

FOOD MARKETING ANALYSIS

Amany Gaber

AGENDA

- Business problem
- Analysis
 - Overall dashboard
 - Where Are Us?
 - Who recommended targeting the next campaign
- Classification

IFOOD Marketing Analysis



Number of customers

2212

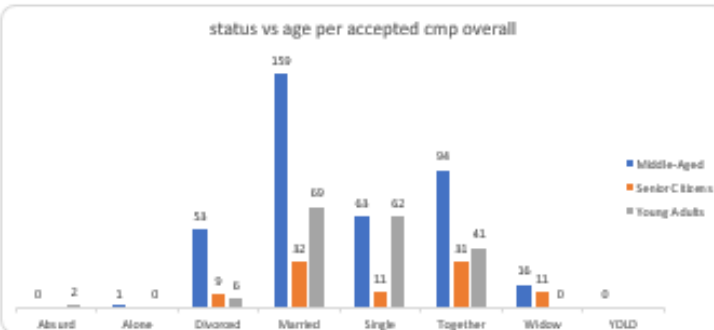
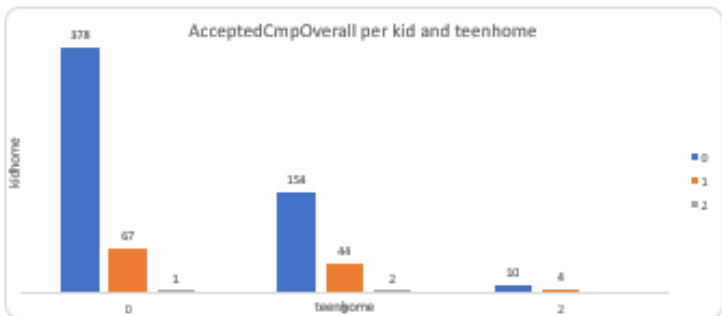
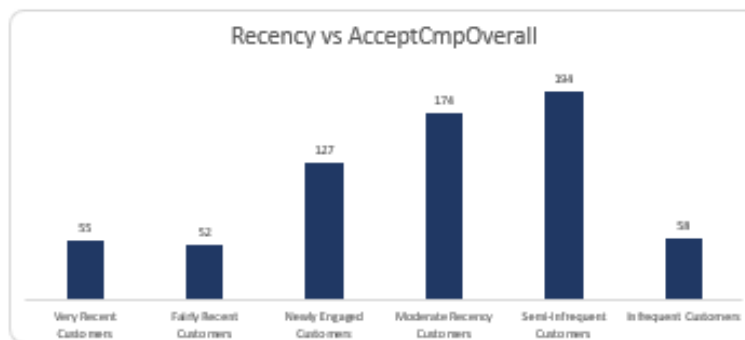
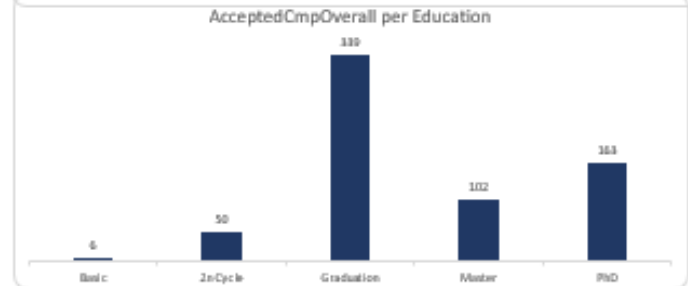
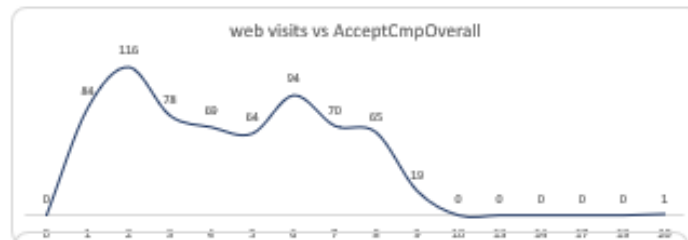
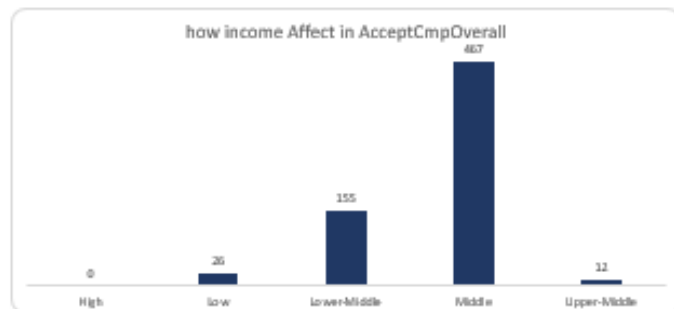
complain rate

0.91%

ROI

2.67

AcceptedCmpOverall
0
1
2
3
4



Recommendation & Insights

*Targeted people in the next campaign should consider the following insights:

1-Educational Influence: Prioritize customers with Graduation education, as they tend to show higher overall campaign acceptance.

2-Income and Age Focus: Concentrate efforts on middle-income individuals, particularly those earning between \$60,000 and \$100,000, and middle-aged customers aged 30 to 60, who demonstrate a strong propensity for campaign acceptance.

3-Recency Matters: Emphasize campaigns for customers with moderate recency (60 to 90 days) and semi-infrequent recency (30 to 60 days) for increased acceptance rates.

4-Stable Acceptance Rate: Expect a stable campaign acceptance rate around 7% for the next three campaigns.

5-Marital Status Influence: Target married and together status customers for higher campaign acceptance, while also considering single and divorced individuals with average acceptance rates. Additionally:

6-Household Composition: Keep in mind that households with fewer children or teenagers tend to have higher campaign acceptance.

