



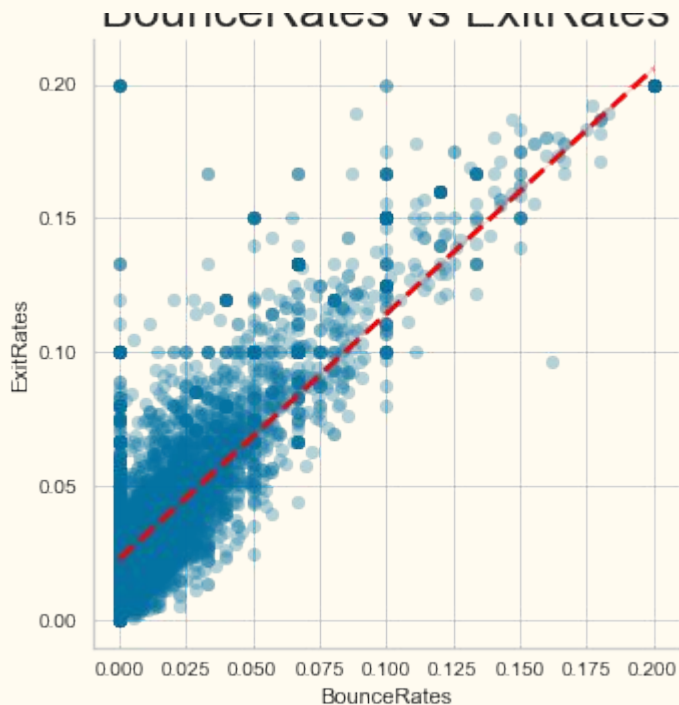
Which customers should Nike target in online shopping?

Analysing a Nike Trainers Database

How was the project formatted?

- Dataset of 12,000 rows, 18 columns
 - Target Variable: 'Bought_product' (Binary column)
 - Machine learning model, predict future behaviours
 - Visualized data, various ways
 - Overall conclusion, who Nike should target
-

Issue of Multicollinearity



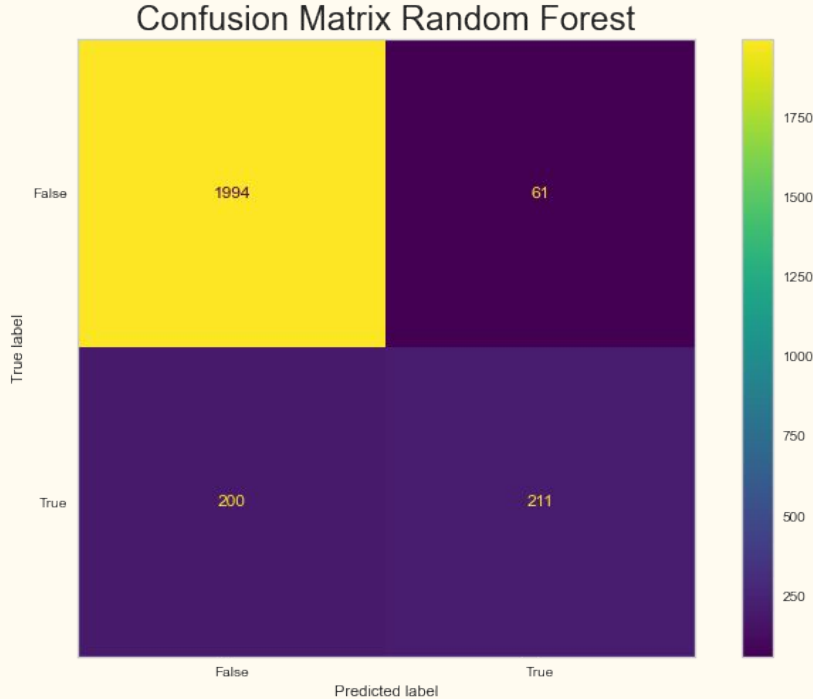
- Bounce Rates VS Exit Rates

BounceRates: The percentage of visitors who exit webpage without triggering any additional tasks.

ExitRates: The percentage of pageviews on the website.

- Very similar, high correlation
- Give causation for ML model to falsely predict higher accuracy
- Didn't have time to change

Machine Learning Model - RFC



- Test Size: 2466 rows

Accuracy Rate (Bought Product):
90.7644118520925%

- Big Issue of multicollinearity

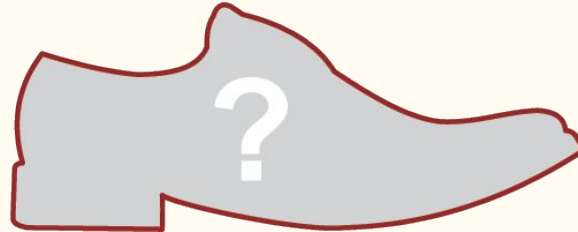
What major factors should Nike consider when using this model for marketing?



