

Customer Analysis

by Nabiilah Nuur Ainii

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 the customer complained in the last 2 years, 0 otherwise

Product

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



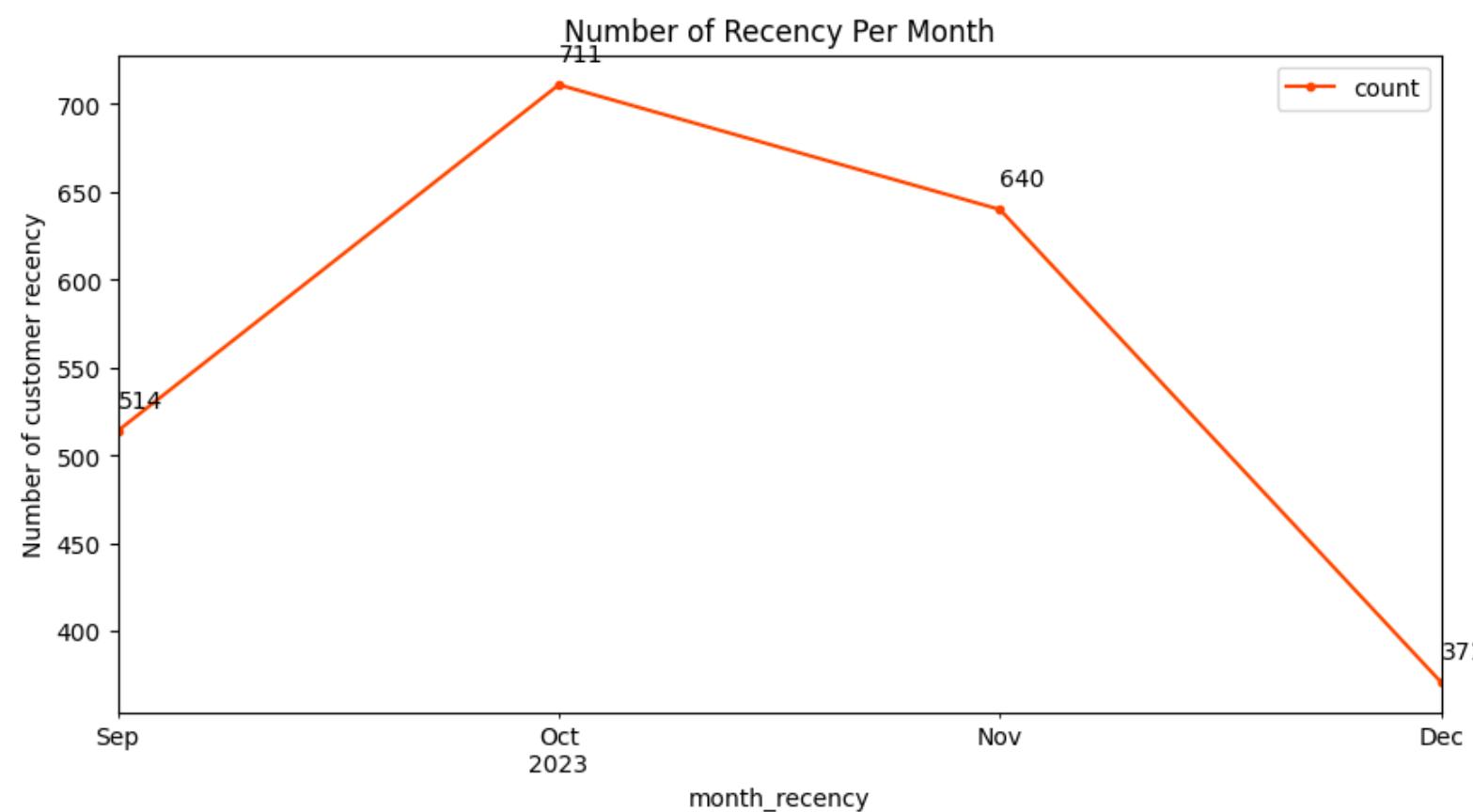
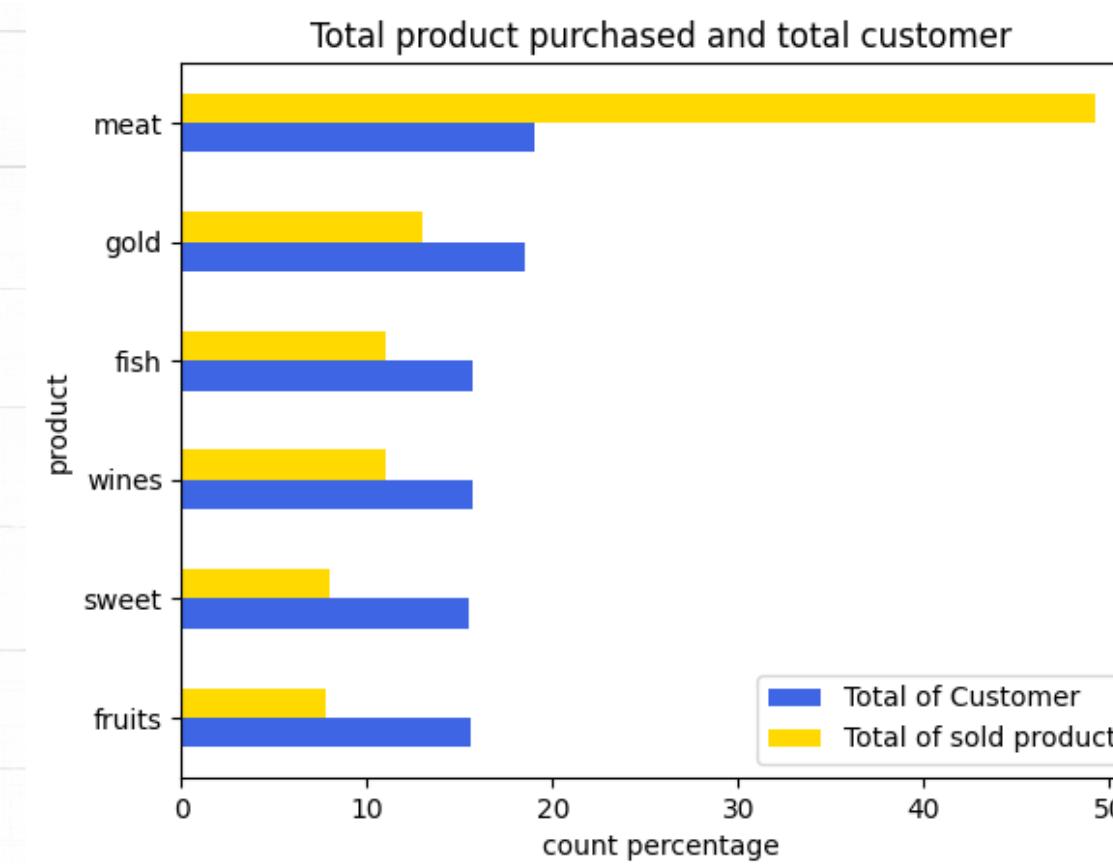
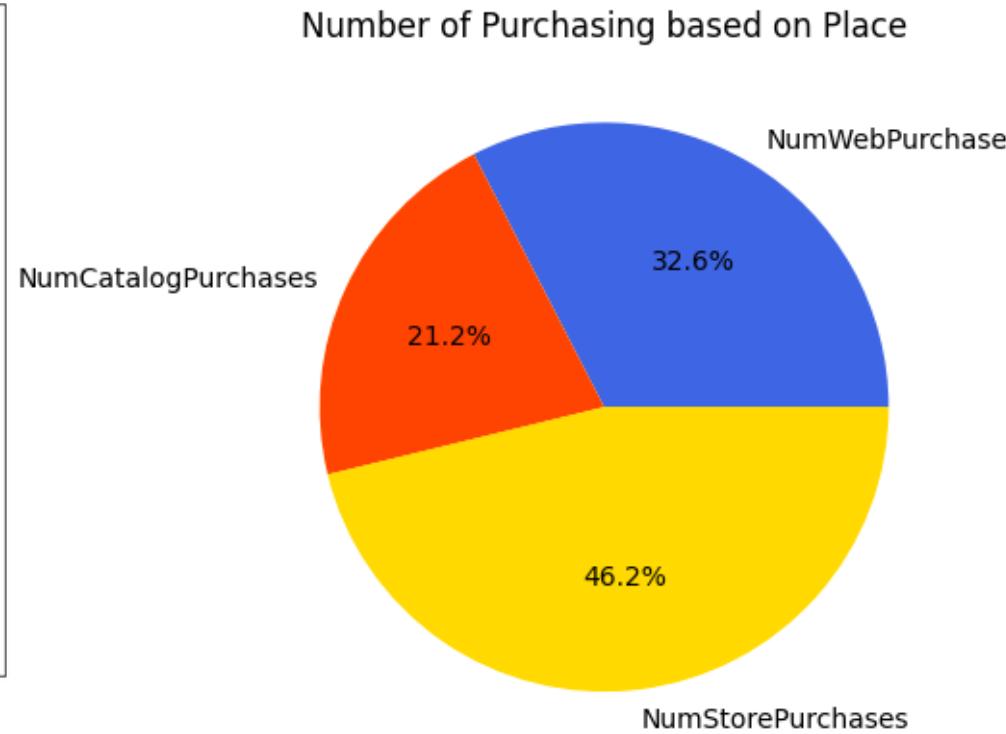
