






IFOOD CRM DATA ANALYST



Table Of Content

-  **Overview**
In this part, we will go through the topic and data.
 -  **Transform data**
Data will be transform for suitable analysis.
 -  **Analysis and Insight**
Digger into data and hightlight gems that can help company's growth increase.
 -  **Recommendation and Conclusion**
- 

Overview

A food company wants to produce the highest profit for the next direct marketing campaign, scheduled for the next month. A pilot campaign involving 2.240 customers was carried out, customers who bought the offer were properly labeled. The total cost of the sample campaign was 6.720MU and the revenue generated by the customers who accepted the offer was 3.674MU. Globally the campaign had a profit of -3.046MU and the success rate of the campaign was 15%.



Overview

ID

Year_Birth

Education

Marital_Status

Income

Kidhome

Teenhome

Dt_Customer

Recency

MntWines

MntFruits



Overview

MntMeatProducts

MntFishProducts

MntSweetProducts

MntGoldProds

NumDealsPurchases

NumWebPurchases

NumCatalogPurchases

NumStorePurchases

NumWebVisitsMonth

AcceptedCmp3

AcceptedCmp4



Overview

AcceptedCmp5

AcceptedCmp1

AcceptedCmp2

Response

Complain

Country





Transforming data



Rename Columns

Rename columns name for better escription.