7-Channel Selection: Focus on both store and website channels, which have demonstrated the highest acceptance rates at 66%.

8-Low Complaint Rate: Note that customer complaints remain minimal, indicating overall satisfaction.

These insights will help tailor the targeting strategy for

BUSINESS PROBLEM

A food company wants to produce the highest profit for the next direct marketing campaign, scheduled for the next month.

So make an analysis to improve the targeting

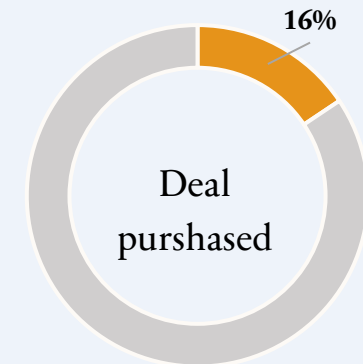
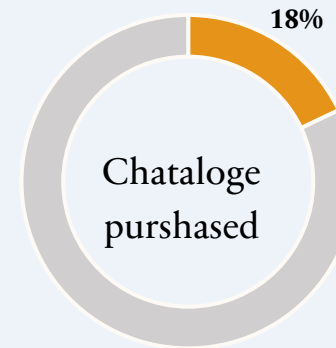
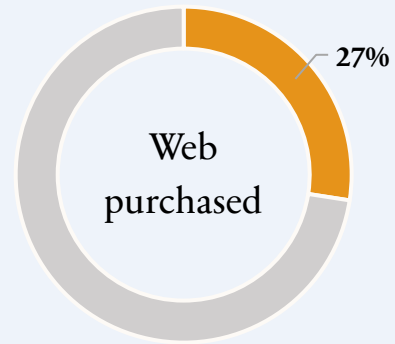
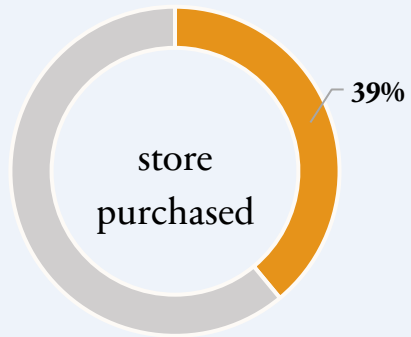
It expected when Targeting recommended applied profit increase by about 15%



ANALYSIS

Where Are Us?

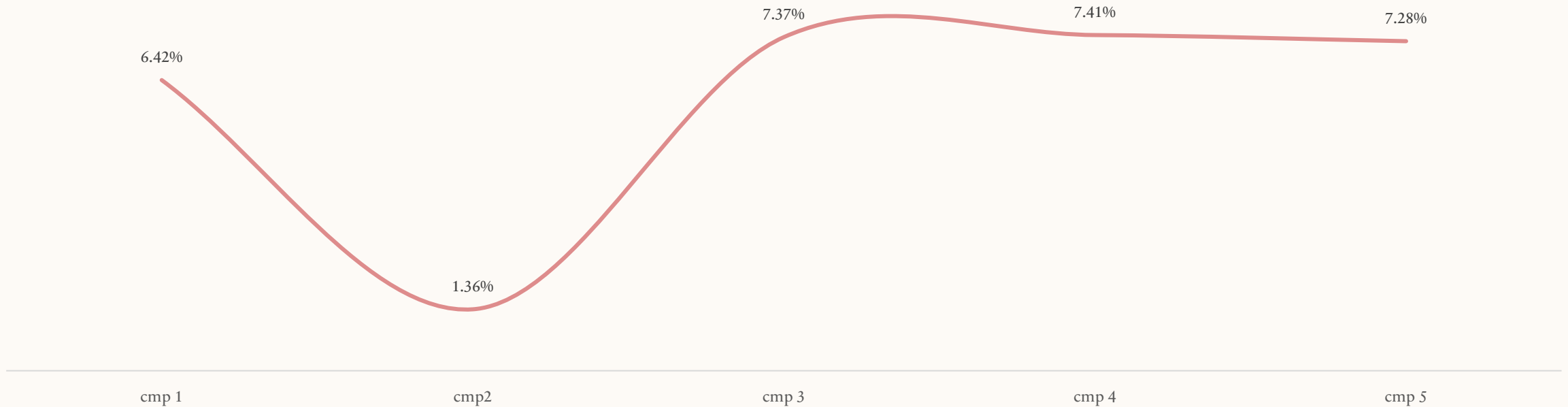
Methods Purchased Percentages



Where Are Us?

