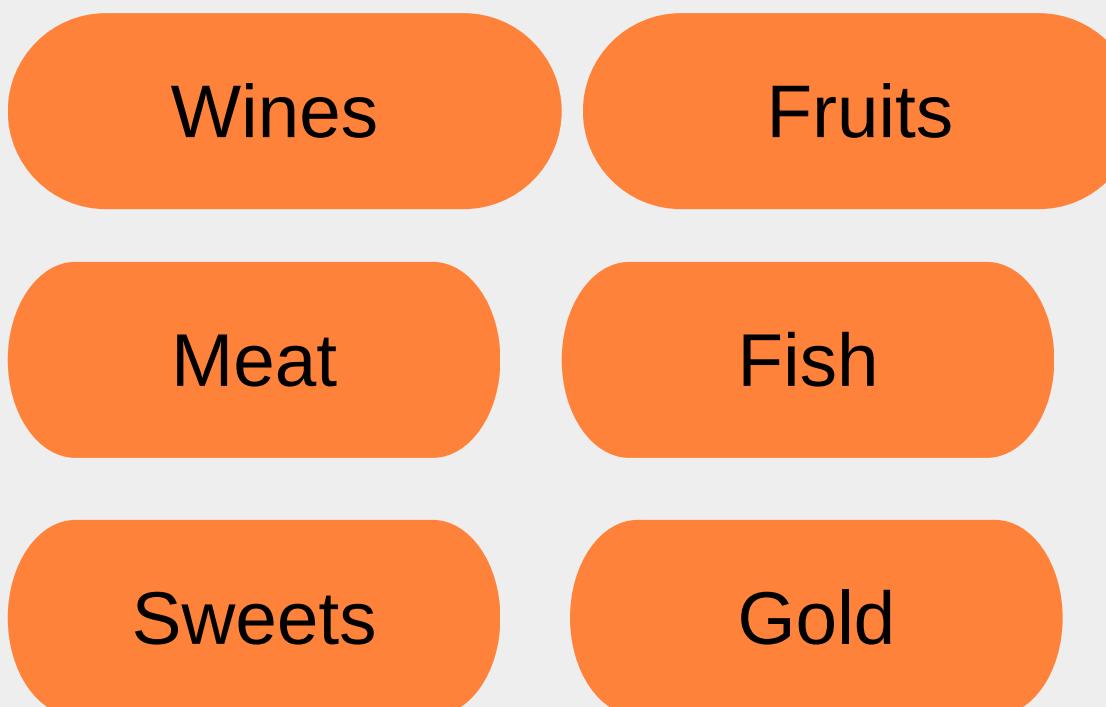
# Data Overview

Raw dataset of 2240 Customers and 20 variables

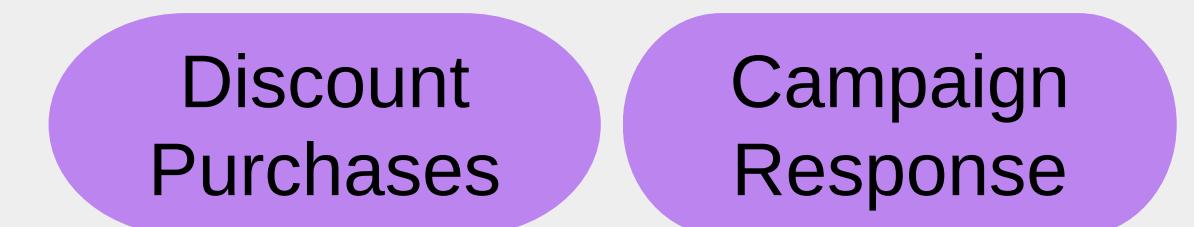
## People



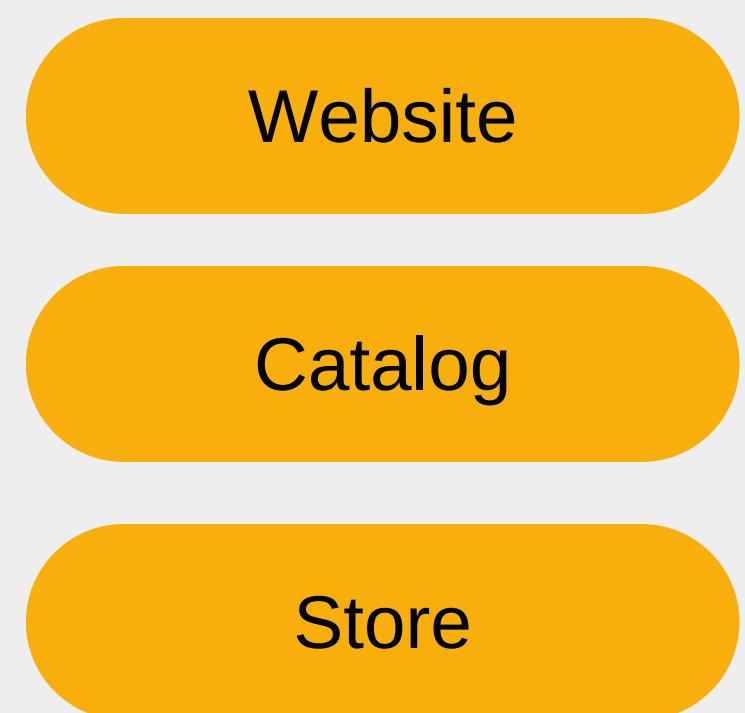
## Product Spending



## Campaign Metrics



## Shopping Channel





# Data Overview

## Assumptions and Changes made

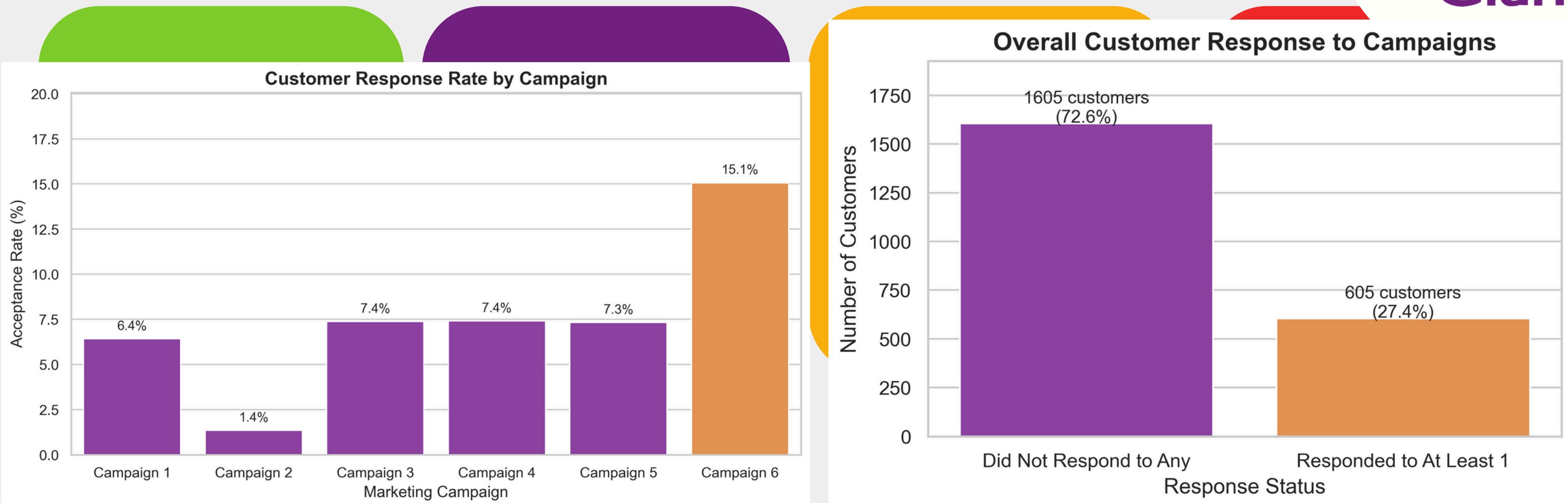
- Relevant for Marketing team, Product team, Operations team, Customer Support team
- Campaign 1 - 6 has an unknown time and contents
- Date of Customer joining the company means the date that the customer joined the Giant Membership program, not the first purchase
- Date of Analysis was last month, December 6<sup>th</sup>, 2014.
- In the education column, 2n Cycle is another word for bachelor's degree.
- Marital Status has assumed definitions for YOLO, Widow, Alone, Together, and Absurd.
- Missing values which were found in the income column were dropped (only 24 values)
- The data excludes customers who made no purchases (Totalpurchases = 0)

# Analysis



# Current Campaign Overview

As campaigns are currently not targeted, they are ineffective at engaging the customers

