Analytics Challenge

"Programming" Better Product Sales

QVC Analytics Challenge

Problem

QVC is the **world's leading video and e-commerce retailer,** reaching nearly 300 million homes worldwide with a live broadcast 24 hours a day, 364 days a year. Our vision is to **change the way the world shops** by re-imagining shopping, entertainment, and social as one. To do so, QVC analyzes our customers' experience to make sure we are providing them the products and services they want.

For this challenge, QVC would like to use this data to better understand and anticipate our customer's buying behavior. However, airtime is a finite resource, and therefore QVC needs to choose the best airtimes for their products and product categories.

Specifically, QVC would like to better understand:

- What is the next product a customer will buy in the next month given their previous buying behavior and product airtime?
- In what product category is a customer likely to buy their next product, given their previous buying behavior and product airtime?
- What are the products and product categories that sell better in a particular geographic, time zone, and customer segment?
- Is there a best time of day to sell a particular product or product category?
- What is the brand affinity (personal connection with the brands QVC sells) for QVC's different customer segments?

Develop a visualization (static or interactive) that reflects your customer analysis based upon the consideration of product airtime and customer buying behavior. In addition to customer orders, your analysis should include customer geography, customer segment, and product air time.

Data

- Customer master (customer number, customer state, customer zip, customer segmentation code)
- Product master (product number, product description, product category, product brand)
- 6 month history of customer orders (order date, order time, customer number, product number)
- Product airtime (date, total time on air, product number, time on, time off)