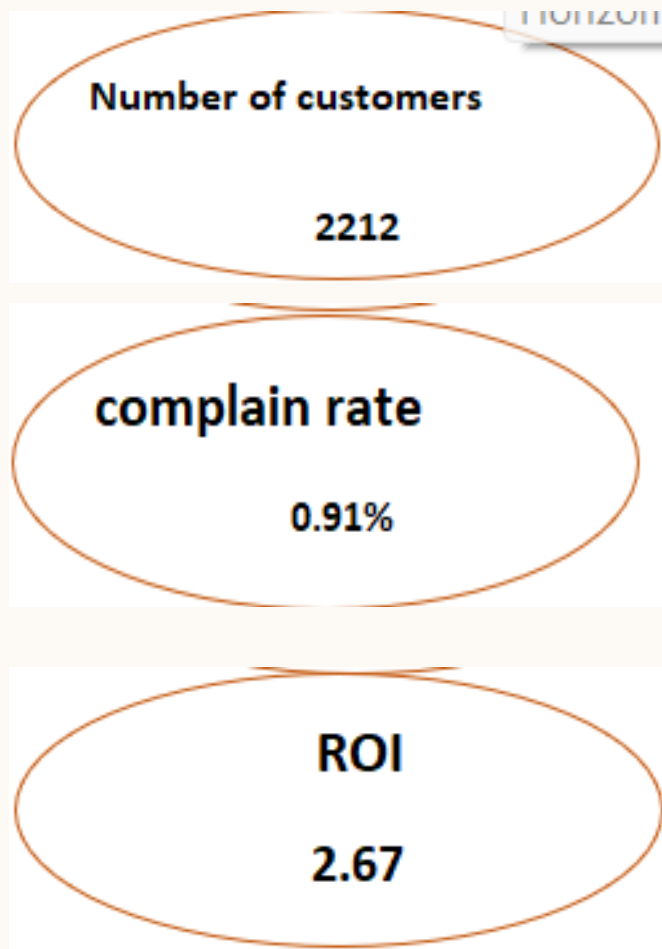
The last 5 campaigns

Campaign Acceptance Rate



Where Are Us?

Methods Purchased Percentages



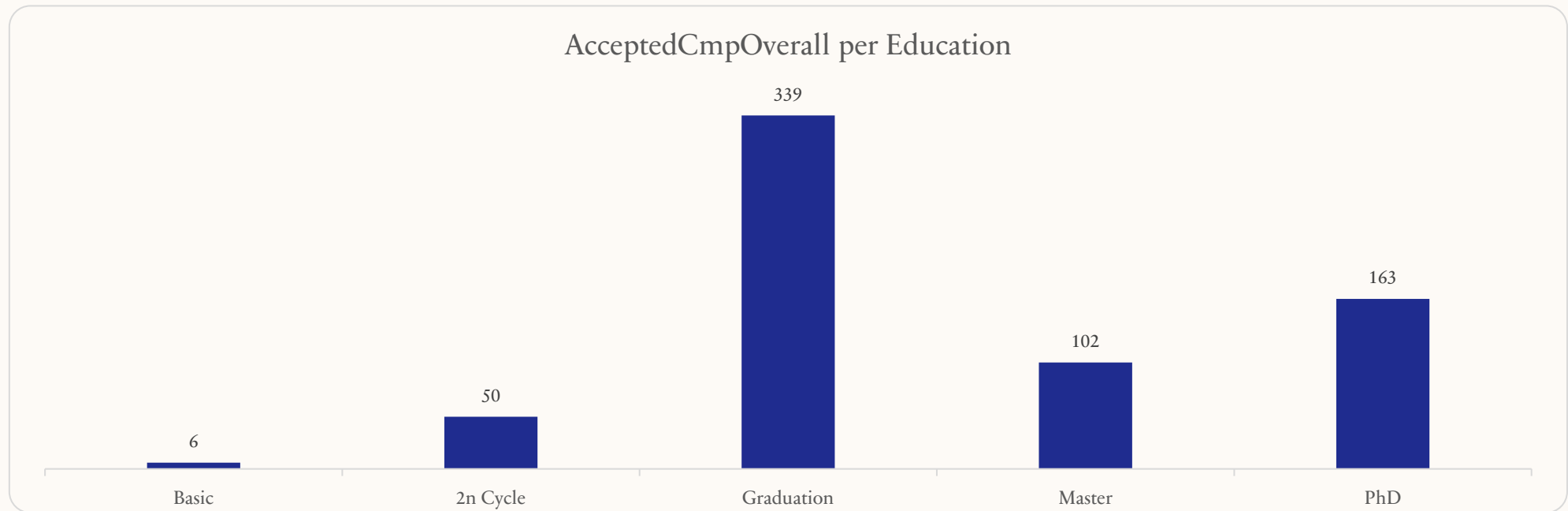
The Number of Customers We Targeted:

It is worth noting that the number of customer complaints has been consistently low, which suggests that customers are generally satisfied with the service.

ROI for Overall last 5 campaigns

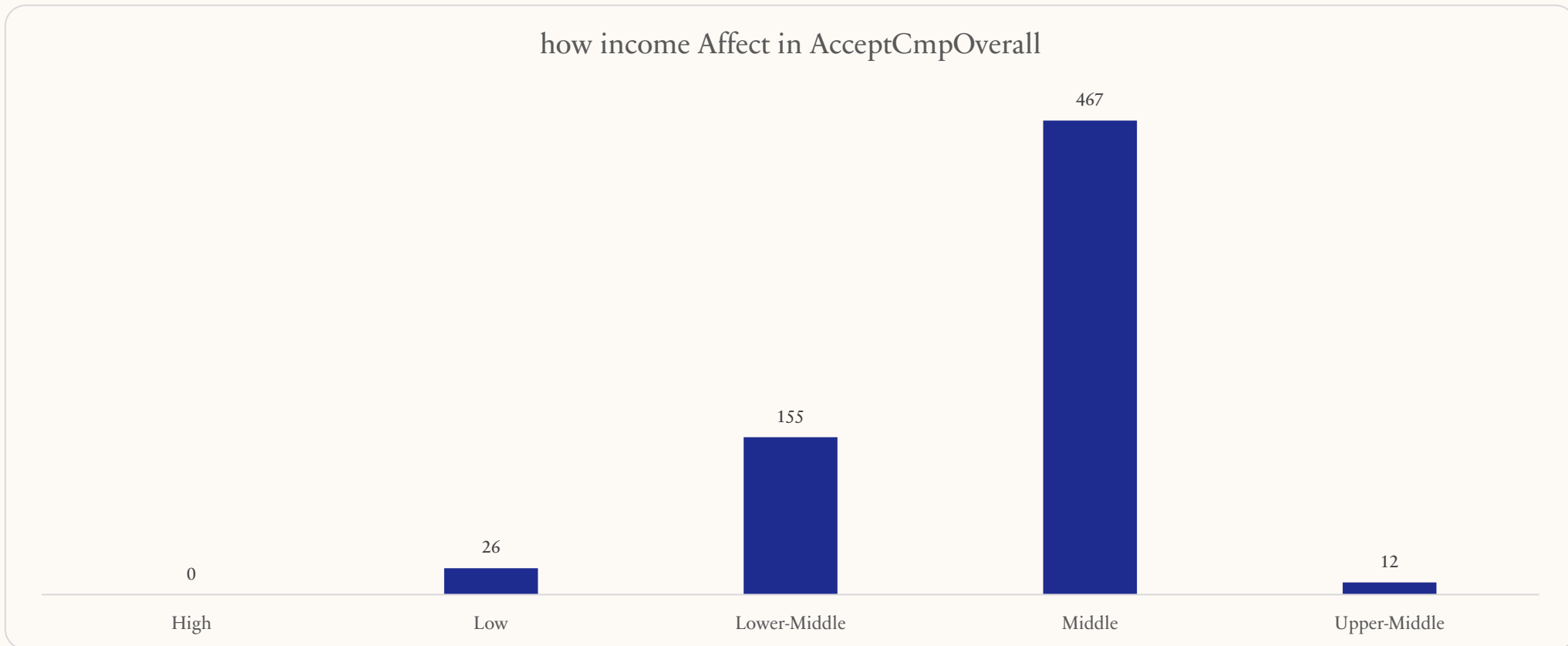
Targeted people in the next campaign should consider the following insights:

1-Educational Influence: Prioritize customers with Graduation education, as they tend to show higher overall campaign acceptance.



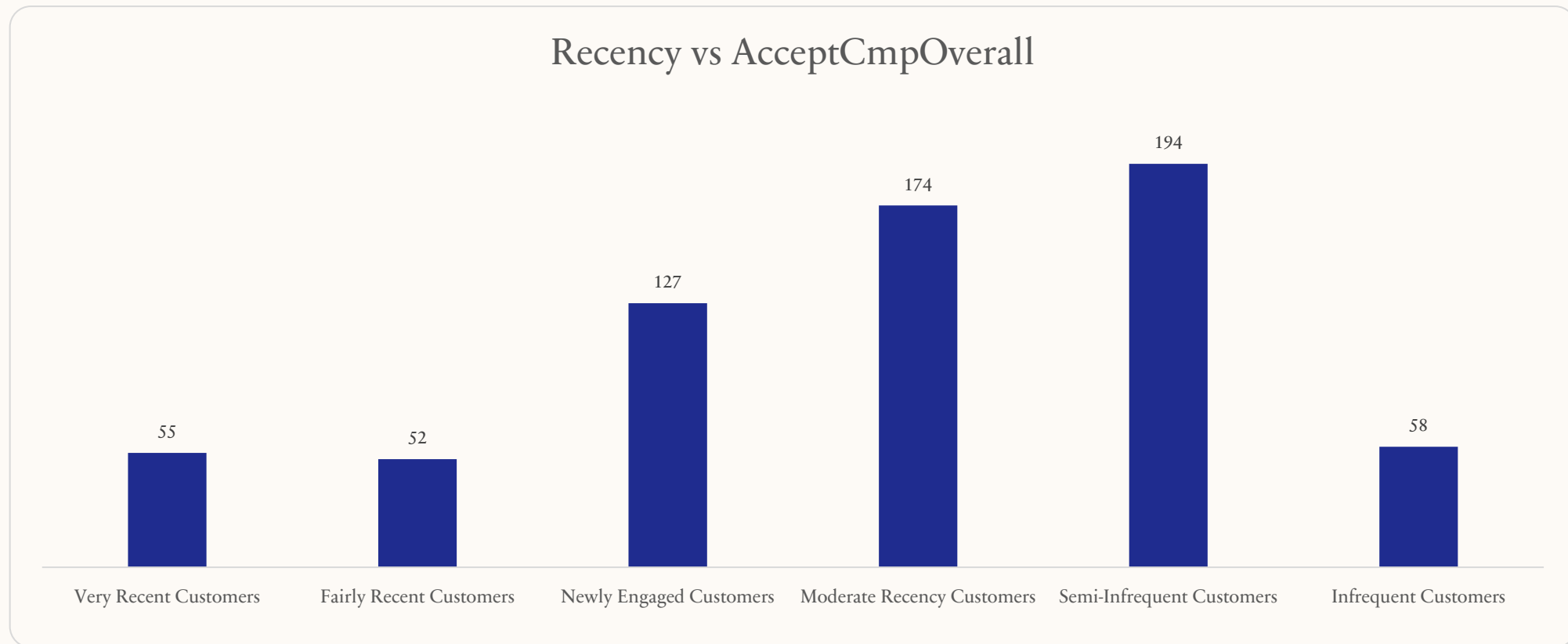
Targeted people in the next campaign should consider the following insights:

2-Income and Age Focus: Concentrate efforts on middle-income individuals, particularly those earning between \$60,000 and \$100,000, and middle-aged customers aged 30 to 60, who demonstrate a strong propensity for campaign acceptance.