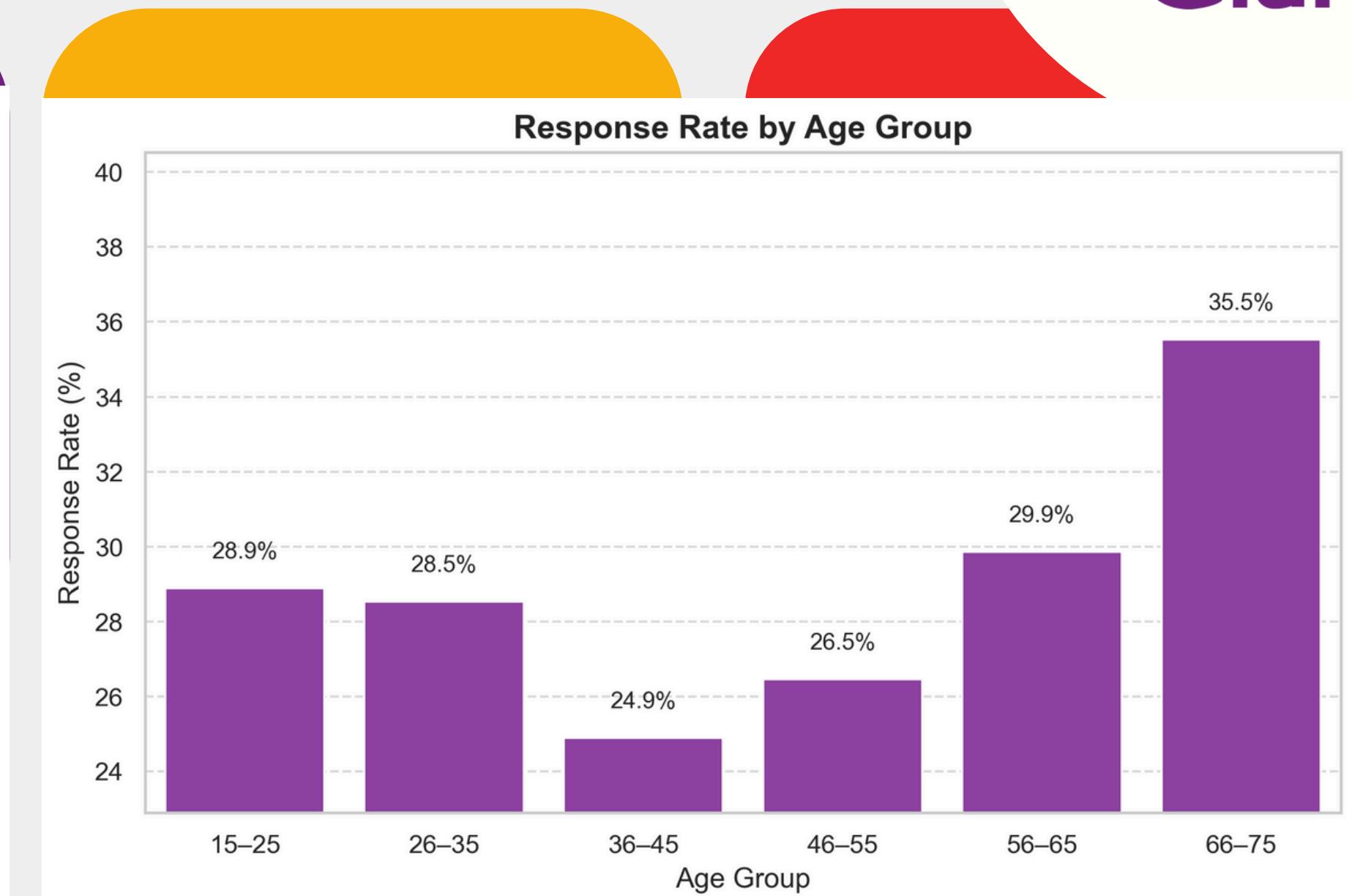
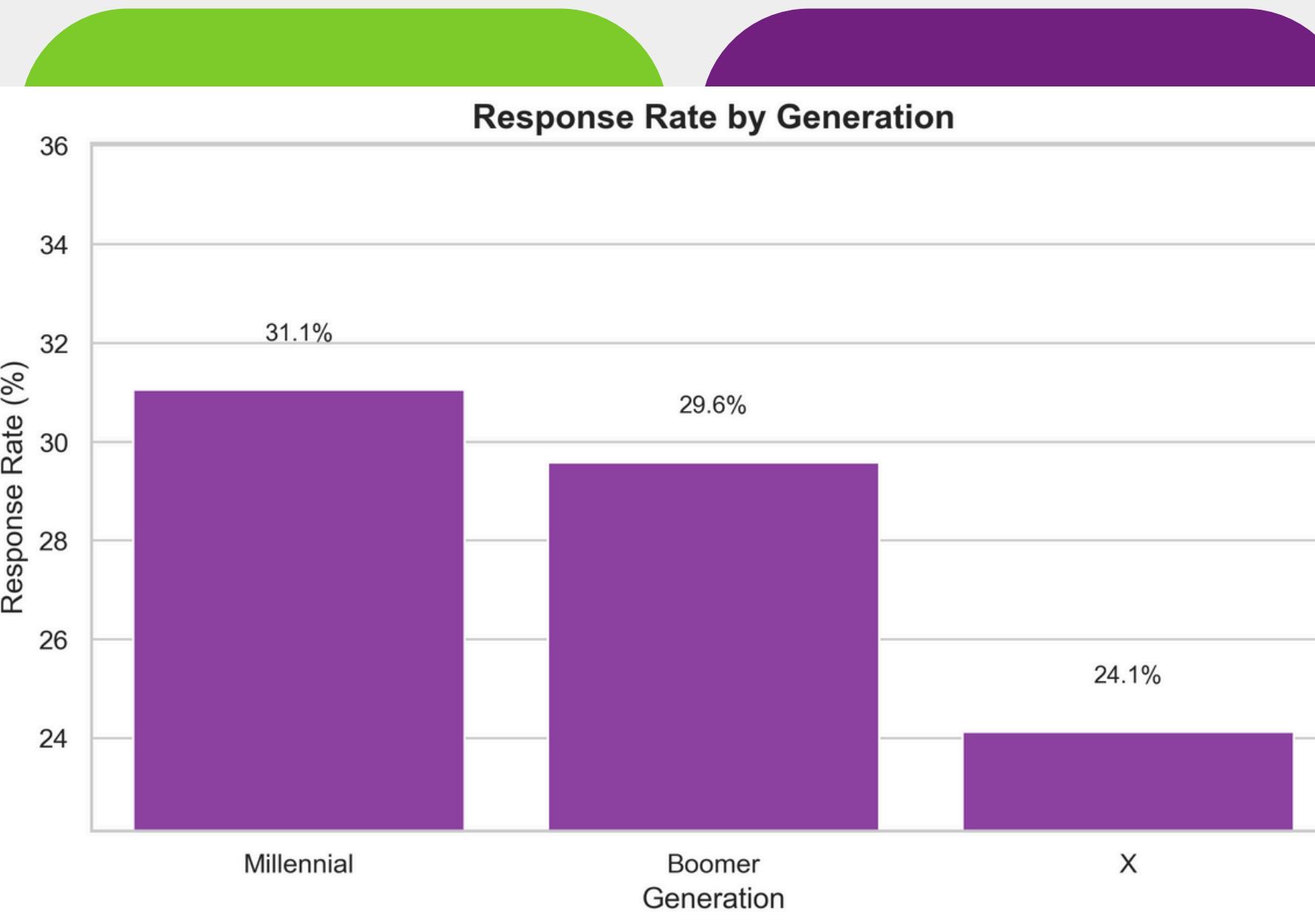


## Key Takeaways

- Individual campaigns have a very low response rate (Campaign 2 least successful (1.4%), Campaign 5 most successful (15.1%))
- Most customers didn't respond at all (72.6%) showing how ineffective current campaigns are

# Demographics by Response

Demographics such as Age have significant effects on response rate



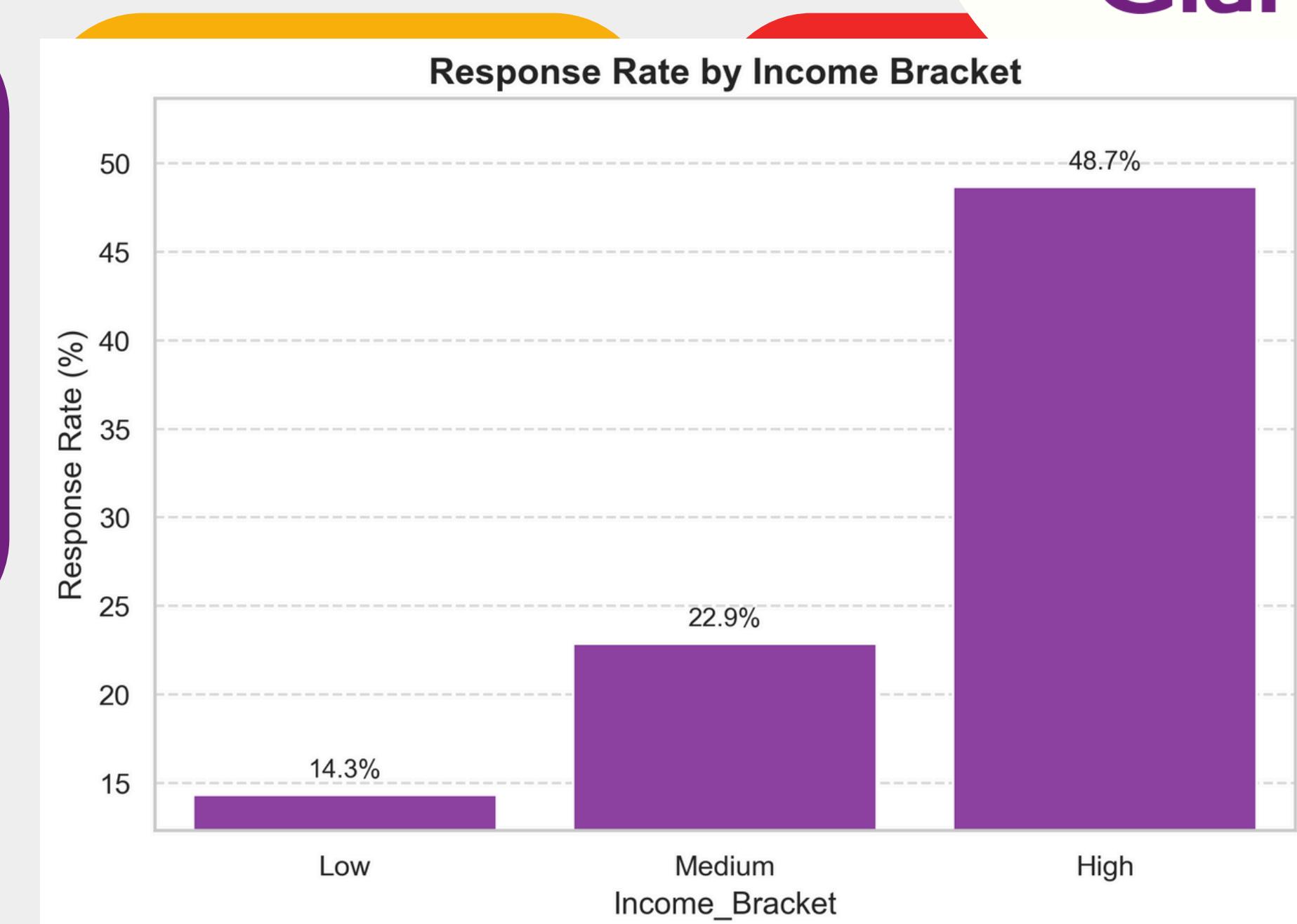
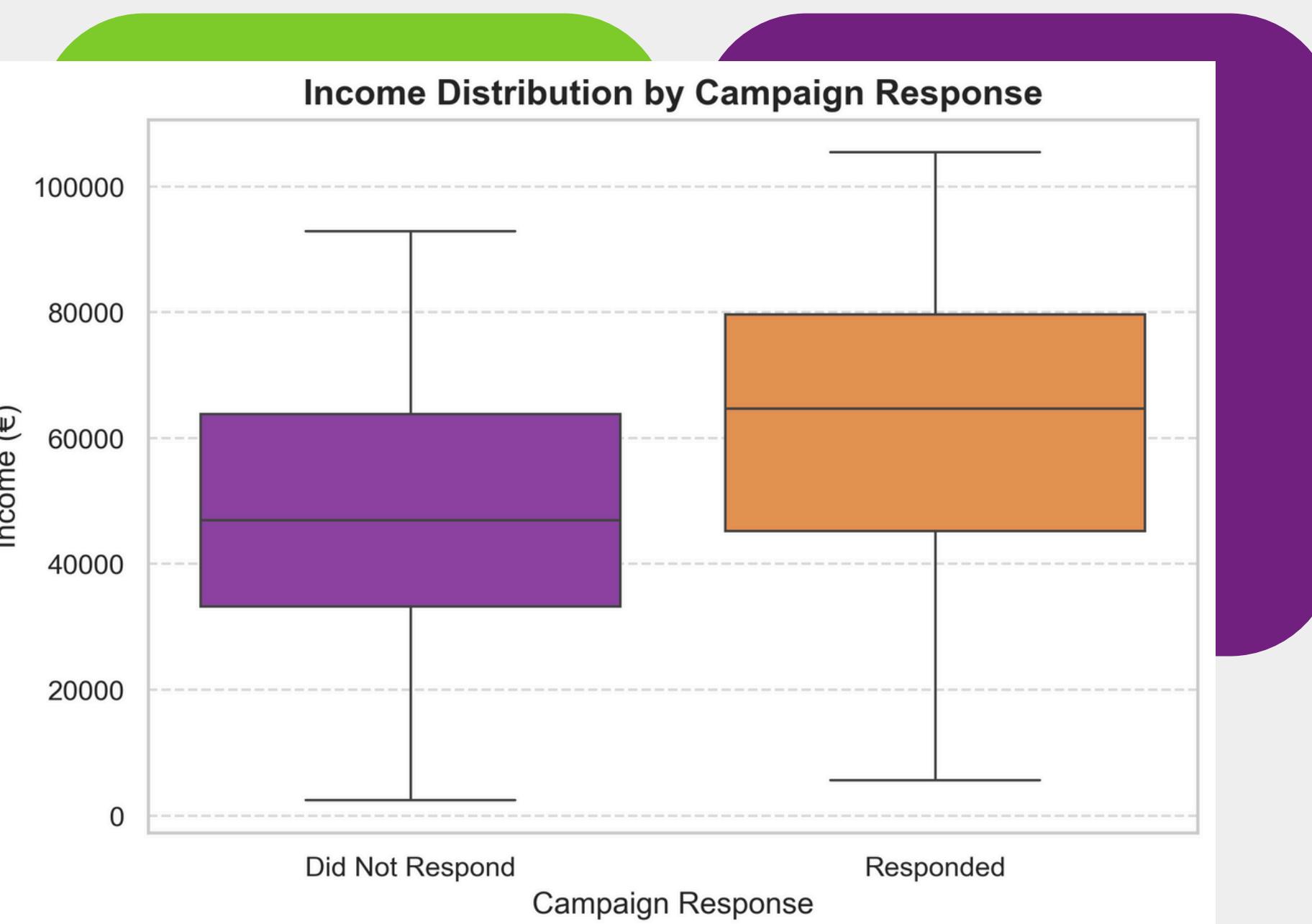
## Key Takeaways