Drop Duplicate Values

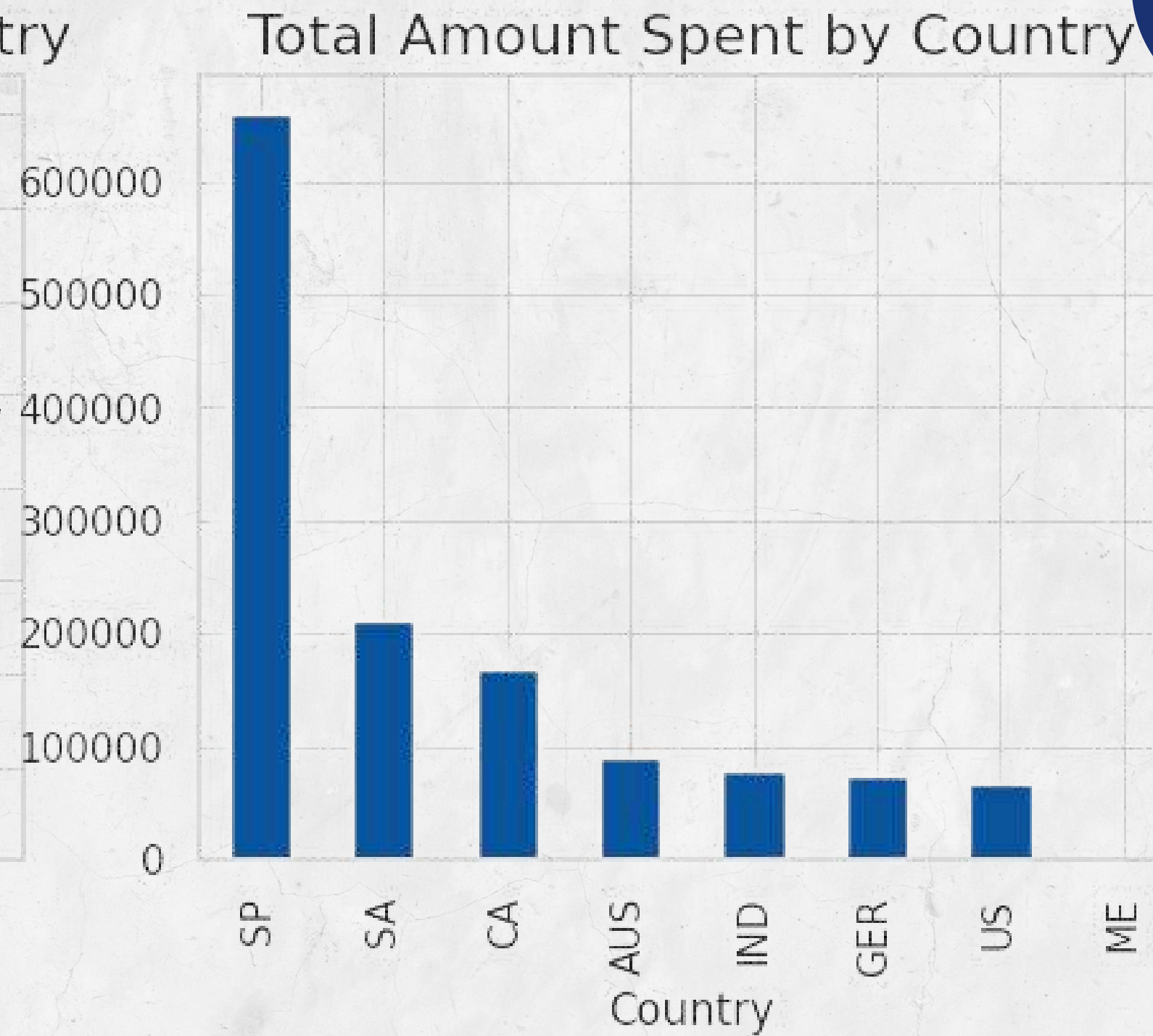
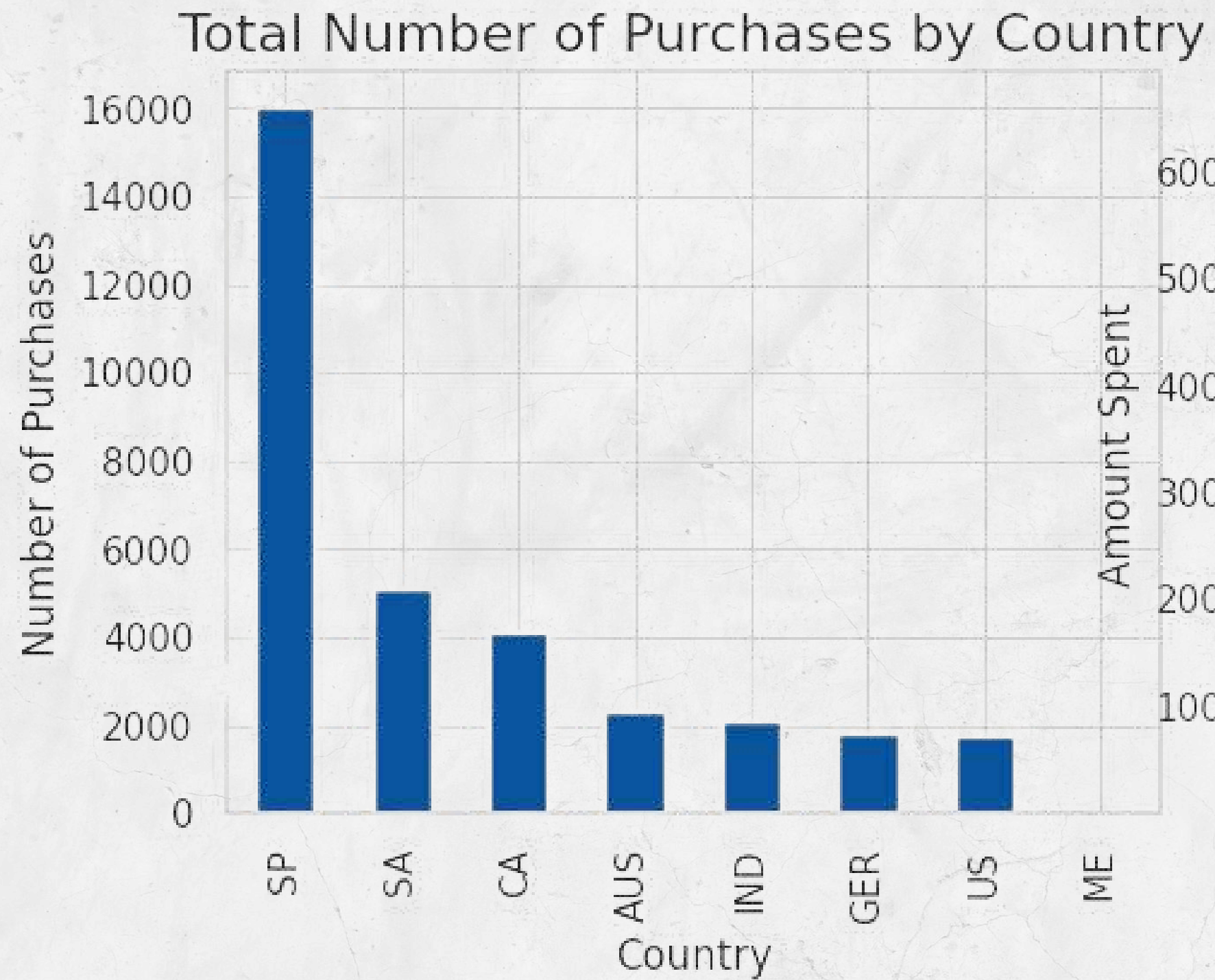
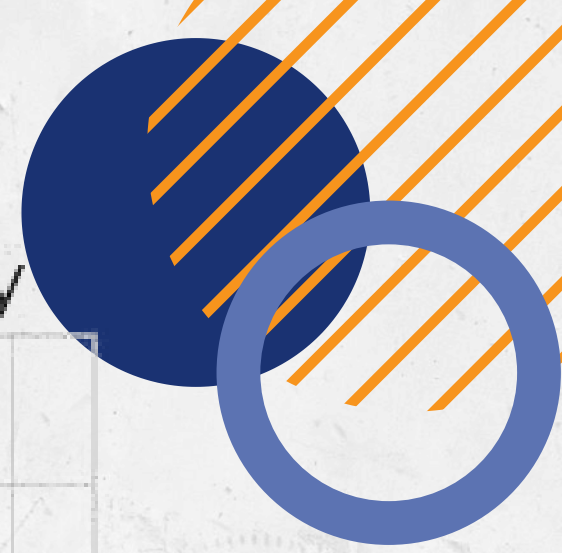
Drop all duplicate values to avoid wrong calculation.