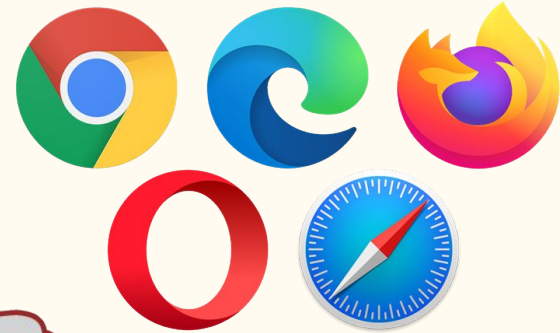
Purchase patterns



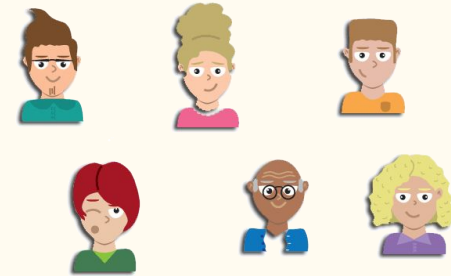
Product Type



Most frequent features of customers



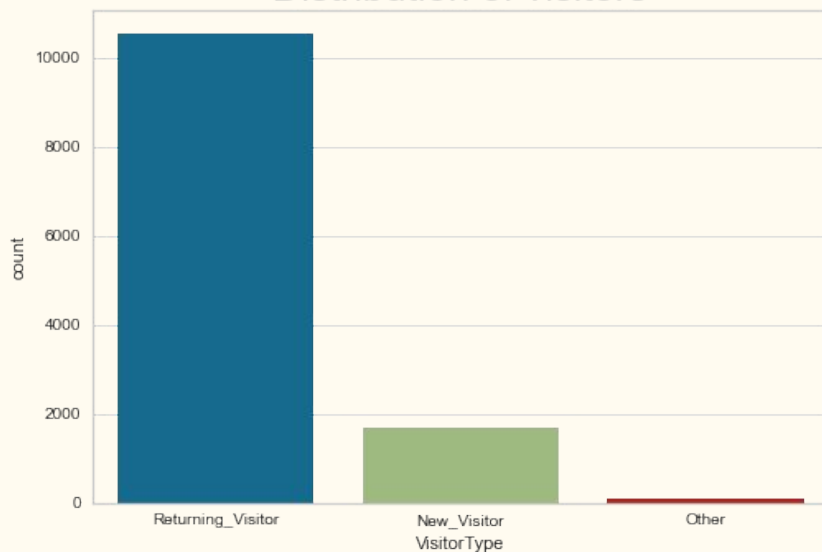
Browser Type



Customer Type

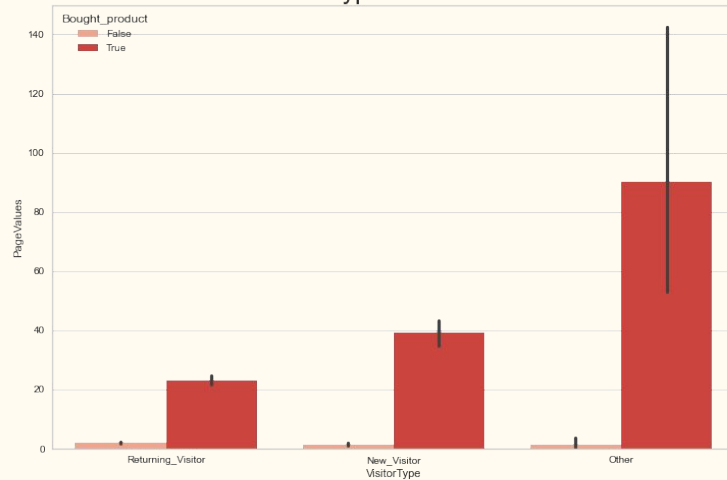
Visitor Type

Distribution of visitors



Returning Visitors: Loyal Customers

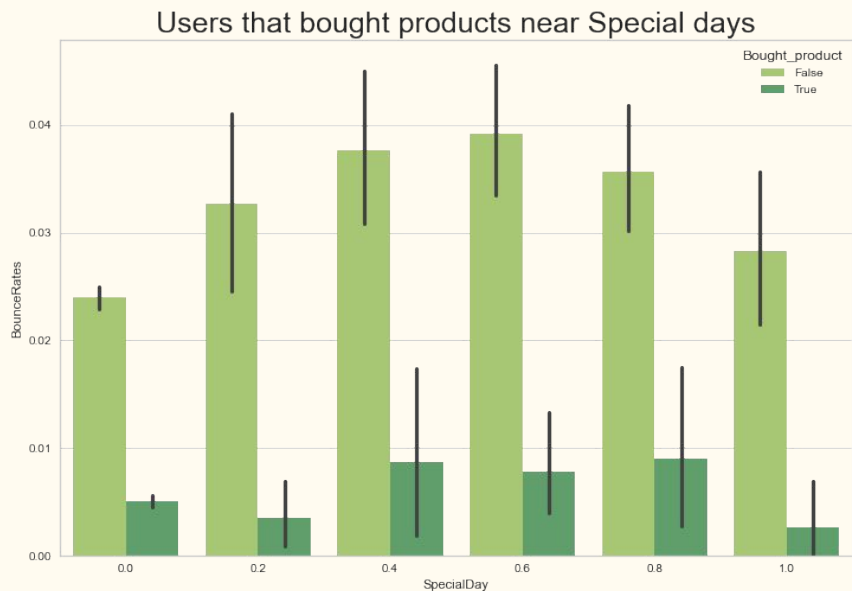
visitor type vs exit rates



