The key to growth is operationalizing insights from analytics

Executive Summary:

- Key challenge in targeted marketing: a deeper analysis of X's customer segments and their importance revealed an opportunity for more effective marketing through targeting **high priority** segments
- The desire for growth is supported by understanding drivers of spend; consumers purchasing **electronics products** is the most important predictor of spend, increasing spend by $521 through increasing electronics product purchases by 1.
    - Enrollment in the Loyalty Program is also a significant predictor of spend, and customers who take advantage of **discounts** is a key differentiator of those participating in the program
- Demand forecasting can help to mitigate the problems with inventory stock-outs, which can be further enhanced through analysis of key promotional data – particularly during **Black Friday** and other successful promotional days

# Retailer X should target 2 core customer segments

Gender: Female
Product Preference: Food
Income: High Income
Customer Profile: Cindy is a Vegan who enjoys her morning Starbucks
Focus Priority: MEDIUM

Gender: Male
Product Preference: Electronics
Income: Low
Customer Profile: John is a college student with limited income and a passion for tech
Focus Priority: HIGH

Gender: Male
Product Preference: Apparel
Income: Medium
Customer Profile: David is a coupon cutting stay-at-home dad who loves getting good deals on golf shirts
Focus Priority: MEDIUM

Gender: Female
Product Preference: Apparel
Income: Medium Income
Customer Profile: Jessica is in her mid-30s and spends her disposal income on clothes
Focus Priority: HIGH

Gender: Female
Product Preference: Health & Beauty
Income: Low
Customer Profile: Amanda is a Senior in High-school with a fixation on lip gloss
Focus Priority: LOW

Population Size:
500

7%

40%

13%

10%

30%
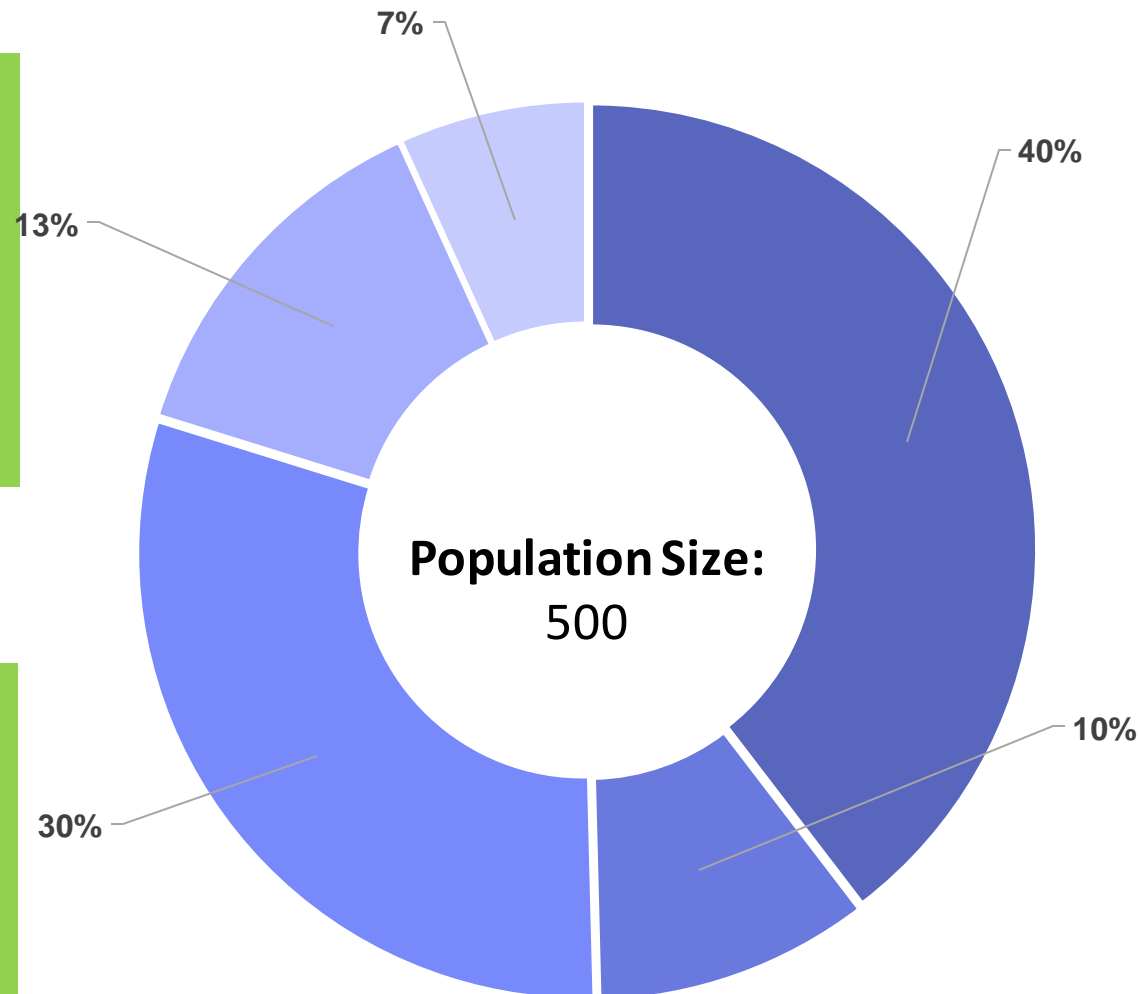
To increase customer spend, focus on Electronics Purchases