- Older customers (66-75) had the highest response rate at 35.5%, significantly above other age groups.
- Middle aged customers have the lowest response rates suggesting that this segment may be less engaged.
- Millennials (31.1%) and Boomers (29.6%) showed relatively high responsiveness



# Demographics by Response

Those who earn more typically are more responsive to campaigns

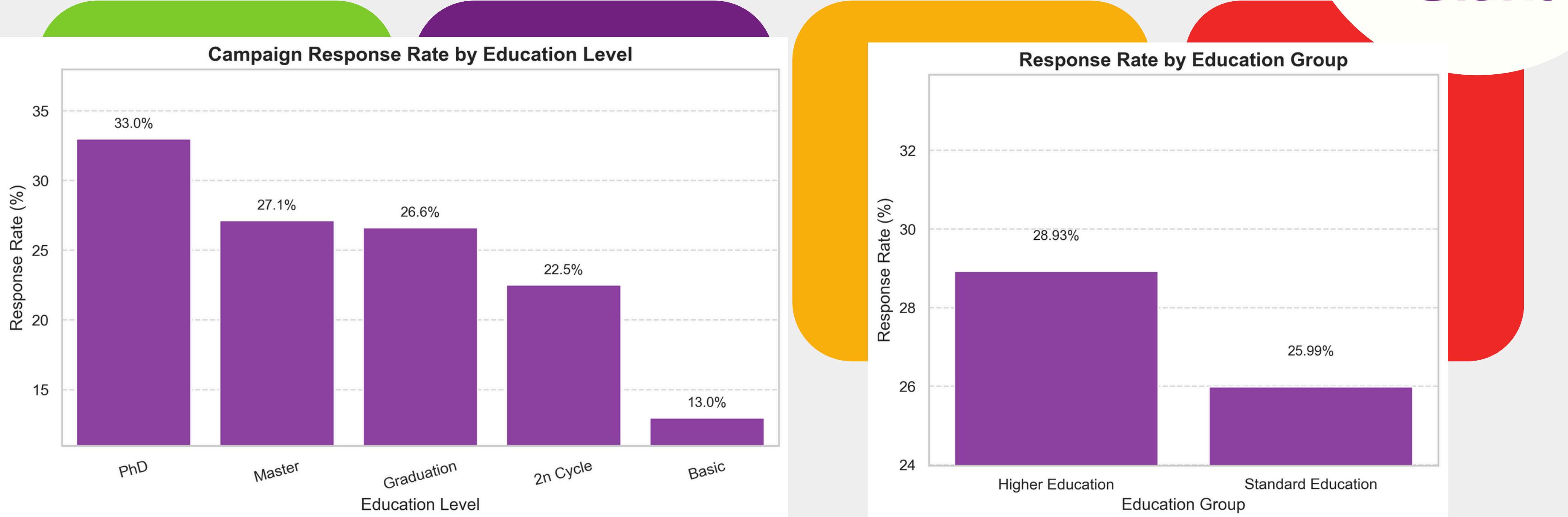


## Key Takeaways

- Customers with higher incomes are the most responsive. Those who responded tend to have higher median income, and those in the higher income bracket also responded more. Some notable outliers did not respond.
- Low (n=545, 0-\$35,000) Medium (n=1098, \$35,001-\$68,000) High(n=567, \$68,001-\$666,666)

# Demographics by Response

Those who are more educated also tend to respond more to campaigns



## Key Takeaways

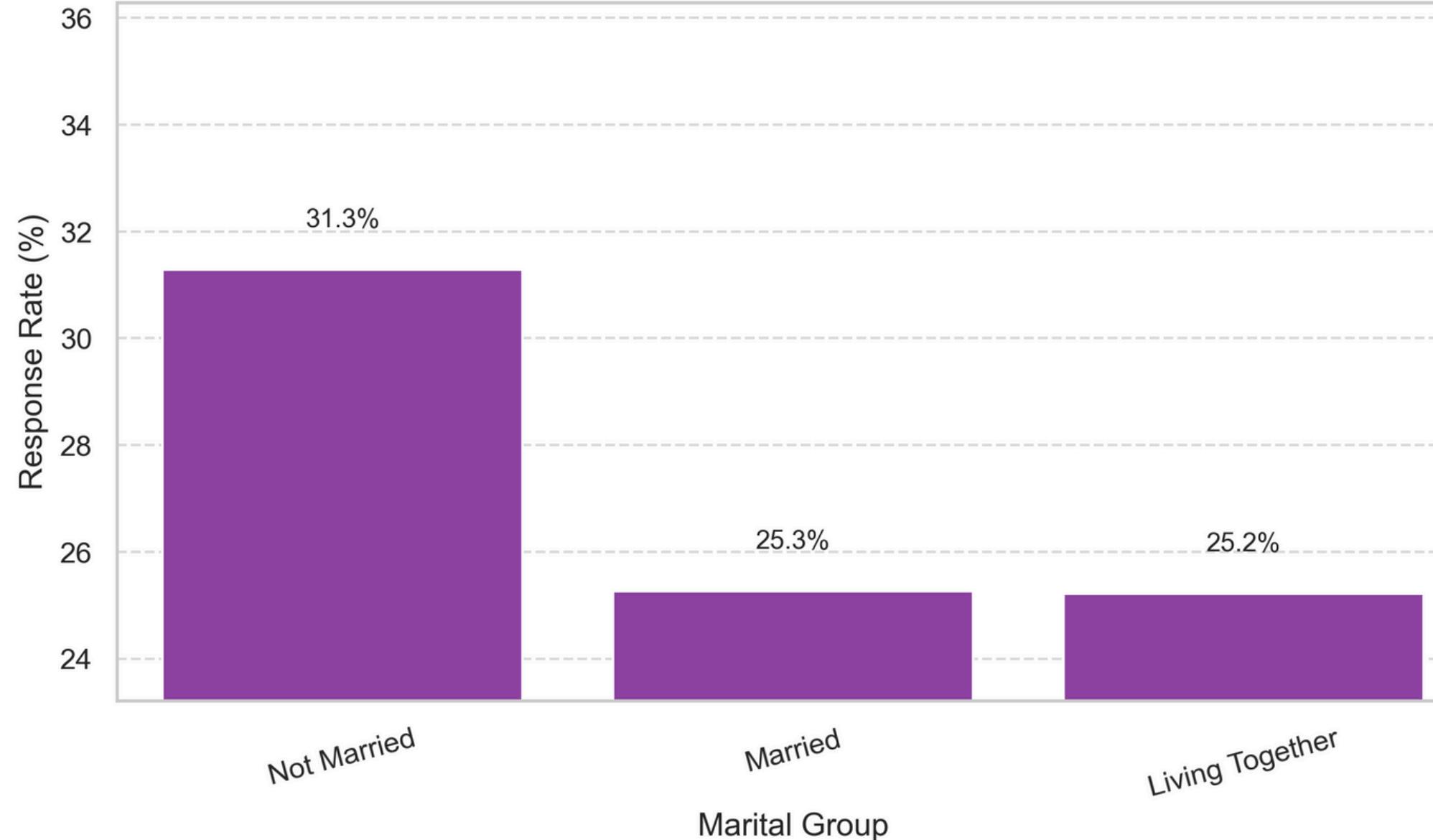
- Those with Standard Education are less likely to respond, with the lowest engagement at 13% for those with Basic Education.
- Basic and Graduation is Standard Education, with Graduation meaning high school degree.

# Demographics by Response

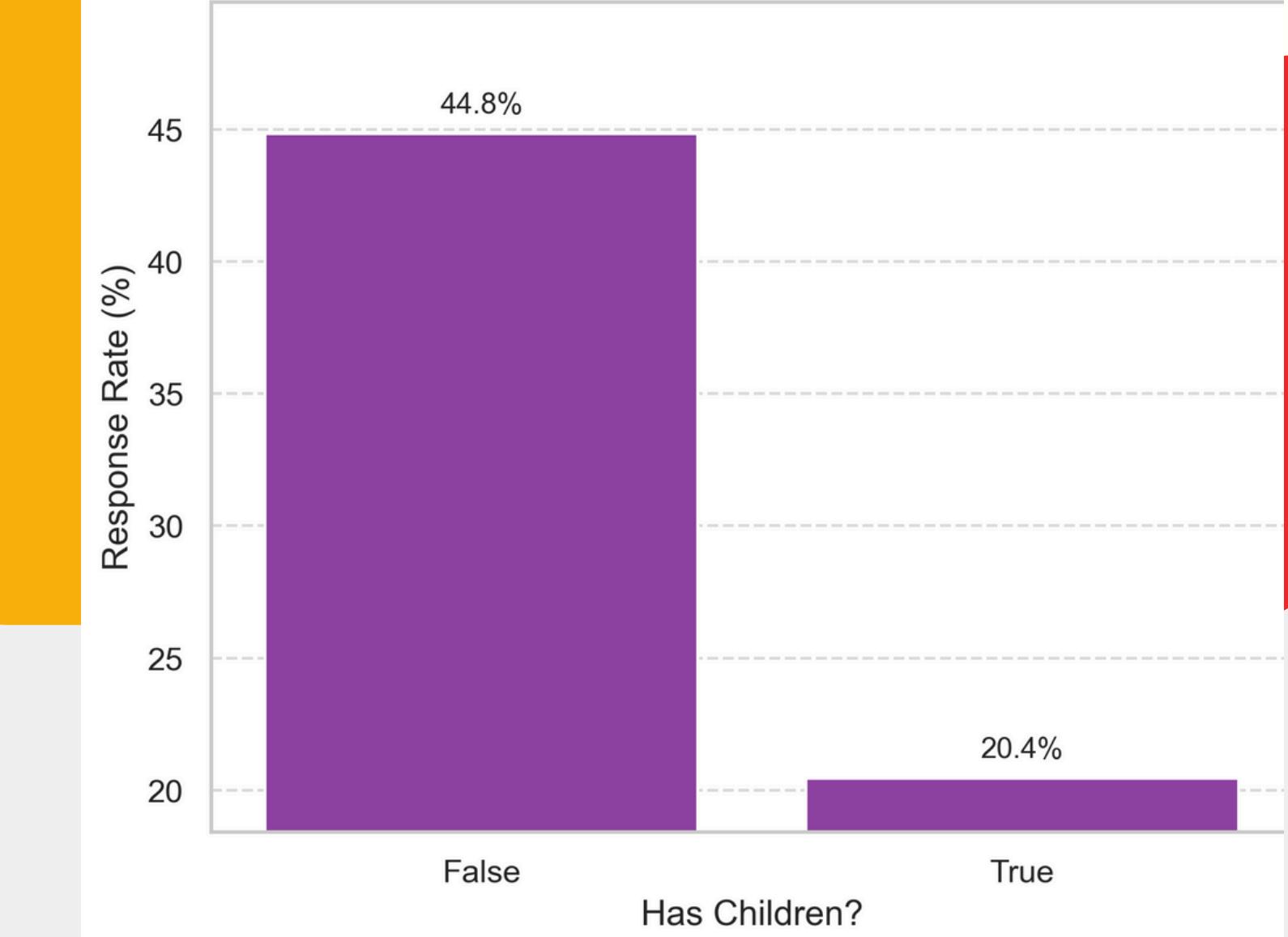
Those who have no children and not married tend to be more responsive



Campaign Response Rate by Marital Group



Response Rate by Parental Status



## Key Takeaways

- This suggests that single individuals may be more open to campaign messaging.
- Customers without children had a much higher response rate ( $n = 1581, 44.8\%$ ) compared to those with children ( $n=629, 20.4\%$ )

# Summary of Campaign Sensitivity

- Age has significant effects on response behavior but does not have a linear effect or trend. Younger generations and Older generations responded better.
- Customers with higher incomes are significantly more likely to respond. Including outliers will show that high-income earners do not respond.
- Those with higher education levels tend to respond more.
- Customers who are not married and have no children are more likely to engage.