Replace Values/Creating New Columns/Remove Outliers

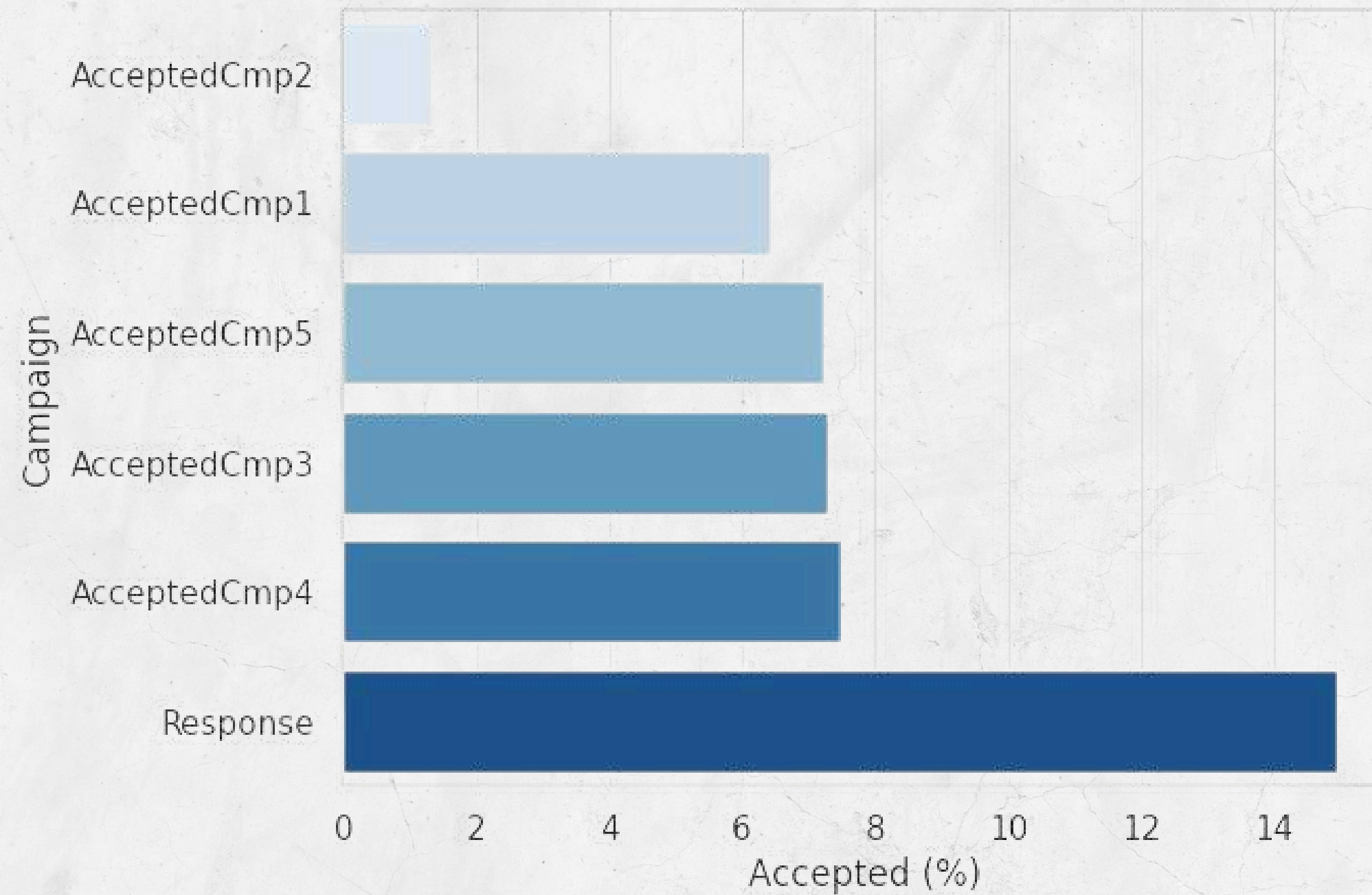
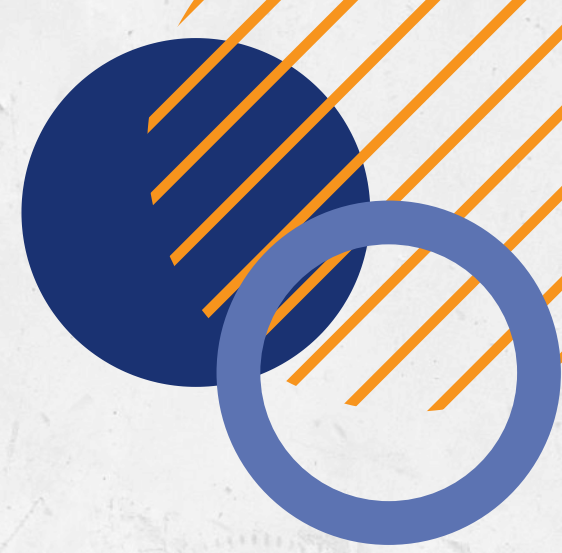
Analysis & Insight





