

Capstone project proposal

Customer Personality Analysis

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Introduction

With the rapid growth of market competition, the businesses are exploiting new opportunity and conducting campaigns to motivate the customers to shop.

Statement of Problem

It is important for the company to analyze its customers personality and have a better understanding of customers behaviors, needs and concerns. The company wants to discover the key factors influencing the buying behaviors of customers and their responses to market campaigns.

Scope of Analysis

The analysis is based only on the market campaign data (220KB with 2240 rows and 29 columns). <https://www.kaggle.com/imakash3011/customer-personality-analysis>

The total number of campaigns in this dataset is unknown and it is assumed that the response of customers is made towards to the last marketing campaign.

Objective

- To investigate what key variables lead to the responses of customers to the last campaign.
- To build a model to predict customer responses to the last campaigns and help business reduce the advertising cost accordingly.

Data description:

People

- ID: Customer's unique identifier
- Year_Birth: Customer's birth year
- Education: Customer's education level
- Marital_Status: Customer's marital status
- Income: Customer's yearly household income
- Kidhome: Number of children in customer's household
- Teenhome: Number of teenagers in customer's household
- Dt_Customer: Date of customer's enrollment with the company
- Recency: Number of days since customer's last purchase
- Complain: 1 if customer complained in the last 2 years, 0 otherwise

Products

- MntWines: Amount spent on wine in last 2 years
- MntFruits: Amount spent on fruits in last 2 years
- MntMeatProducts: Amount spent on meat in last 2 years
- MntFishProducts: Amount spent on fish in last 2 years
- MntSweetProducts: Amount spent on sweets in last 2 years
- MntGoldProds: Amount spent on gold in last 2 years

Promotion

- NumDealsPurchases: Number of purchases made with a discount
- AcceptedCmp1: 1 if customer accepted the offer in the 1st campaign, 0 otherwise
- AcceptedCmp2: 1 if customer accepted the offer in the 2nd campaign, 0 otherwise
- AcceptedCmp3: 1 if customer accepted the offer in the 3rd campaign, 0 otherwise
- AcceptedCmp4: 1 if customer accepted the offer in the 4th campaign, 0 otherwise
- AcceptedCmp5: 1 if customer accepted the offer in the 5th campaign, 0 otherwise
- Response: 1 if customer accepted the offer in the last campaign, 0 otherwise

Place

- NumWebPurchases: Number of purchases made through the company's web site
- NumCatalogPurchases: Number of purchases made using a catalogue
- NumStorePurchases: Number of purchases made directly in stores
- NumWebVisitsMonth: Number of visits to company's web site in the last month