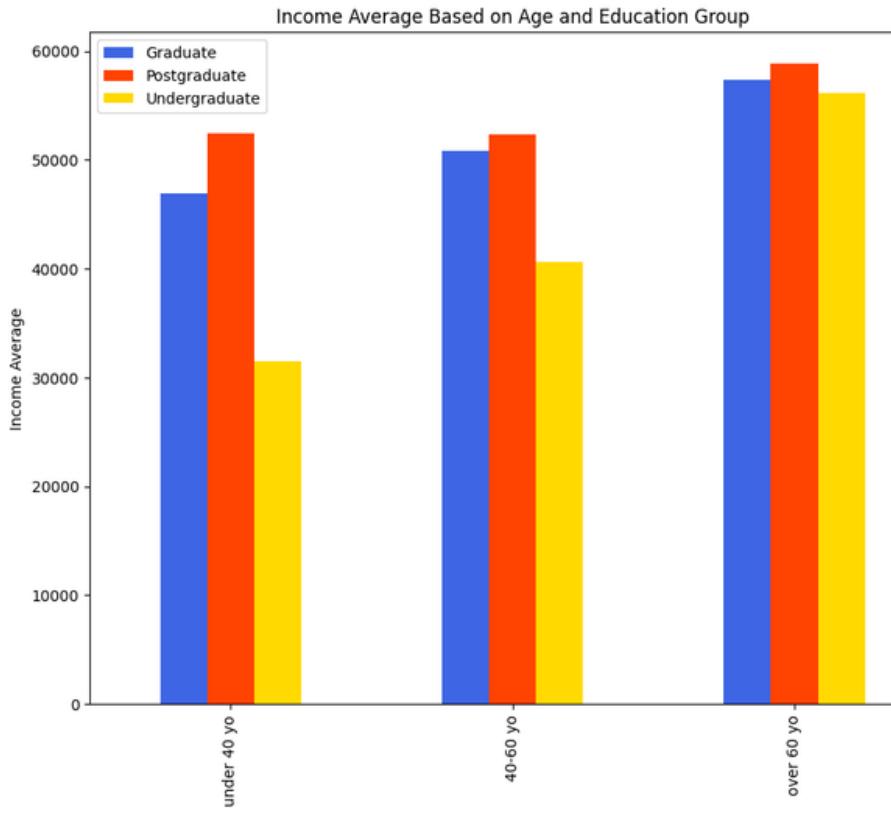
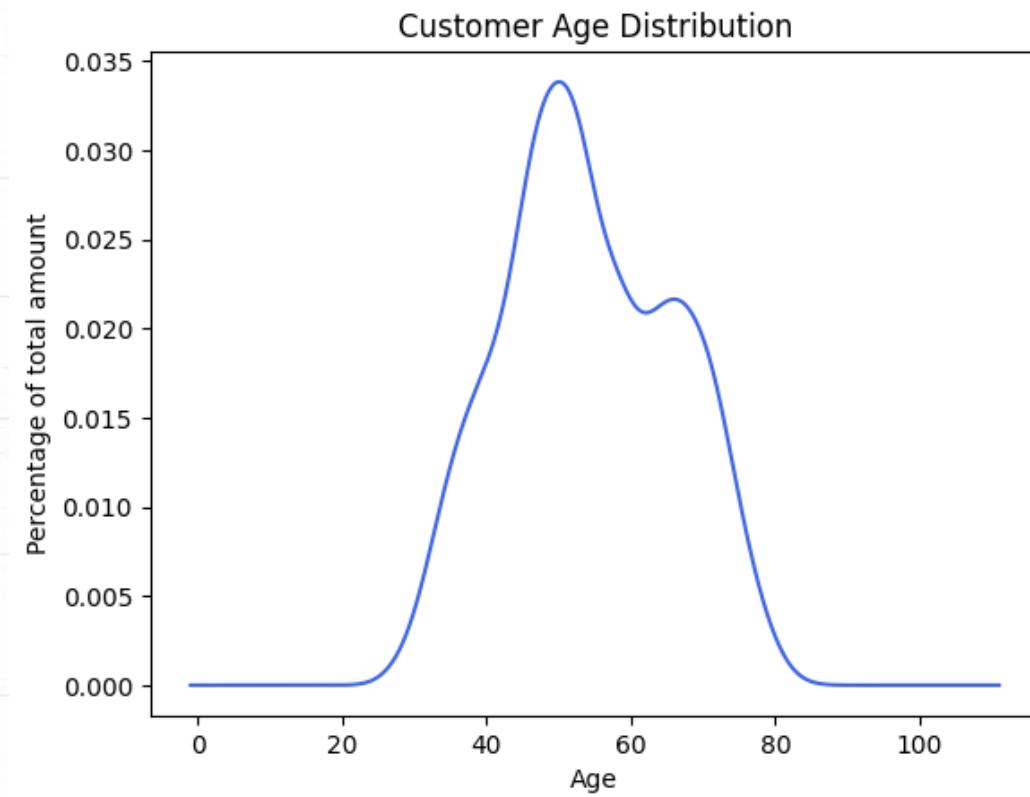
Place