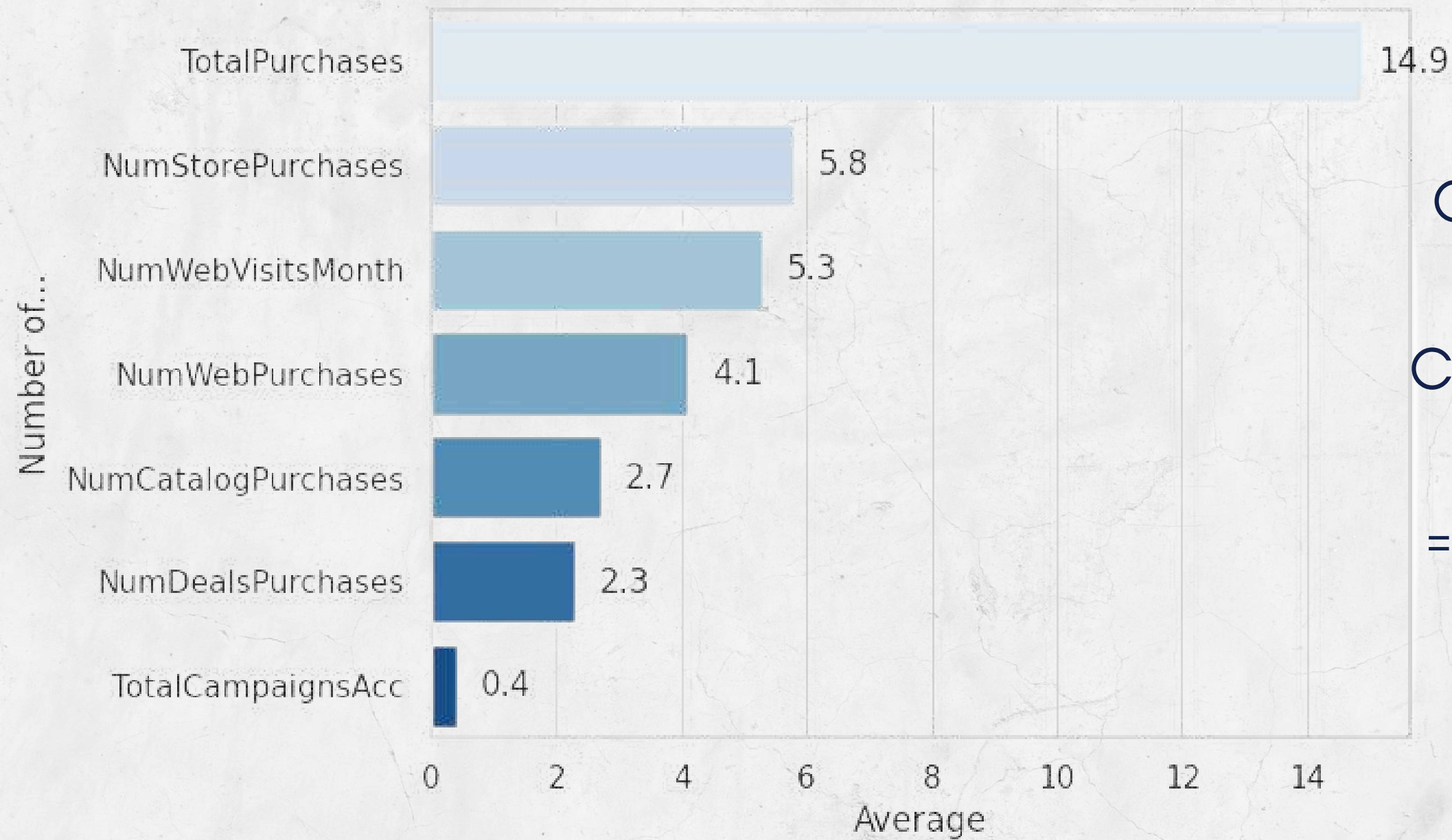
Spain is the country has the most total Spent and Purchase with total are nrealy 16.000 and more than 600.000\$