Holding all else constant, increasing the number of electronics purchases by 1 impacts customer spend by $521
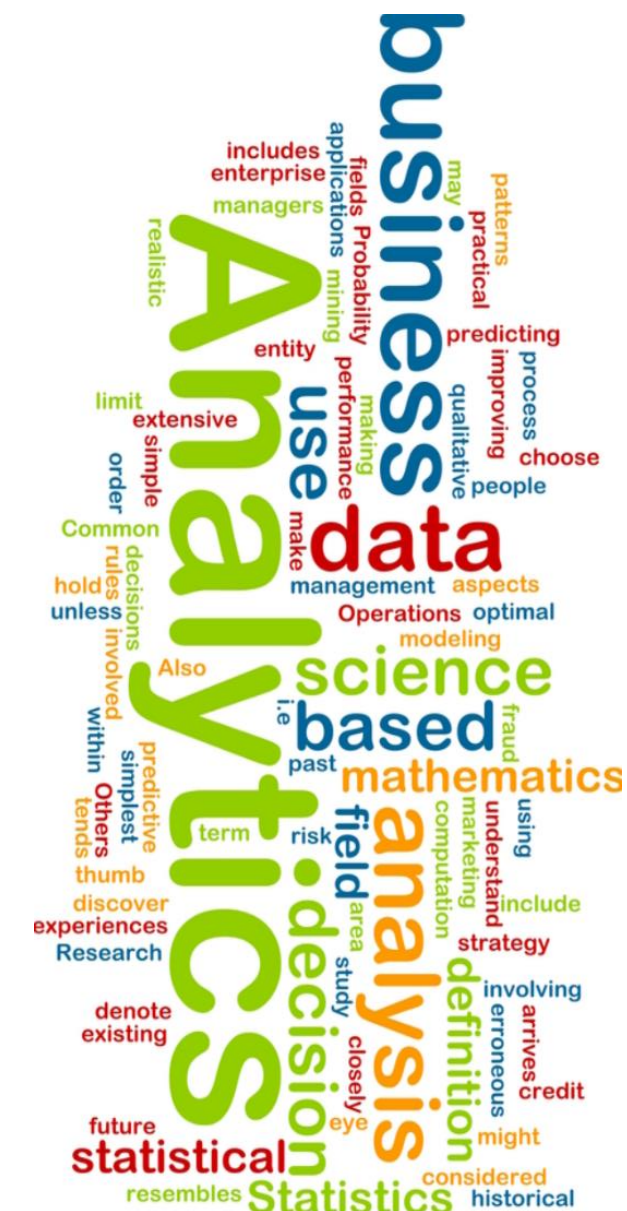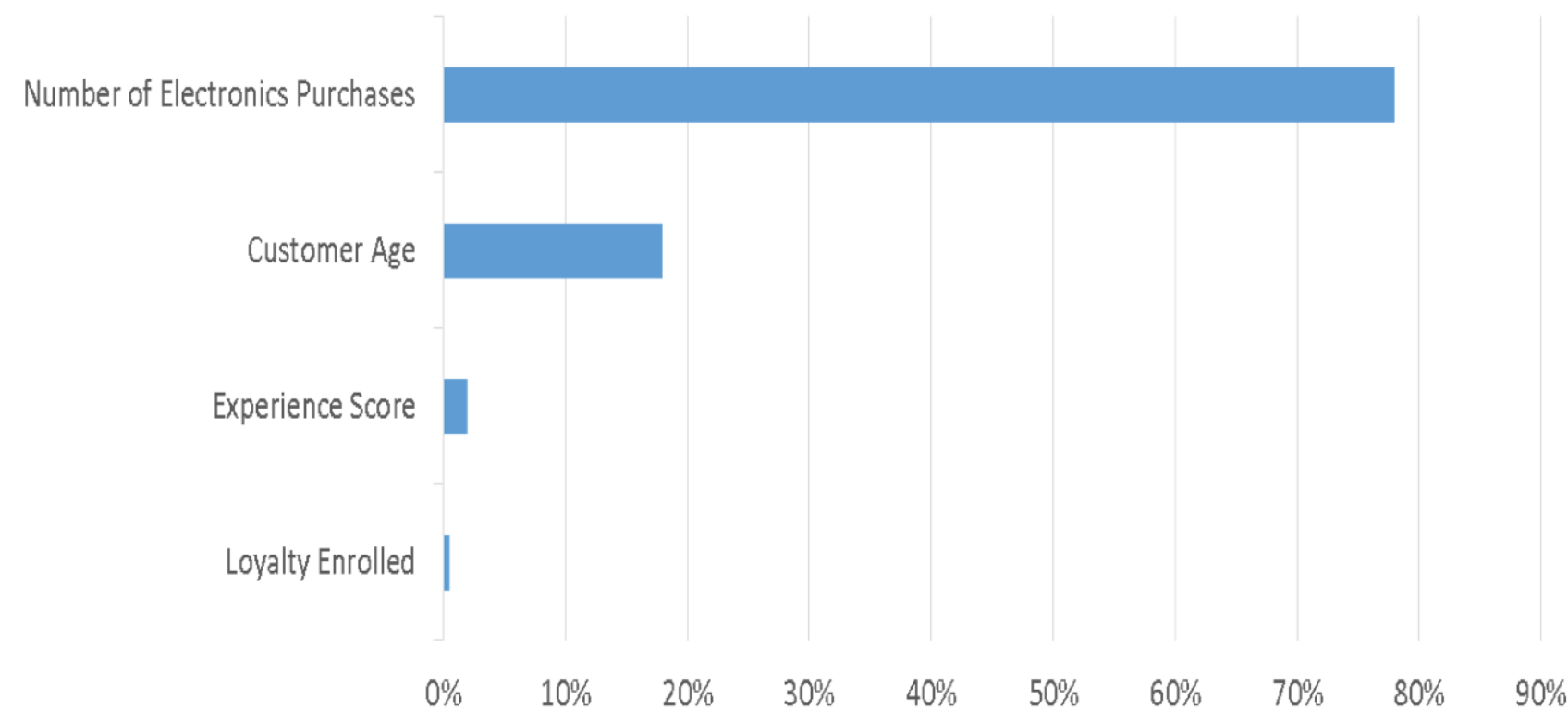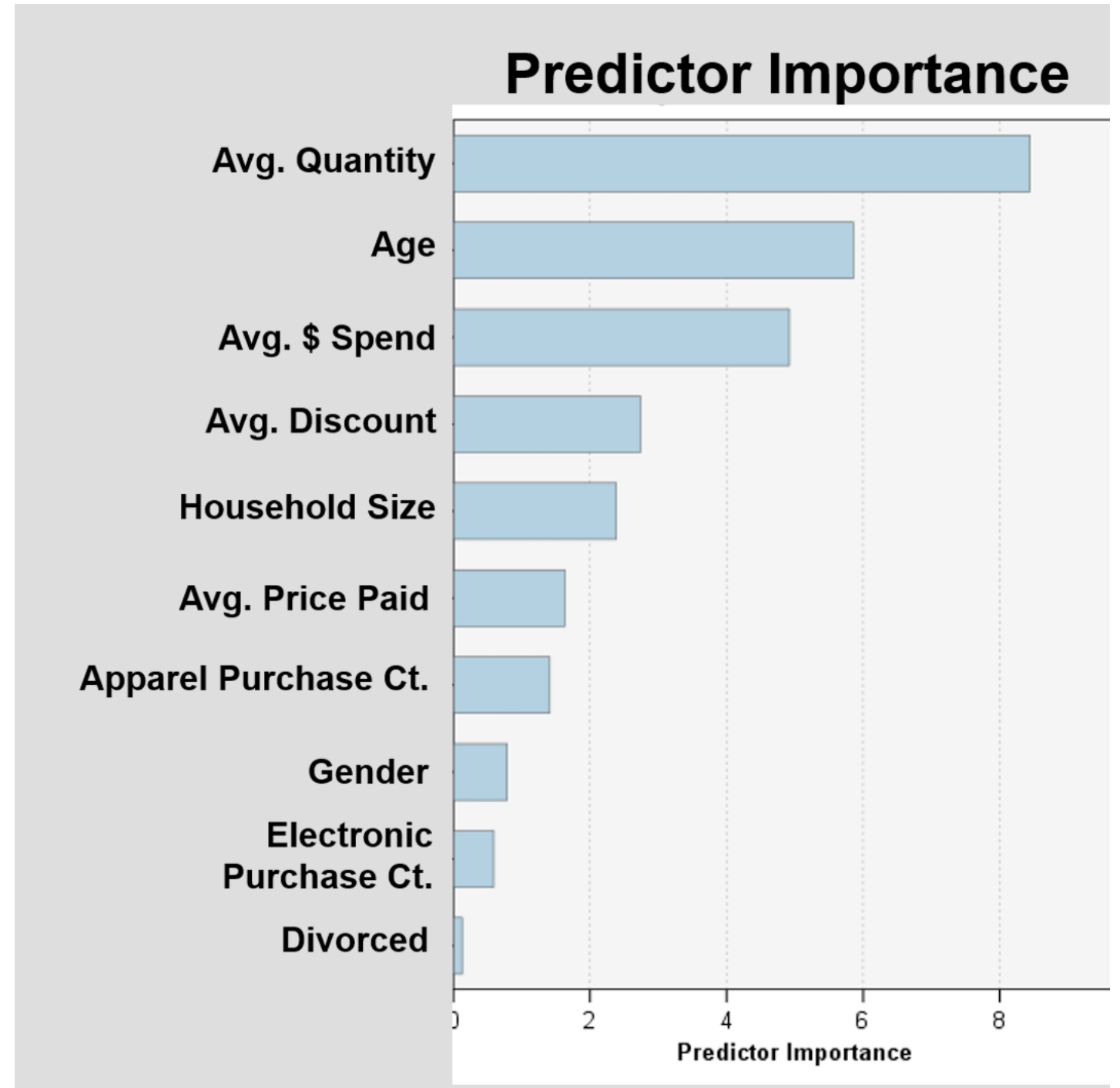