## Important Disclaimers

- Correlation does not mean Causation
- Some charts disregard outliers
- Demographic Generalizations

## Limits

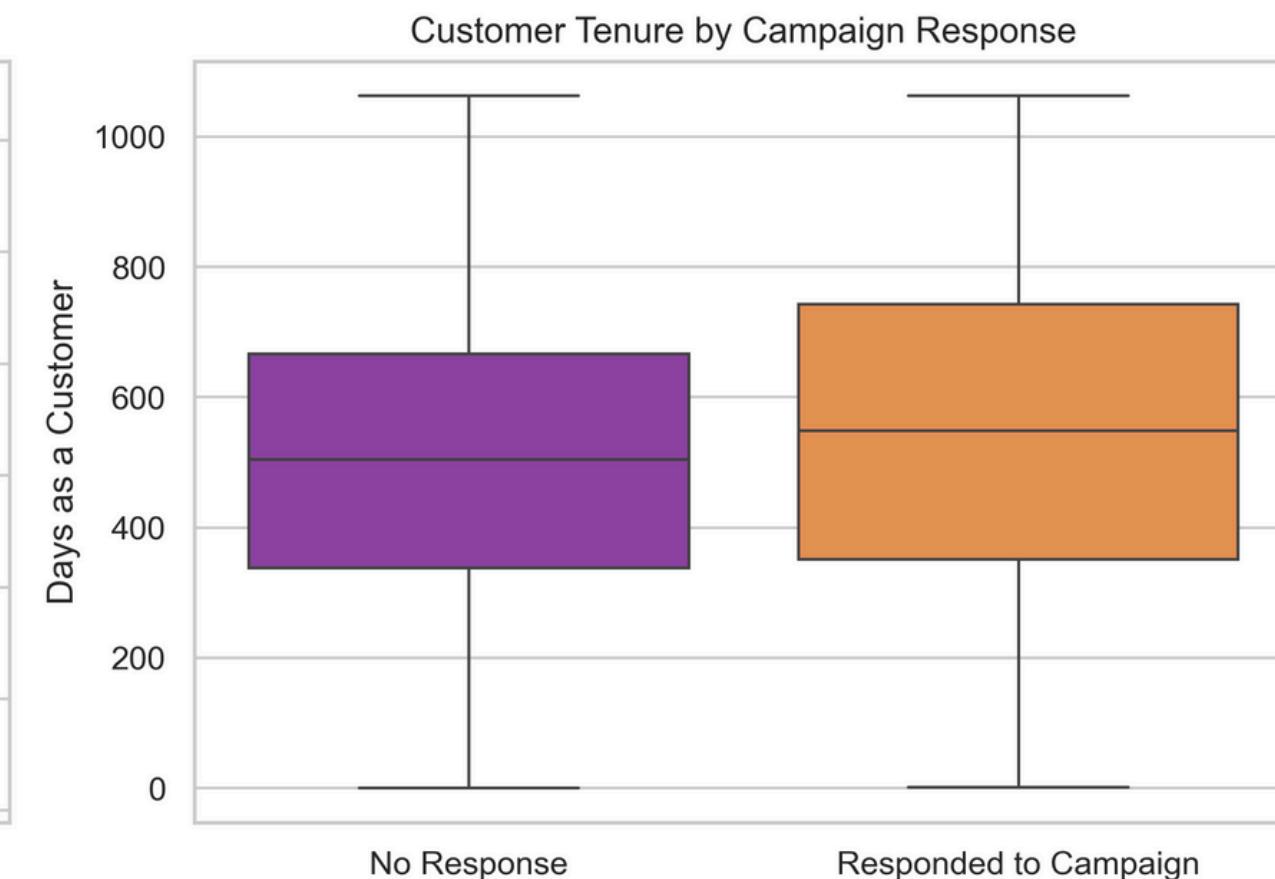
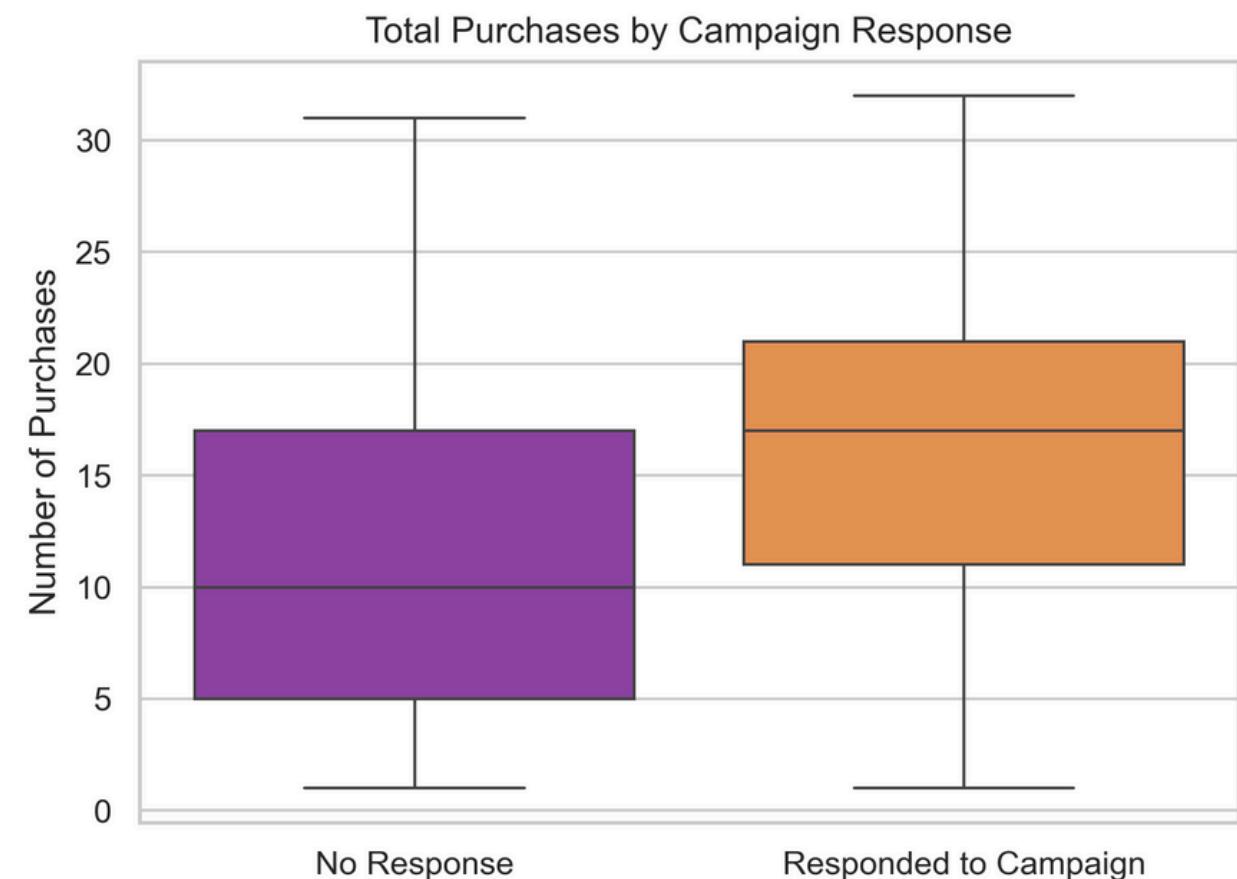
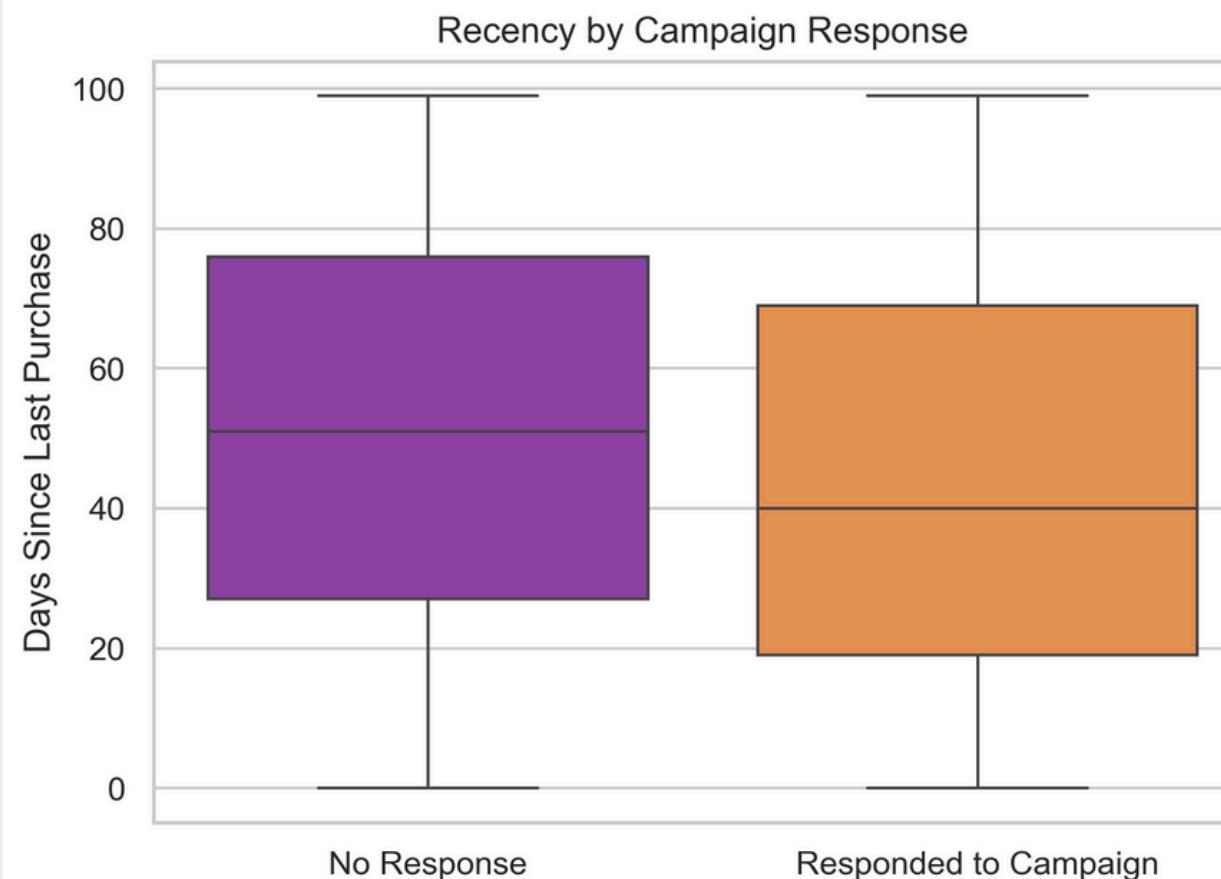
- No information on Campaign 1 - 6
- Sample bias
- Campaign response measurement not defined