NumWebPurchases: Number of purchases made through the company's website
NumCatalogPurchases: Number of purchases made using a catalog
NumStorePurchases: Number of purchases made directly in stores
NumWebVisitsMonth: Number of visits to the company's website in the last month

Promotion

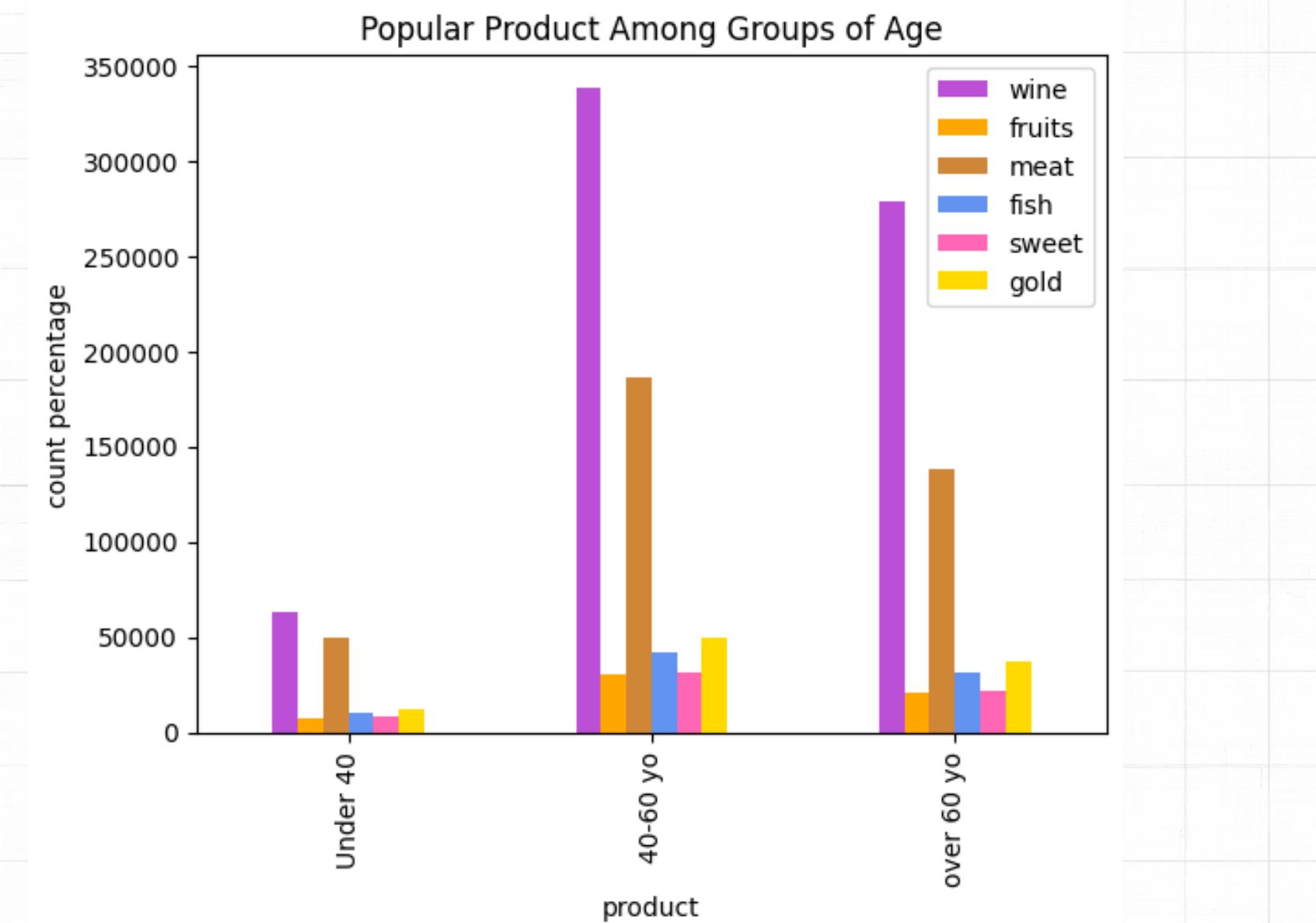
NumDealsPurchases: Number of purchases made with a discount
AcceptedCmp1: 1 if customer accepted the offer in the 1st campaign, 0 otherwise
AcceptedCmp2: 1 if customer accepted the offer in the 2nd campaign, 0 otherwise
AcceptedCmp3: 1 if customer accepted the offer in the 3rd campaign, 0 otherwise
AcceptedCmp4: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