*__78.1%__ of the variability in total $ spend can be explained by the regression including the number of electronics purchases, enrollment in the loyalty program, the average experience score, and the age of the customer as predictors.

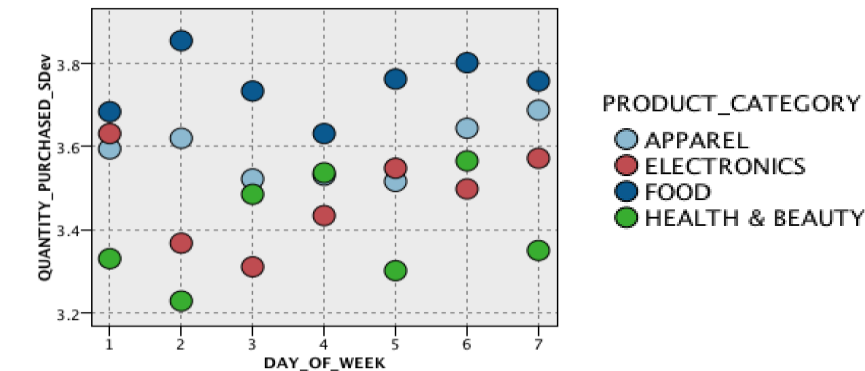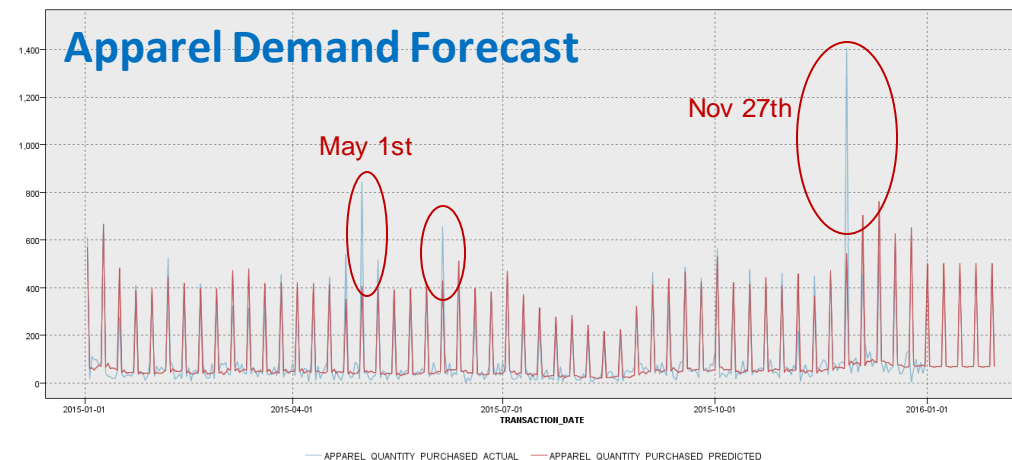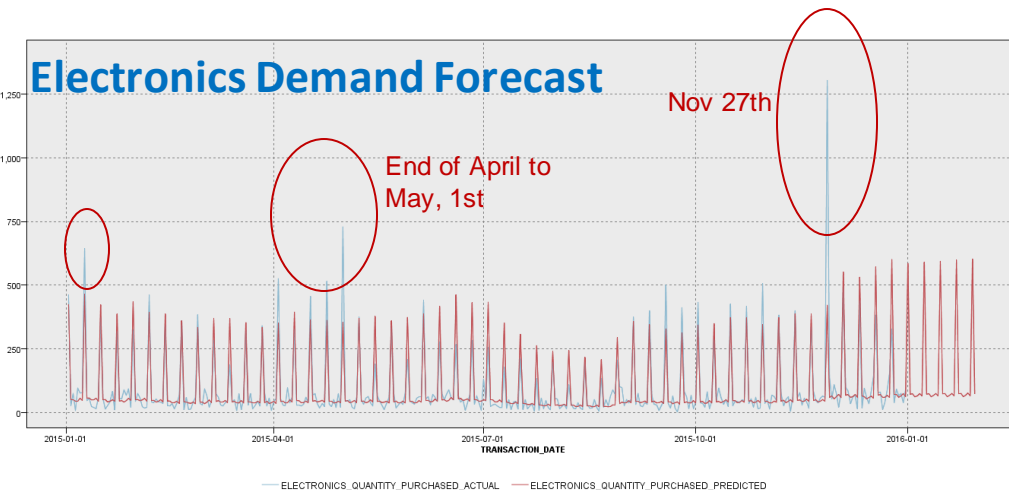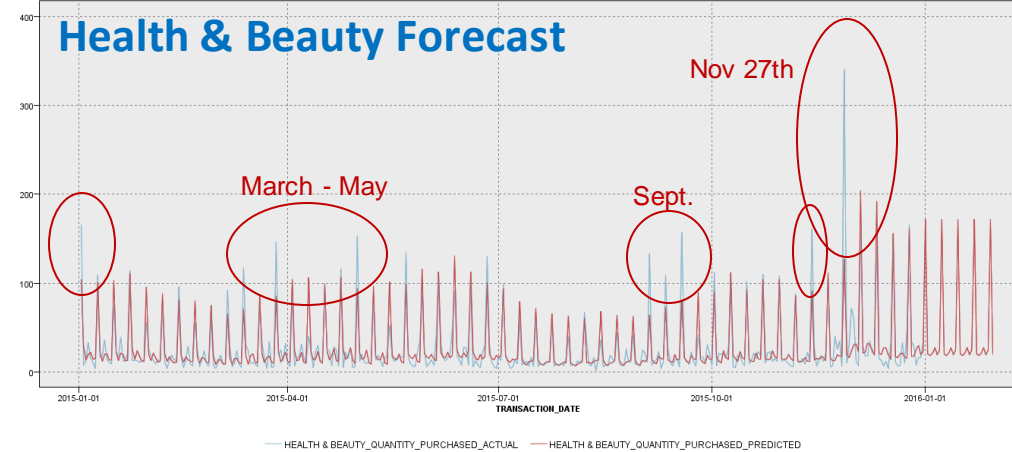# Offering discounts is a key driver of Loyalty Program enrollment
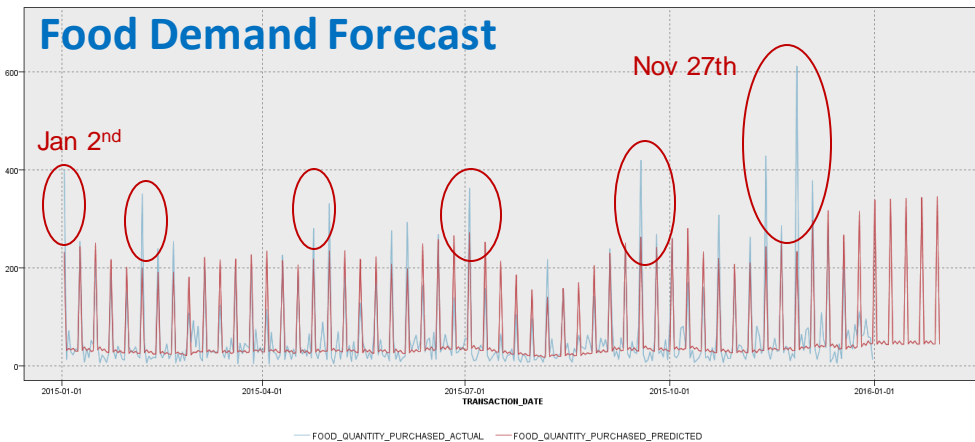
What makes a loyalty program enrollee?