# Responses by Behavior

Better scores in Recency, Frequency, and Length lead to better rates of response



Engagement Behavior vs. Campaign Response

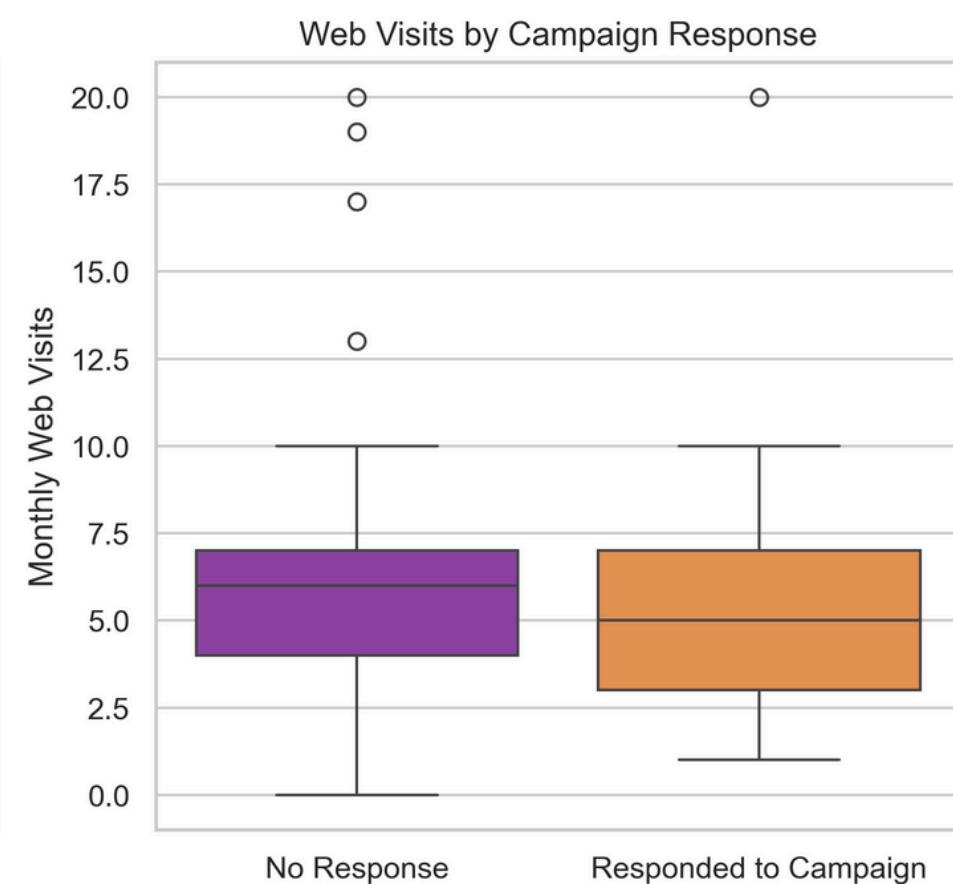
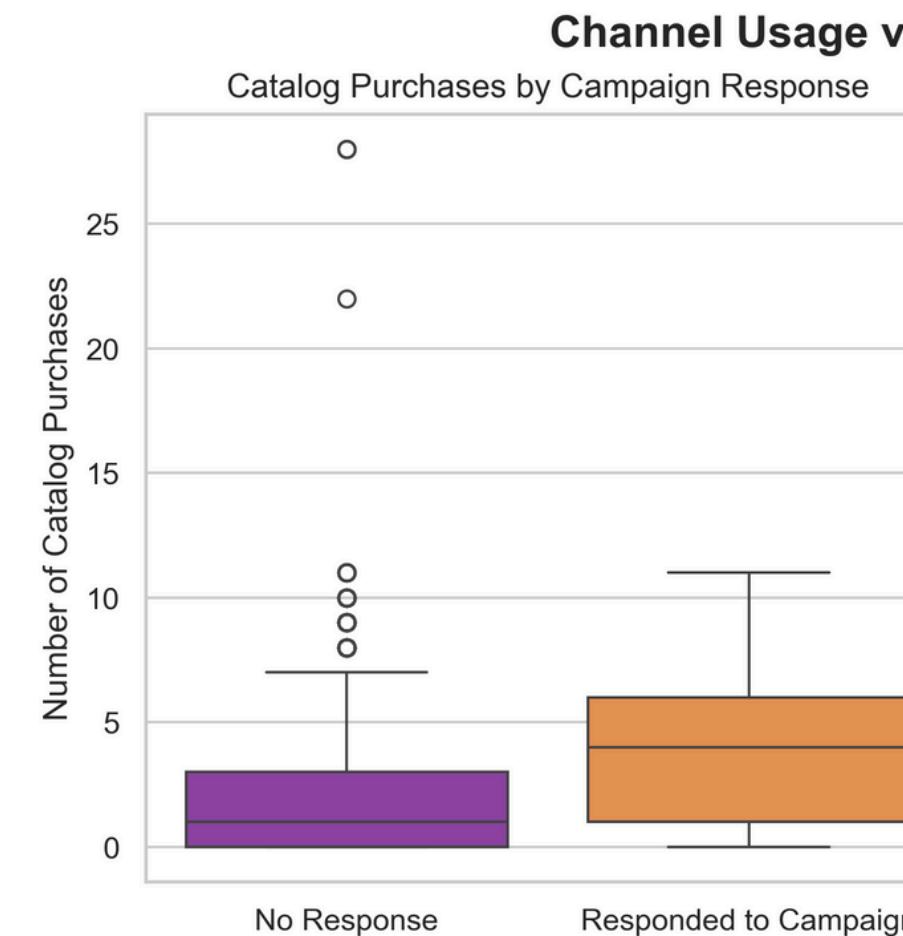
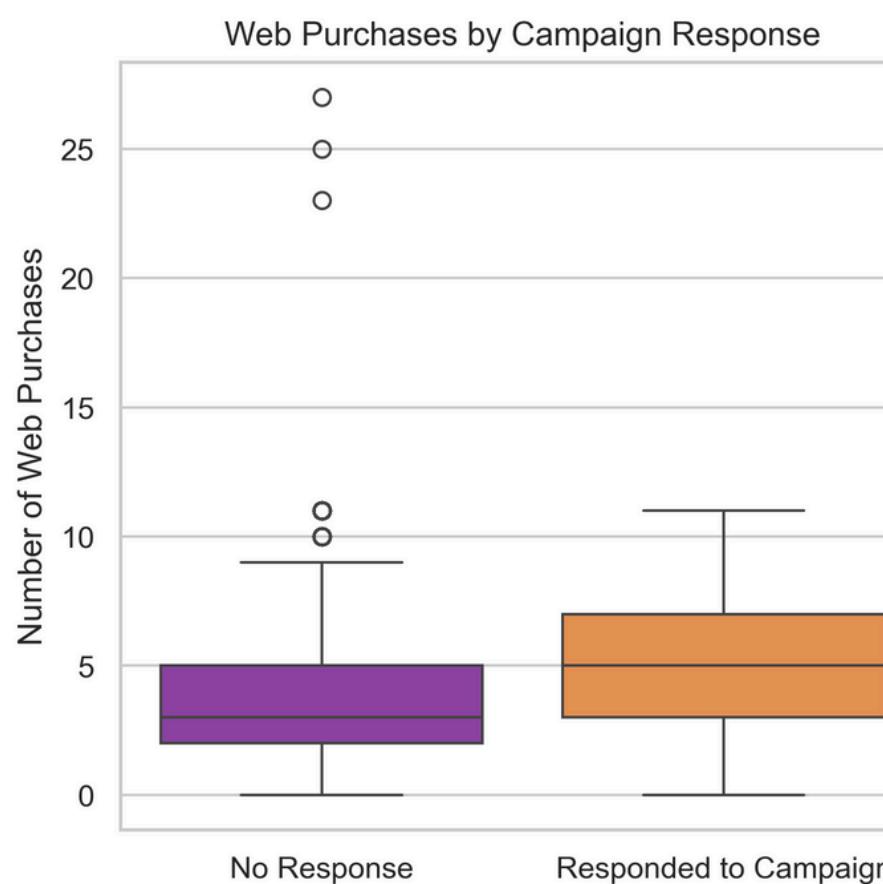


## Key Takeaways

- Recent engagement increases campaign responsiveness
- Frequent buyers are more receptive to campaigns
- Loyalty and long-term relationships appear to positively influence response rates

# Responses by Behavior

Responders on average have higher usages in all channels than non-  
responders

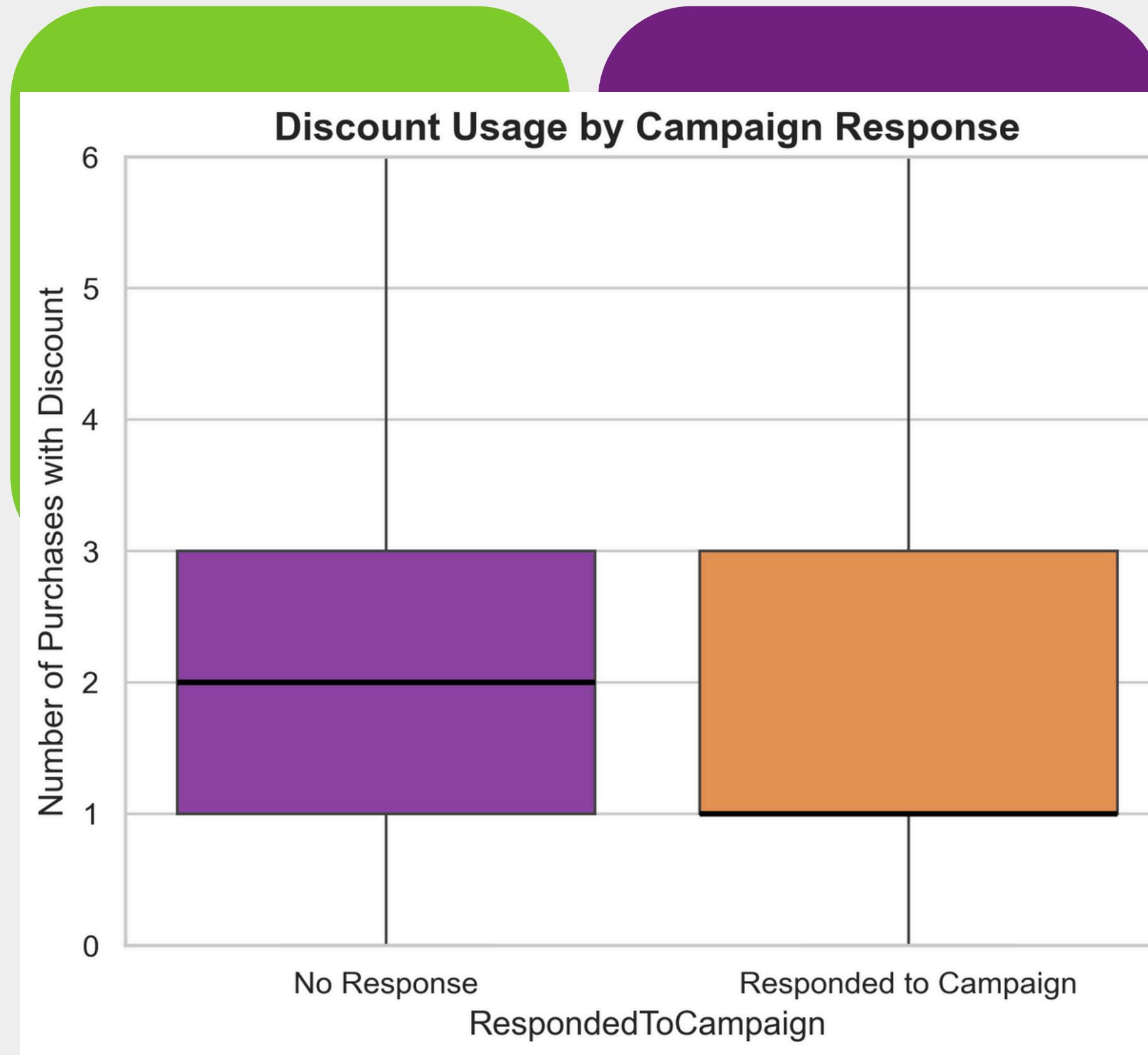


## Key Takeaways

- Web purchases and Catalog purchases had bigger differences between responders and non-responders.
- Outliers tended to be from Non-responders who made significantly more purchases in some channels.
- Campaign responders are more engaged overall.