Comprehensive Report

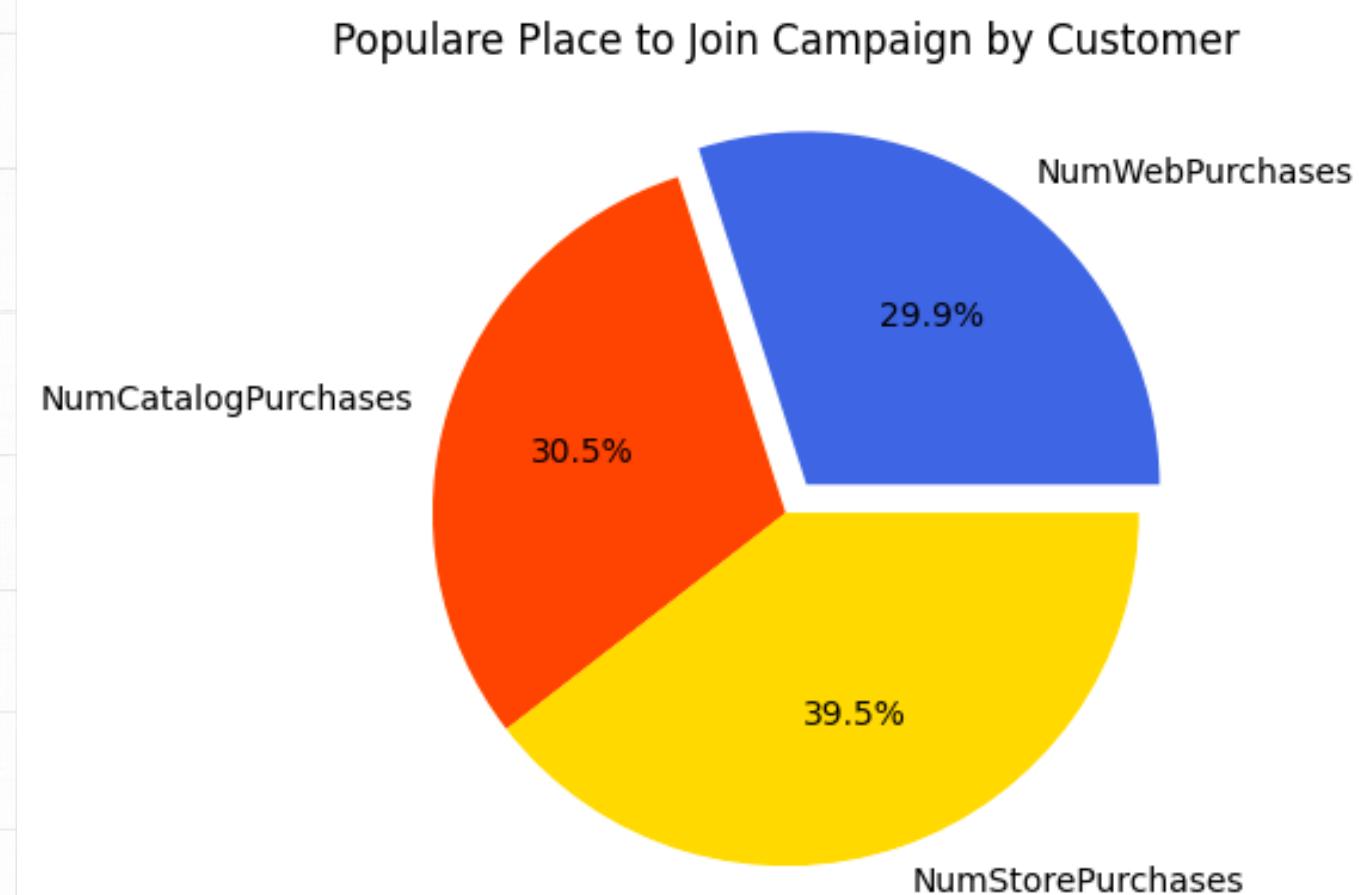


Findings

Popular Product for Each Group of Age

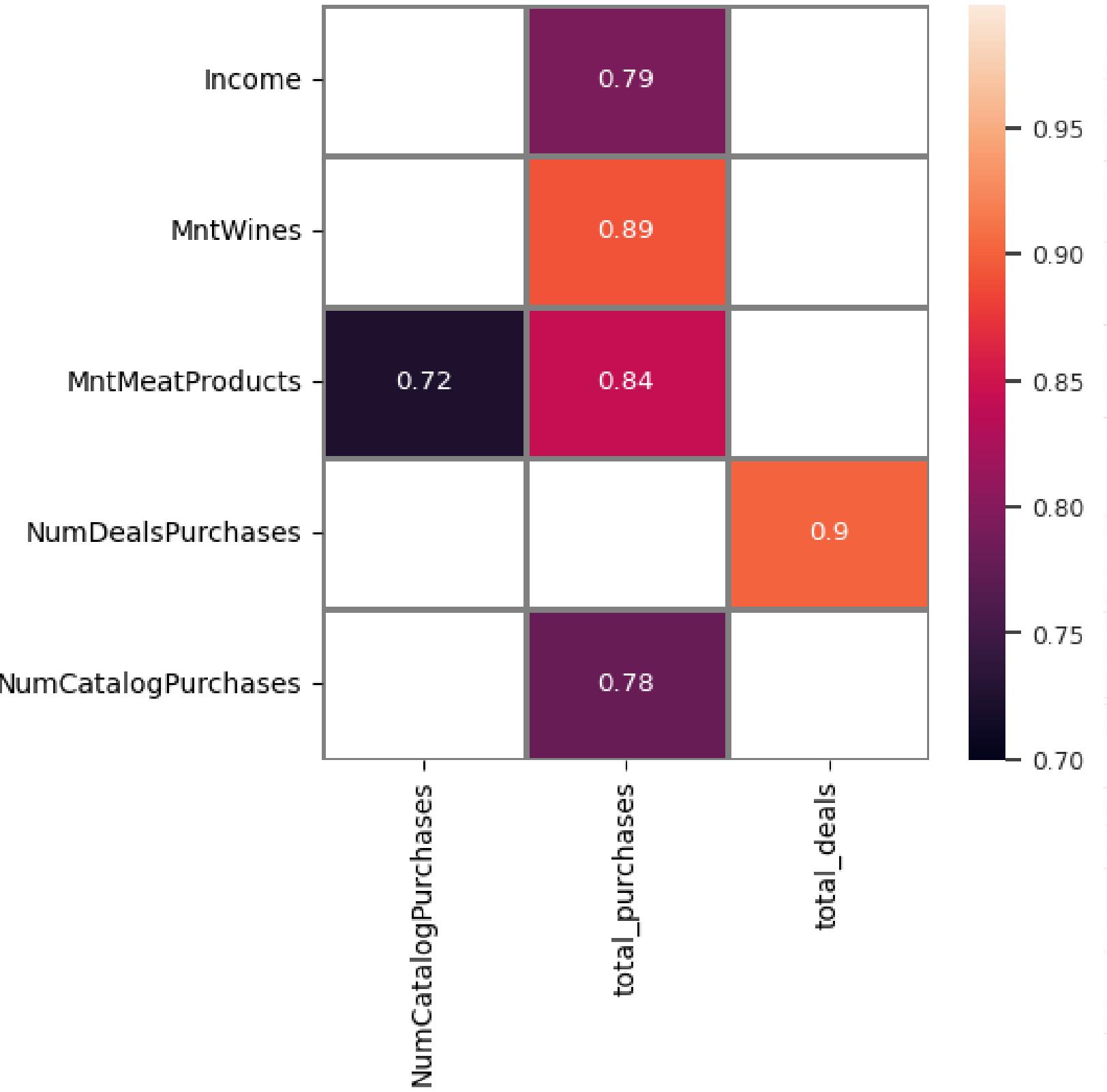


Popular Place to Use Promotion



Most Rewarding Customer is....

By mapping the correlation between each column and total purchases (number of total purchases from all products per ID), we get the feature **Income**, **Wine sales**, **Meat sales**, and **Catalog Purchasing** that has a percentage of **correlation over 70%** with total purchases.



Our Most Rewarding Cust Behaviour

High Income

Like to buy Wine

Like to buy Meat

Mostly buy through Catalog



Recommendation based on the report

1

Based on the **favorite purchasing place** of customers who have **repeated purchases with promotion**, people who used **promotion (> 10 times)** to purchase were **least likely** to buy through the **web**. It means the web promotion may not go well in attracting customers' attention compared to other places.

Based on that, we could have arranged another **interesting promotion** that **focuses on a web** store, competing with other place's promotions, so many people will **buy more** with promotion through the **web**.

Affected Area:

Impacts on different department(e.g Marketing), impact on different groups of people (change the behavior)

Impact:

- + more web visit and more purchases
- + the comfort in use in all places
- cost more if conduct 'more' promotion
- in all total purchases web still #2 in highest purchases

Recommendation based on the report

2

From the **average income** report based on **age and education** segment, the **highest average income** is for customers **over 60 years old** with a **postgraduate** degree.

We can maintain and increase that loyalty by **conducting a promotion** like membership. So, we give them a reward and their rate of **loyalty** to our products will **increase** along with their **purchases**. This also could work for customers that have a long recency to get **interested** in **our product again**.

Affected Area:

Impacts on different department(e.g Marketing, Finance), impact on customer groups (>60 yo, postgraduate)

Impact:

- + improve cust satisfaction
- + revenue increase because repeated purchase from loyal cust

- cost more to make membership
- add jobdesc to maintain/calculate the membership

Recommendation based on the report

3

Through a report about **customer recency**, the count of customer recency reached the peak 2 months ago, in October 2023, then dropped when it was in November and December. So, it means **most of our customers haven't bought again after October 2023**.

With the gap of more than 50 customers in November and more than 250, we should **check all possibilities** that affect this drop, both **internal and external** reasons.

Affected Area:

Impacts on different department(e.g Marketing, Finance, Brand & PR), impact on different business processes (if we found out that the cause is the business process itself), impact on group of customers

Impact:

- + Get back many long recenced cust
- + Increase income
- change business process
- takes a long time
- involves many departments

Thank You