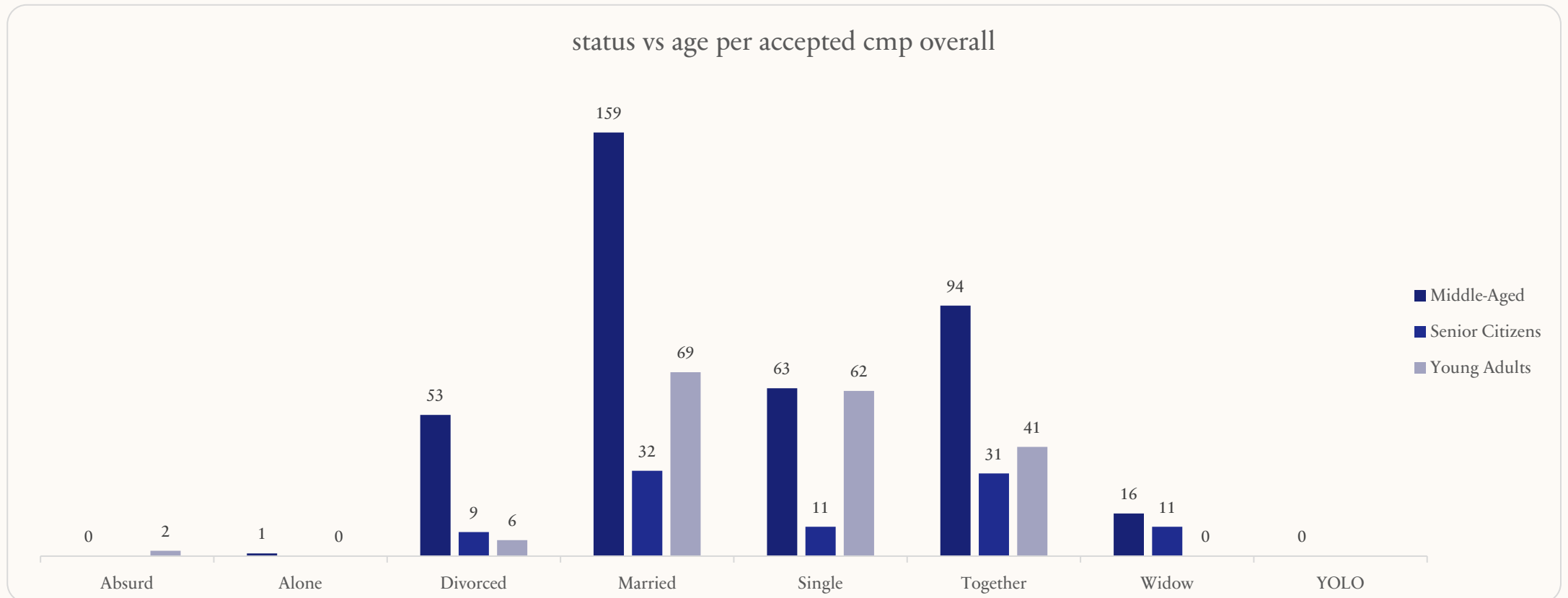
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3-Recency Matters: Emphasize campaigns for customers with moderate recency (60 to 90 days) and semi-infrequent recency (30 to 60 days) for increased acceptance rates.



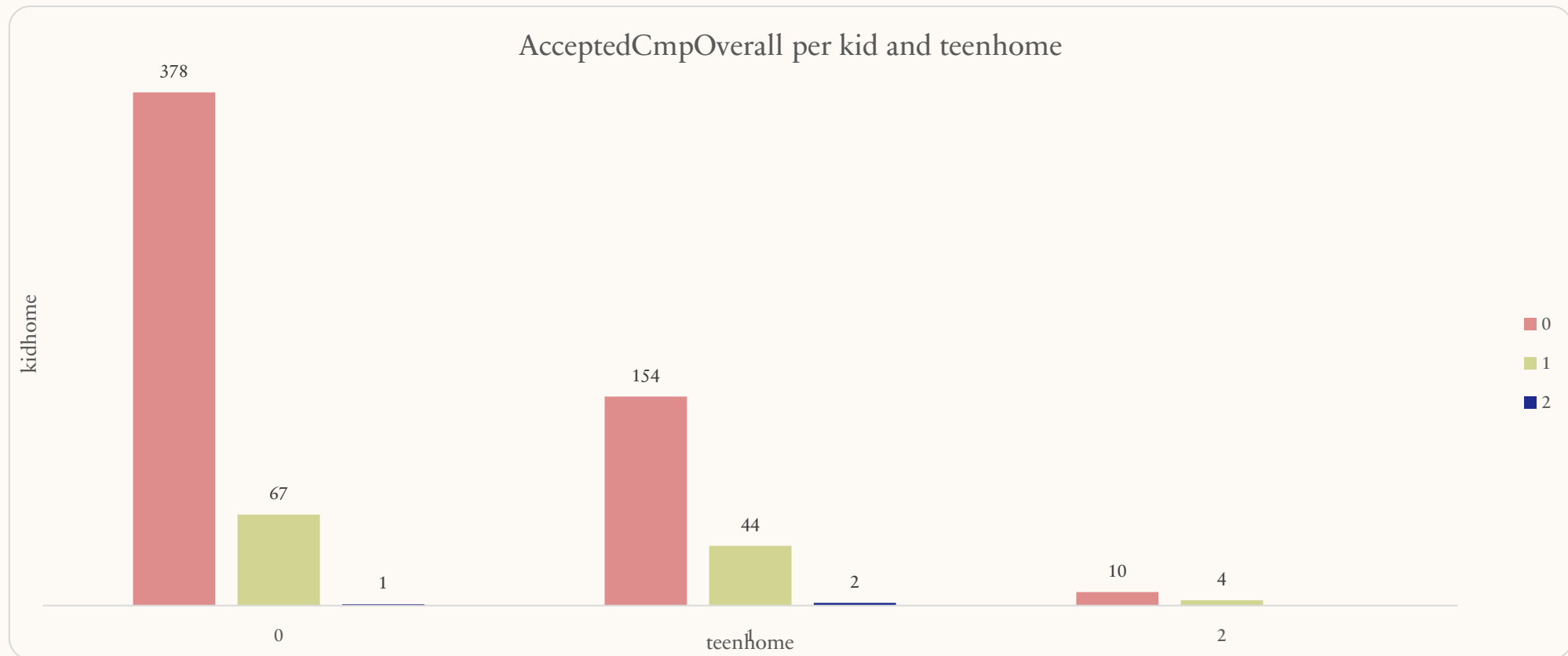
Targeted people in the next campaign should consider the following insights:

5- Marital Status Influence: Target married and together status customers for higher campaign acceptance, while also considering single and divorced individuals with average acceptance rates. Additionally:



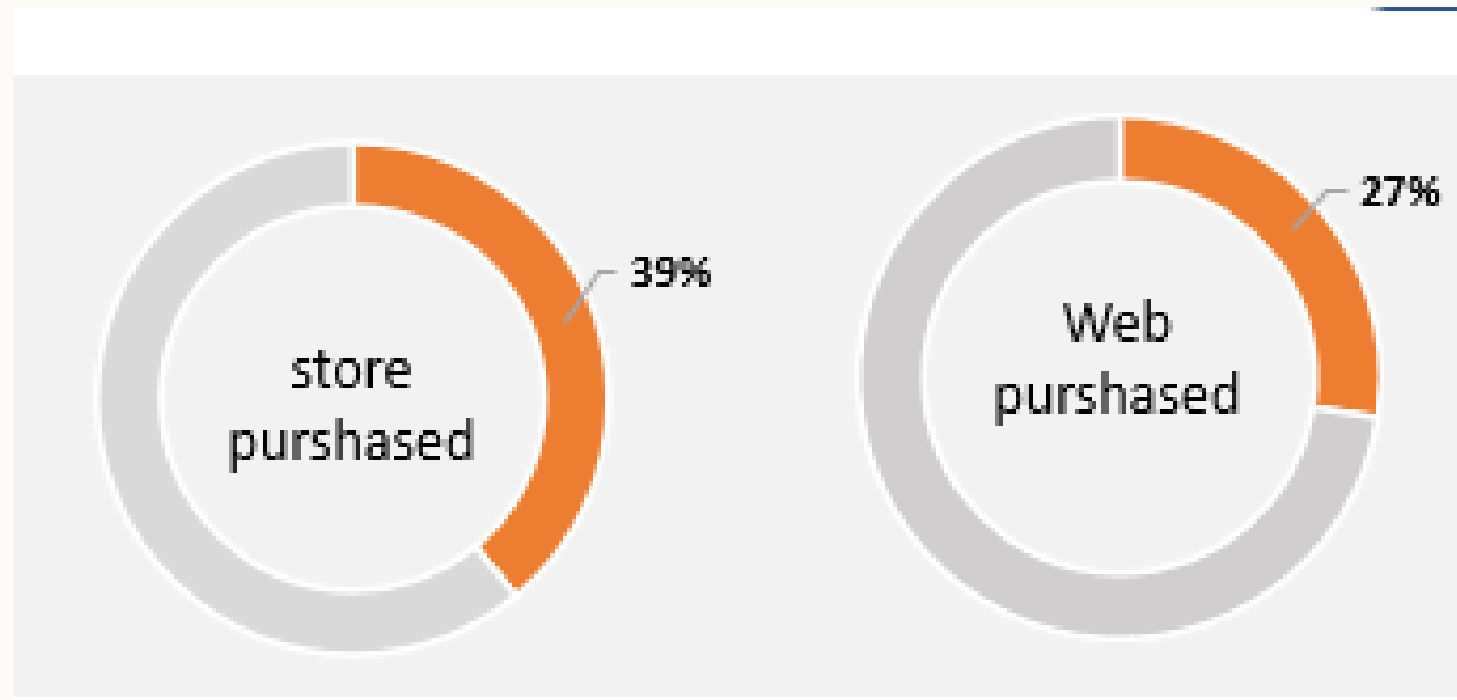
Targeted people in the next campaign should consider the following insights:

6- Household Composition: Remember that households with fewer children or teenagers tend to have higher campaign acceptance.



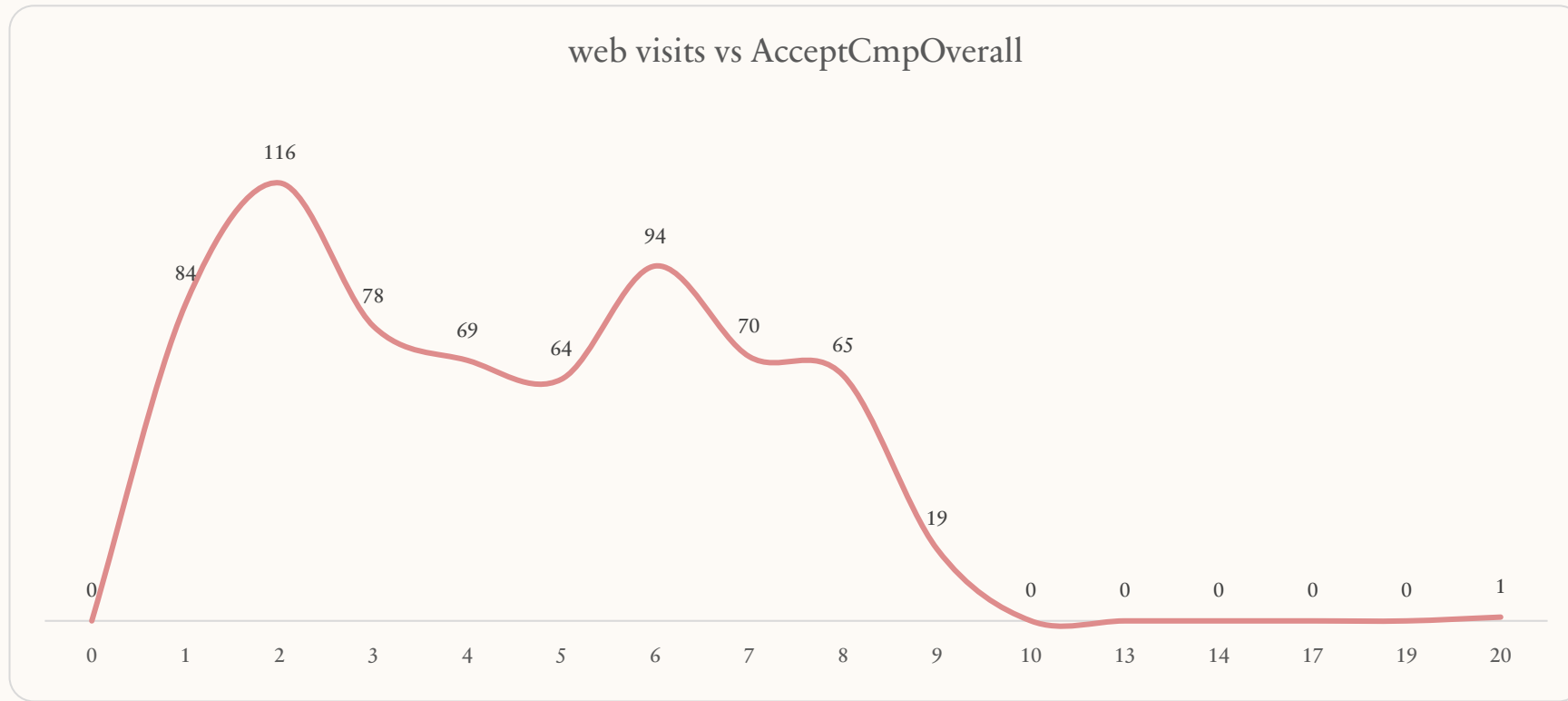
Targeted people in the next campaign should consider the following insights:

7-Channel Selection: Focus on store and website channels, demonstrating the highest acceptance rates at 66%.



Targeted people in the next campaign should consider the following insights:

Website visits have a direct relation at 0,1,2 and inverse after that can help us in customer classification what to put in or out of our campaign





CLASSIFICATION

Classification Models Accuracy

```
Model: Logistic Regression
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```
Accuracy: 0.8035264483627204
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Model: XGBoost
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Accuracy: 0.8236775818639799
```

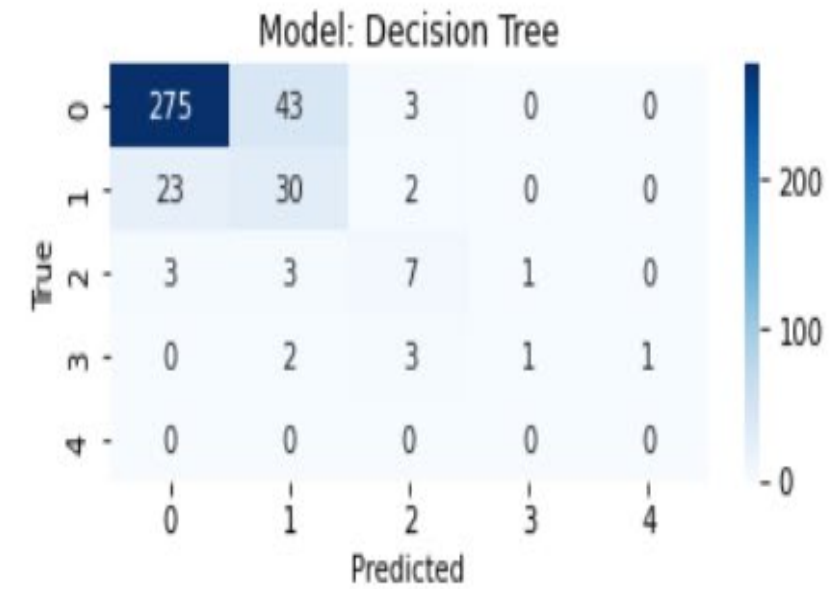
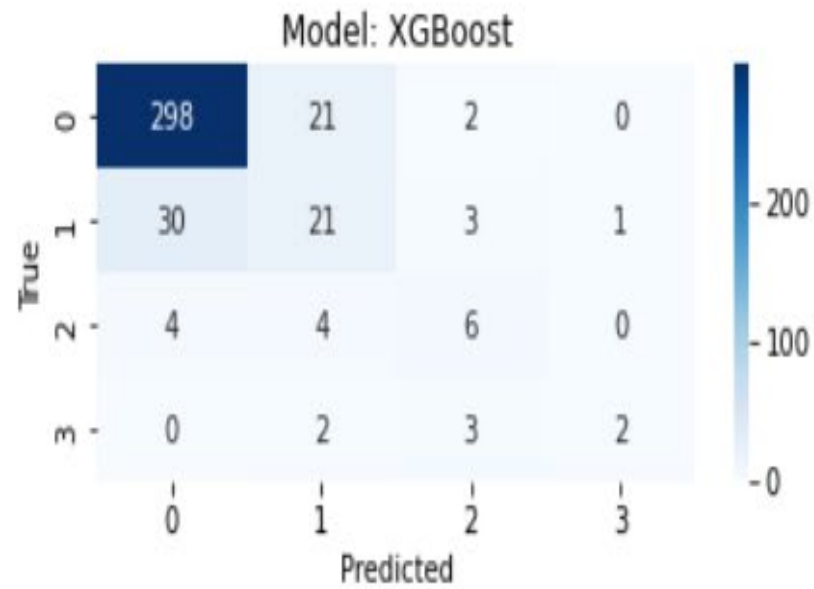
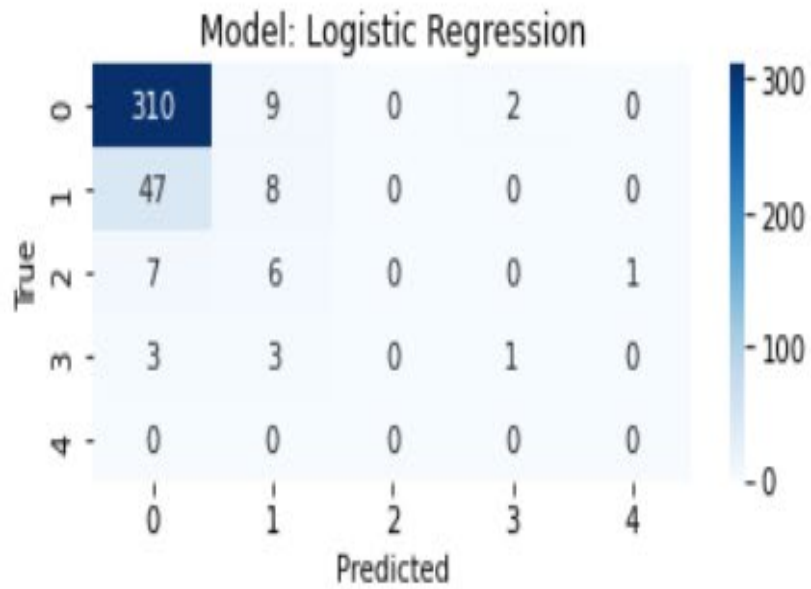
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```
Model: Decision Tree
```