# Responses by Behavior

Non-responders averaged using more discounts than responders



### Key Takeaways

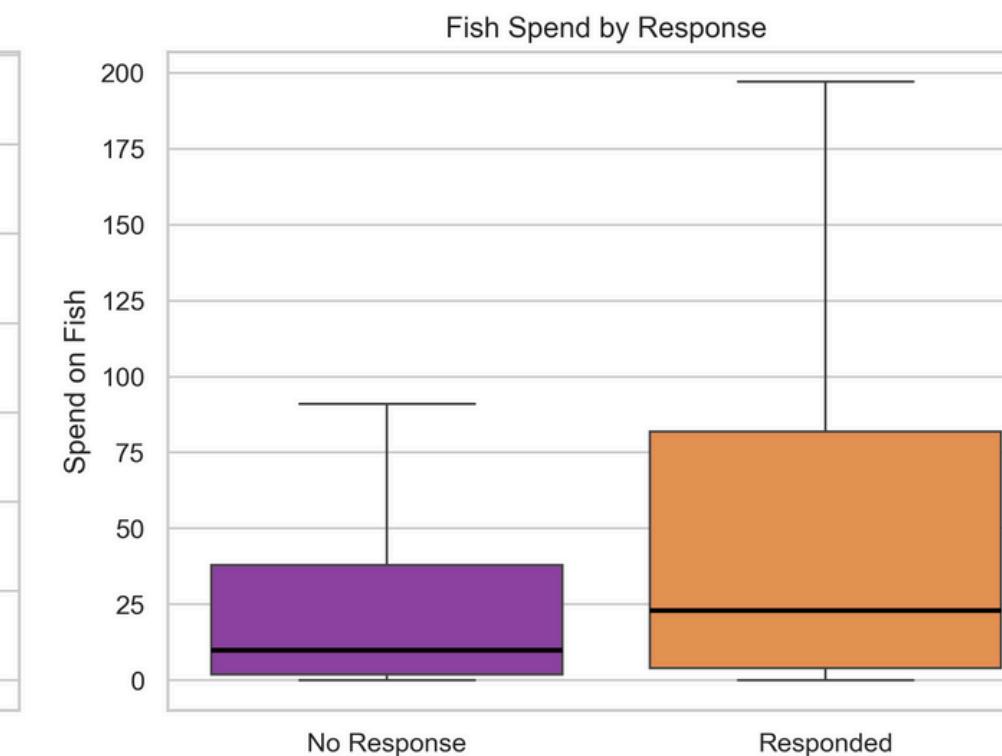
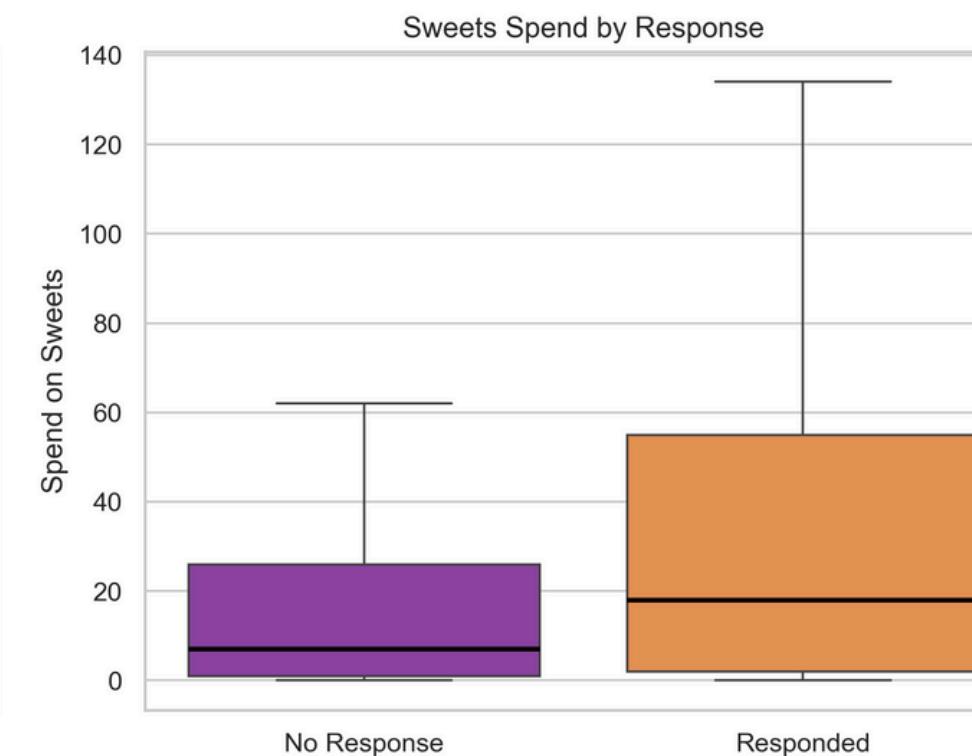
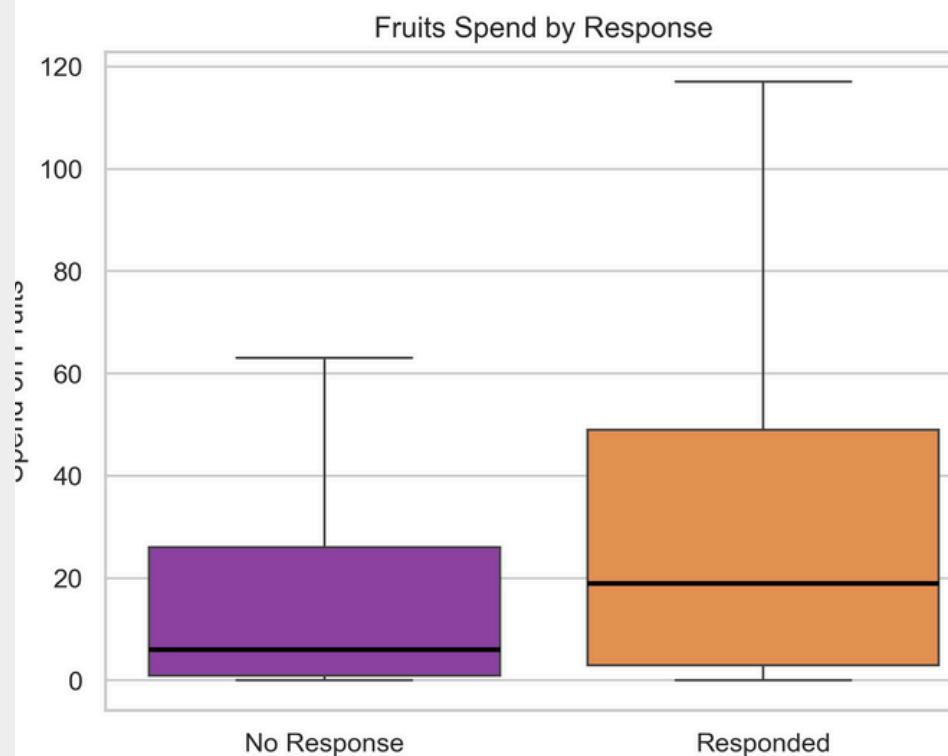
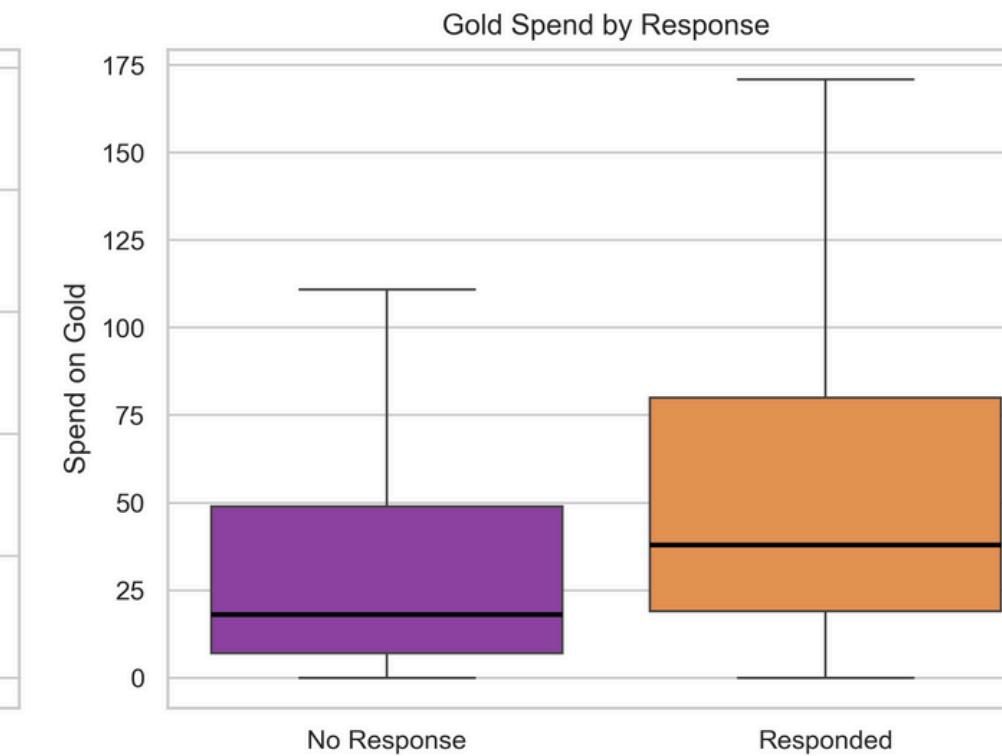
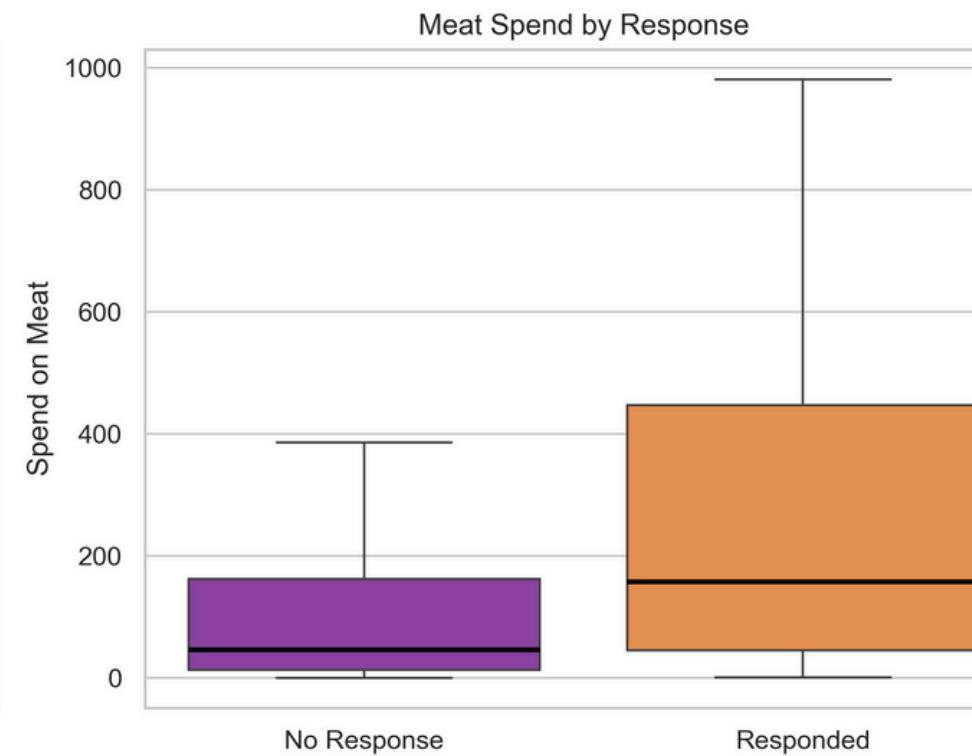
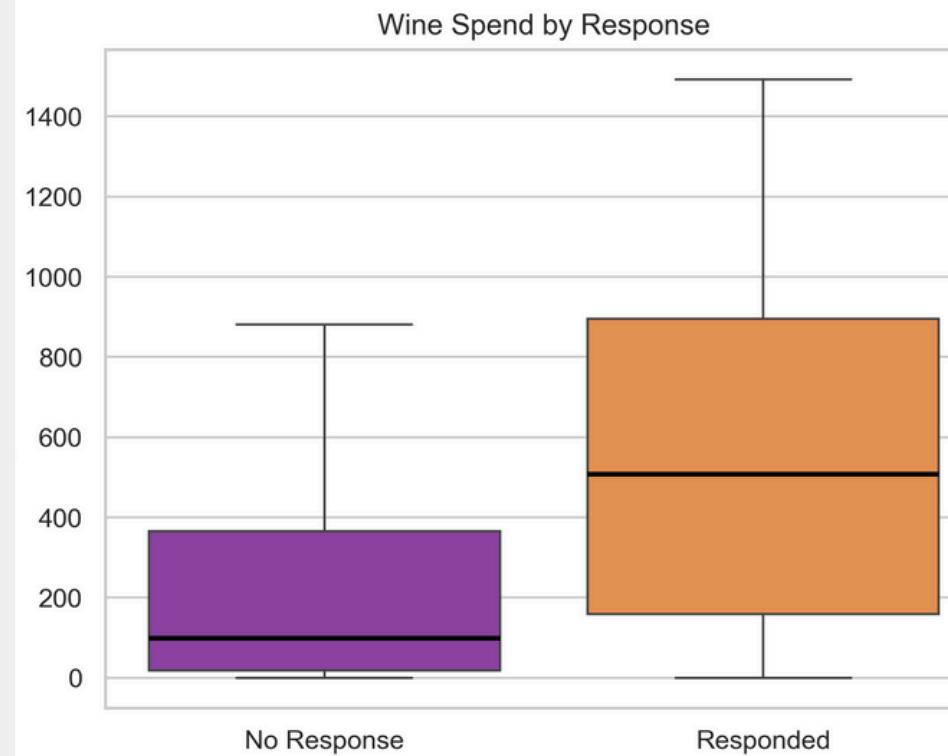
- Customers who responded to the campaign used fewer discounts on average, with a lower median than non-responders
- This implies that other factors — like product interest, engagement, or loyalty — may be more effective than price-based incentives for driving campaign response.
- Over 98.2% of customers used discounts.