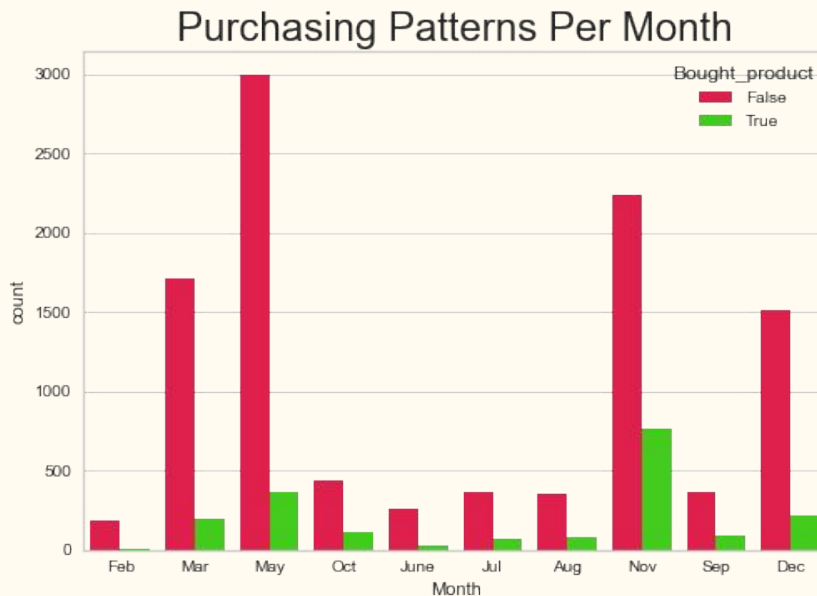
Notice the Inverse

- Based upon this, nike choose who to target

Purchasing Patterns

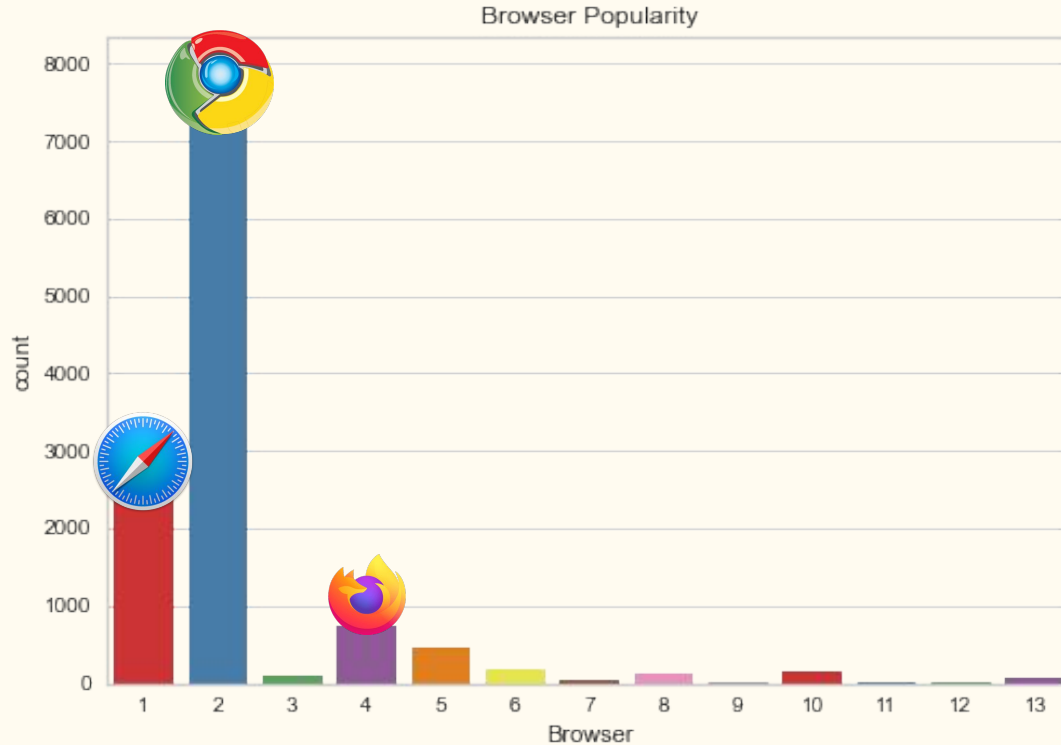


- Special days (Christmas, Valentines)
- Optimal time specifically market



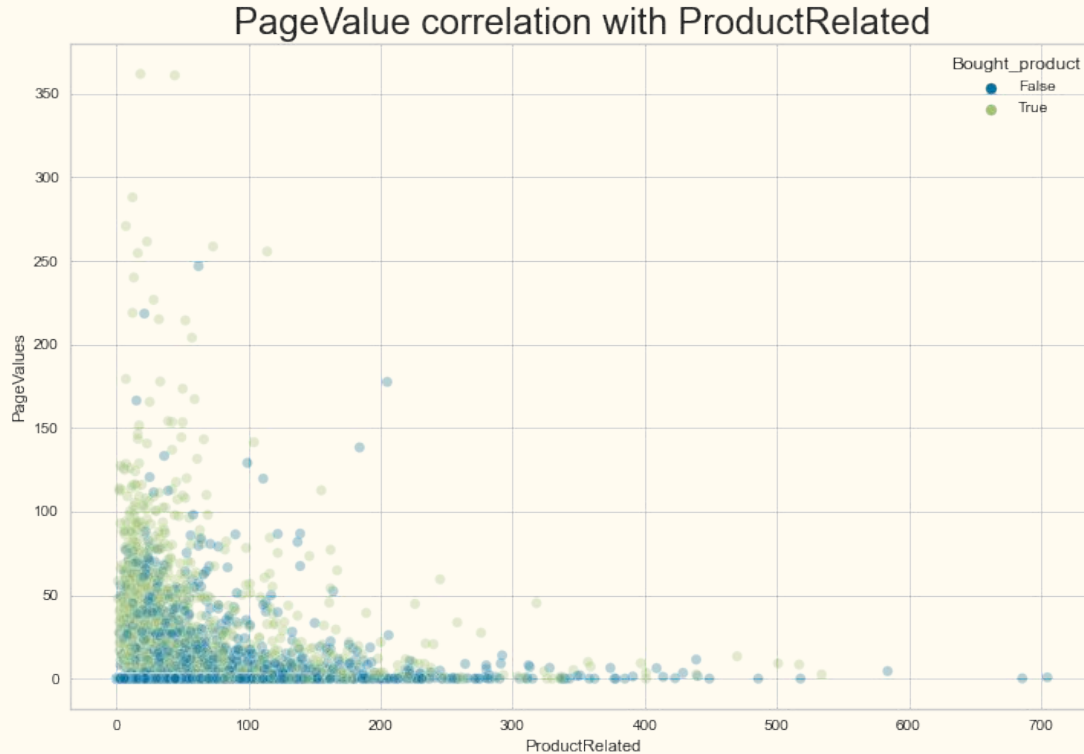
- November, marketing decision
- June, marketing decision

Browser Popularity



- Browser based marketing
- Spend more on certain browsers, reduce failed campaigns

Product Type



Page Values: The average value of the product displayed on specific pages

Product Related: Number of product related pages that were visited

- Purchases less expensive trainers, more common

Who is Nike's Ideal Customer?

Key Attributes:

- Using google chrome
- More likely to buy cheap trainers
- Most likely to purchase in November
- Loyal