```
Accuracy: 0.7884130982367759
```

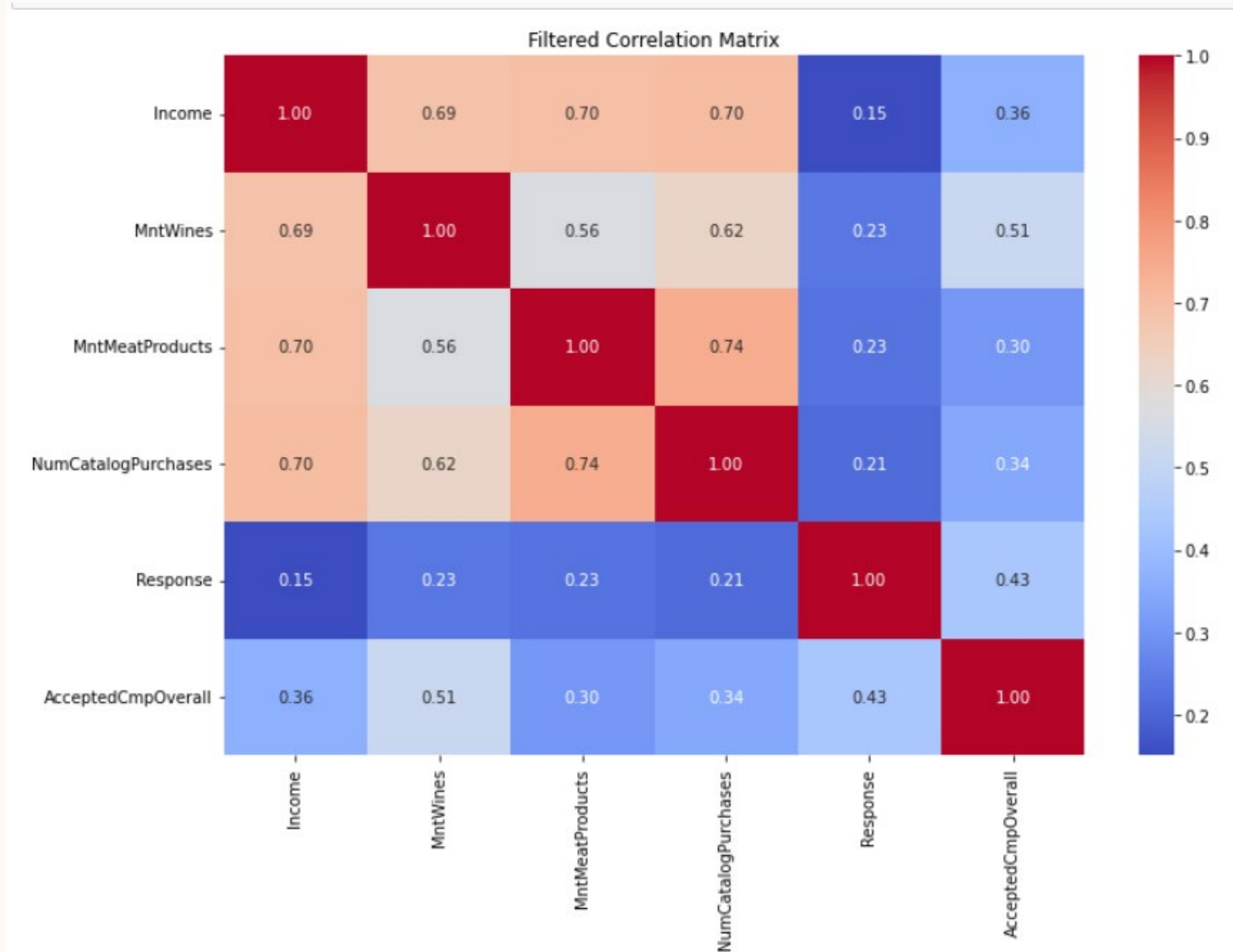
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Confusion Metrix



The Important Features

19



Actual vs models Predictions

Logistic Regression	XGBoost	Decision Tree	actual
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0

Checking if We improve targeting by 10 samples

Predicted

Number of Predicted Campaign Acceptances: 6 of 10 samples included targetted



THANK YOU

Amany Gaber

amanygaber330@gmail.com