# Responses by Behavior

Responders tend to spend more on all products than non-responders



Product Spending vs. Campaign Response



## Key Takeaways

- As spending increases with one product, customers are more likely to respond to campaigns.
- Differences are strongest with spenders on Wine, Meat, and Fish.
- Less noticeable with Fruits, Sweets and Gold but all statistically significant.

# Customer Segmentation through: LRFM Analysis

## Length (L)

- Measures how long a customer has been actively purchasing.
- In our dataset calculated by `Dt_customer`: How long a customer has been a member with the Giant
- Key indicator of **customer retention**.

## Frequency (F)

- Measures how often a customer makes purchases over time.
- In our dataset, calculated by `TotalPurchases`: Total amount of purchases made through different channels of Web, Catalog, and Store
- High frequency suggests **loyalty**.

## Recency (R)

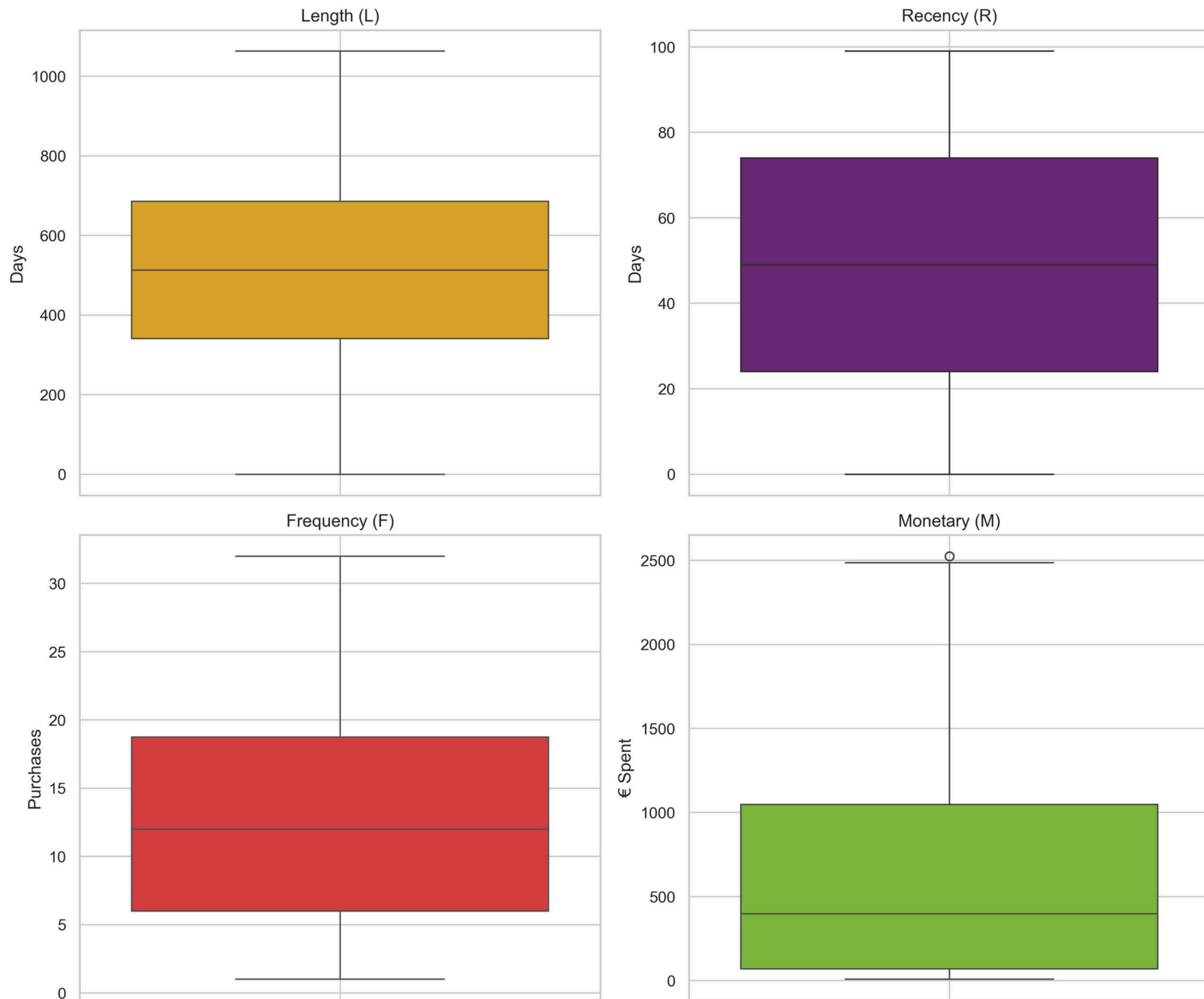
- Tracks how recently a customer made a purchase.
- In our dataset, calculated by `Recency`: Number of days since customer's last purchase
- Recent purchases indicate **engagement**.

## Monetary (M)

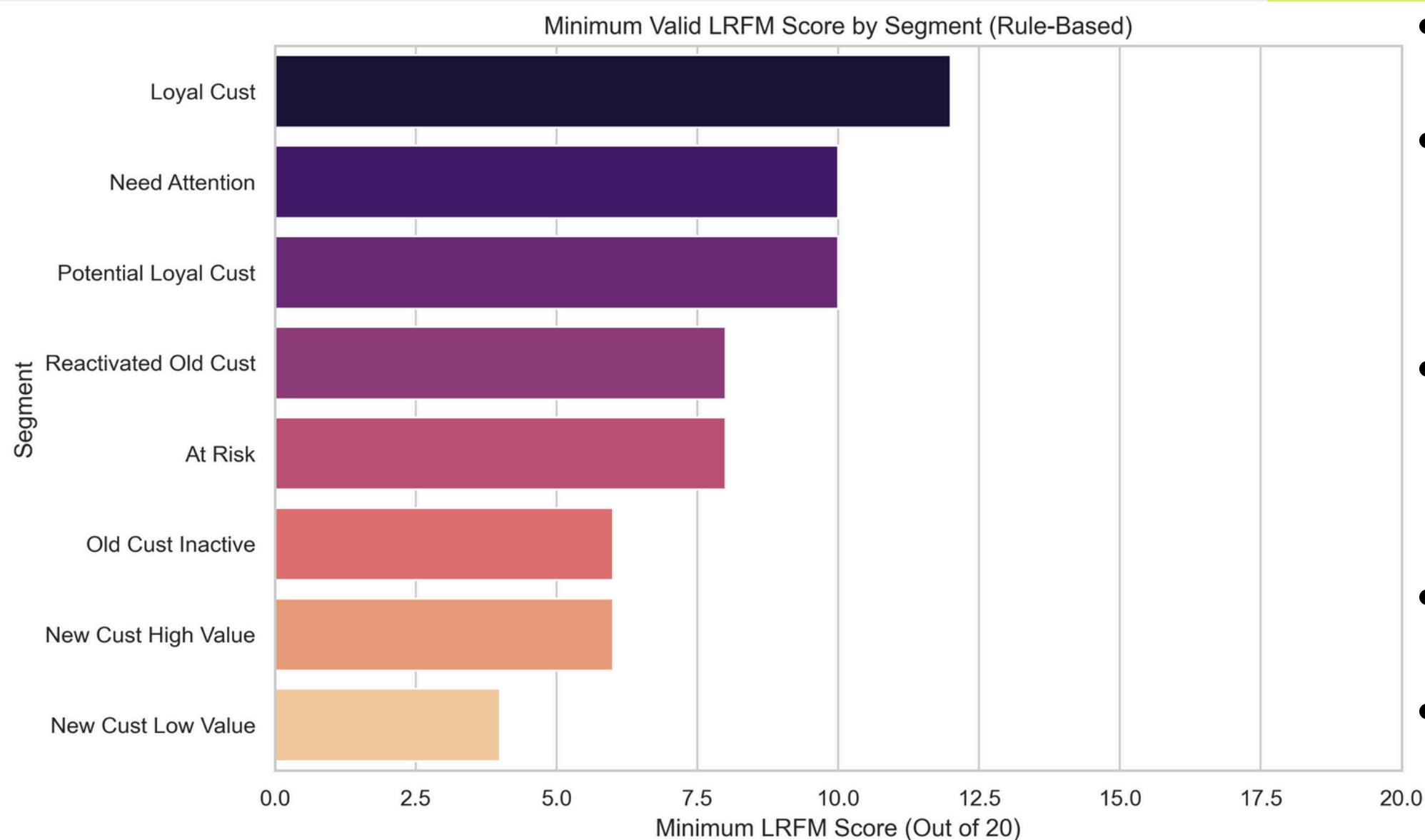
- Evaluates the total amount spent by the customer.
- In our dataset, calculated by `Total_Money_Spent`: Total amount of money spent across all different products
- High monetary value signals a valuable customer.