Focus on successful promotions to more effectively forecast demand

Key Insights

- A significant spike in sales across all product categories on Black Friday, but sales stagnate going into December
- **Food:** Post New year stock needs to be increased
- **Health & Beauty:** Demand for products decreases during summer months, but there are spikes post new year, in the spring, and early September
- **Electronics:** End of April to May 1st promotions were successful, and in future will require additional stocking
- **Apparel:** Approaching summer months there are spikes in demand

Food Demand Forecast

Jan 2nd

Nov 27th

Health & Beauty Forecast

March - May

Sept.

Nov 27th

Electronics Demand Forecast

End of April to May, 1st

Nov 27th

Apparel Demand Forecast

May 1st

Nov 27th

Store Traffic data and Stock out data can help us determine if stock outage is the reason for lower sales on certain days

Advanced Analytics provides Retailer X with a competitive advantage

Findings & Actionable Insights

Clustering

- Focus on media consumption patterns of high priorty clusters
  - ✓ Sponsored University Sports Events
  - ✓ Targeted Facebook Ads

Regression

- Focus on driving electronics purchases
  - ✓ Incentive product category sales
  - ✓ Optimize store layout

Classification

- Focus on driving loyalty program enrollment
  - ✓ Revamp discount programs
  - ✓ Incentive sellers to enroll customers

Demand Forecasting

Value to Business

- ✓ Enhanced Planning Ability
- ✓ Reduced Stock-outs
- ✓ Lower Holding Costs

Value to Customer

- ✓ Enhanced experiences
- ✓ Reliable shopping