# LRFM Distributions

- Many customers are loyal over time. Long tenure is common. Most customers fall in between 1-2 years in terms of loyalty.
- Most data on purchases were kept for within 100 days. Most are active.
- Both Frequency and Monetary are right-skewed.



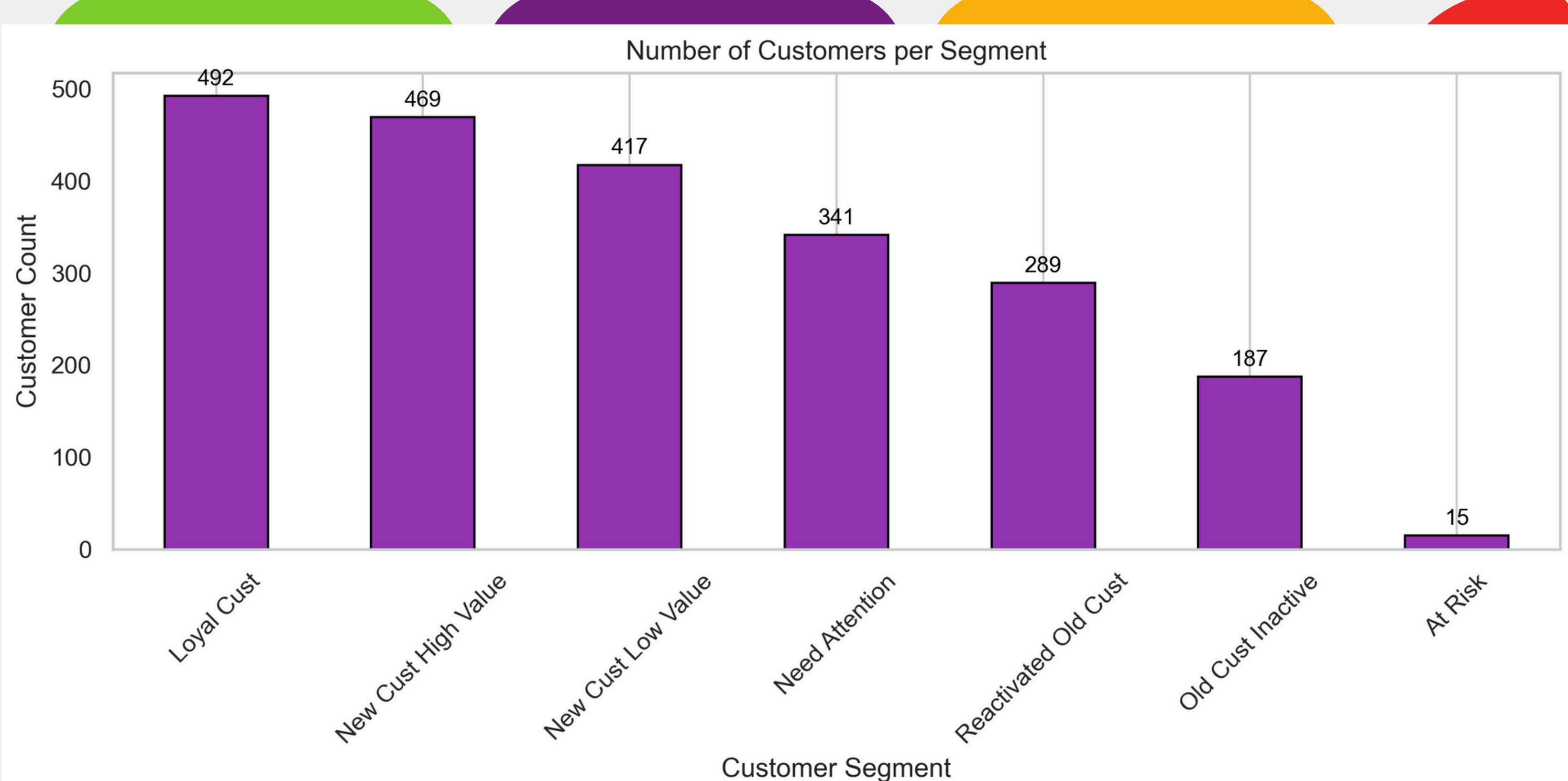
# LRFM Score Segmentation



- **New Cust Low Value:** New customers with low recency, frequency, and monetary engagement.
- **New Cust High Value:** New customers with high recency, frequency, and monetary engagement.
- **Old Cust Inactive:** Long-time customers with low recency, frequency, and monetary engagement.
- **At Risk:** Old customers with low recency, low frequency, and high monetary engagement (indicating they were previously active but have become less engaged).
- **Need Attention:** Old customers with high recency, high frequency, and high monetary engagement (indicating they were previously active and remain highly engaged).
- **Loyal Cust:** Long-time customers with high recency, frequency, and monetary engagement.
- **Potential Loyal Cust:** Long-time customers with high recency and high frequency but lower monetary engagement.
- **Reactivated Old Cust:** Customers who were inactive but have recently re-engaged.

# Customer Segmentation Result

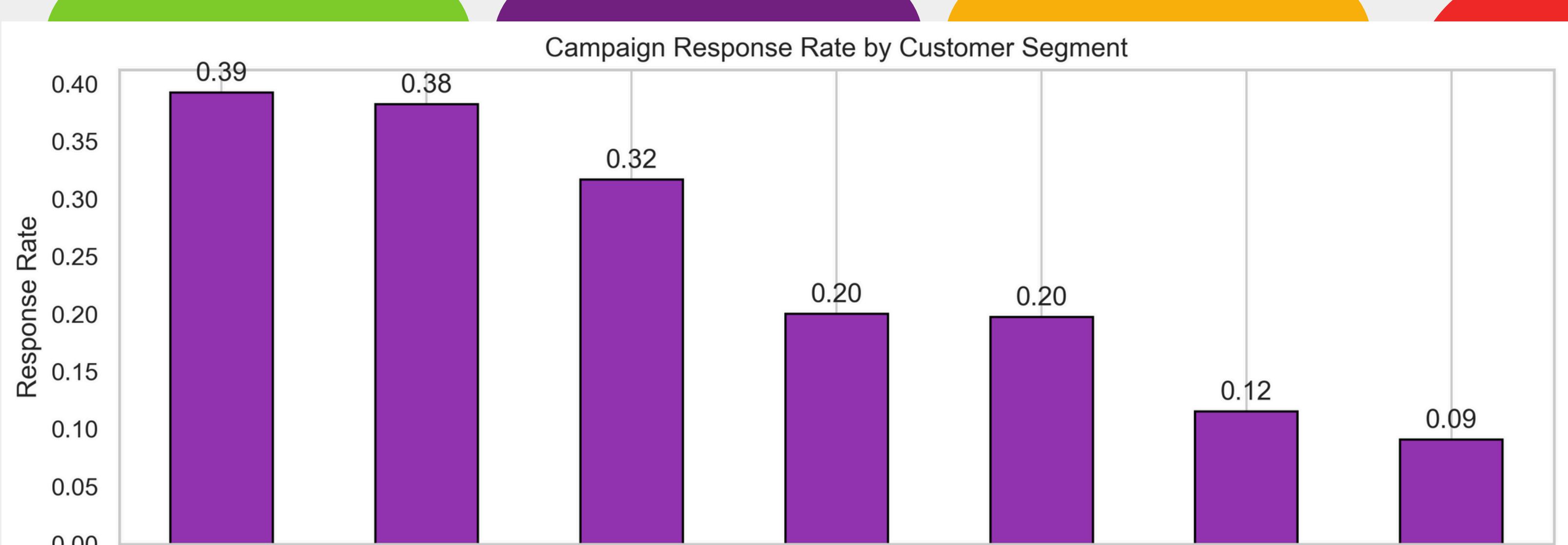
Without targeted campaigns, Giant already has Loyal Customers



Improvements can be made to target High Value New Customers and Customers who need Attention

# Customer Segmentation Result

There are customers who will respond positively with potential improvements



New high-value customers are open to engagement.  
Loyal customers are engaged and receptive.

# Insights



# Questions Answered



Customers who are educated, who are not married, who have no children, who have high income respond more.

Frequent purchasing behavior regardless of channel also increases chance of response.

We can capture different types of customers using Length, Recency, Frequency and Monetary factors.

The three most valuable segments are Loyal Customers, New Customers and Customers who need attention.

# Insights

## Targeting strategy based on demographics:

### Campaign Response by Demographics and Behavior

- Age has a significant effect, but not a linear one.
  - Both younger and older customers respond more than middle-aged groups.
- Higher income is associated with greater response rates.
  - However, this trend weakens when extreme income outliers are included.
- Educational attainment matters:
  - Customers with higher education levels are more likely to respond.
- Marital status and family size influence engagement:
  - Customers who are not married and have no children respond more frequently.
- Behavioral patterns play a role:
  - Positive scores for Recency, Length, and Frequency correlate with better response rates
- LRFM-Based Segment Behavior
  - New High-Value Customers and Loyal Customers have the highest response rates, at 39% and 38%, respectively.
  - Customers Who Need Attention also respond well, with a 32% rate, despite showing signs of disengagement.
  - Old Inactive and New Low-Value Customers have the lowest response rates, at 9% and 12%.

# Recommendations



# Recommendations

## Targeting strategy based on demographics:

Focus campaigns on high-response segments:

- To appeal to those who are more educated:
  - Educational content campaigns through website or catalogs
  - Bundles with nutritional themes such as high-nutrient snacks or discounted wine
- High income appeal:
  - Premium tiers for loyalty programs - create discounts based on spending
  - Limited edition products on Meat, Wine and Fish
- Children vs No Children
  - Separate promotions for those with children and those without children
  - (DINK = Double Income, No kids) - Subscription boxes for wine, cheese, or specialty foods
- Age Specific Campaigns
  - Older Customers = Appeal to tradition, such as 'Giant trusted since 1923'
  - Younger Customers = Social Media or Online engagement, coupon codes on websites or social media





# Recommendations

Targeting strategy based on value:

Focus campaigns on already strong segments or those with proven value:

- Loyal Customers:
  - VIP Loyalty Program: Offer exclusive discounts, early access to products, or birthday rewards.
  - Referral Campaigns: “Get rewarded for bringing friends!”
- New Customers:
  - Welcome Series Emails: Introduce benefits, best-sellers, and how to earn loyalty points.
  - First-Time Bundle Offer: “Complete your experience — 10% off your next 3 purchases.”
- Customers who need attention
  - “We Miss You” Emails: “Come back for 20% off your favorites.”
  - Feedback Requests: “Tell us how we can improve your experience” with incentive.



# Targets and Goals

By implementing the proposed campaign strategies, we aim to achieve the following measurable outcomes:

- Increase overall campaign response rate
- Target: +10% increase in engagement across active customer segments over the next 6–12 months
- Boost product-specific sales through targeted bundles and offers
  - Focus categories: Bundled Products such as Wine, Meat, Fish
- Improve engagement with digital platforms
  - +10% increase in website interaction (visits, click-throughs)
  - +10% increase in social media engagement (likes, shares, coupon redemptions)
- Enhance retention of key customer segments
  - Improve 3-month retention rate for New High-Value Customers
  - Reactivate 10% of 'Customers Who Need Attention' through re-engagement campaigns
- Optimize marketing efficiency
- Reduce campaign cost per responder by deprioritizing low-response segments



# Thank you!