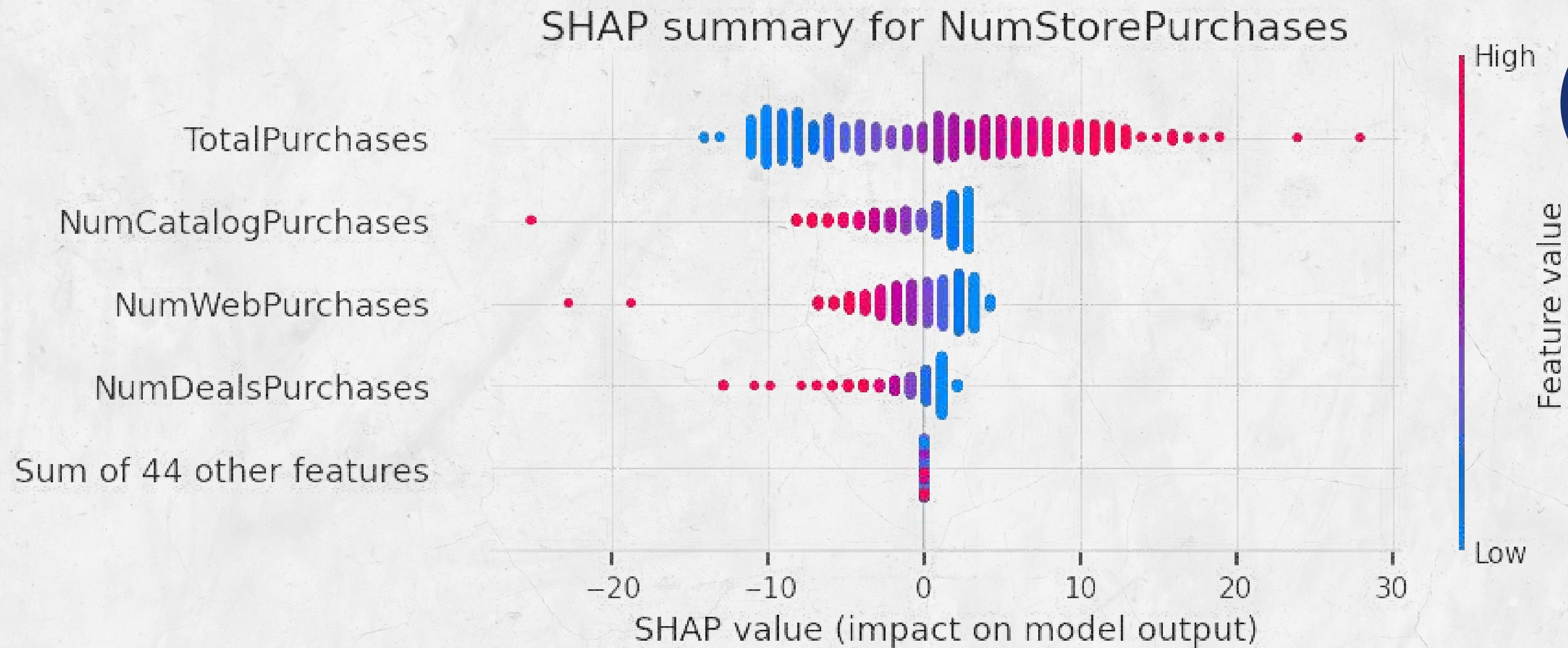


Response (last campaign) is the campaign that is the most successful with average accept percentage score higher than around 2 times higher than AcceptedCmp4 (the fourth campaign)



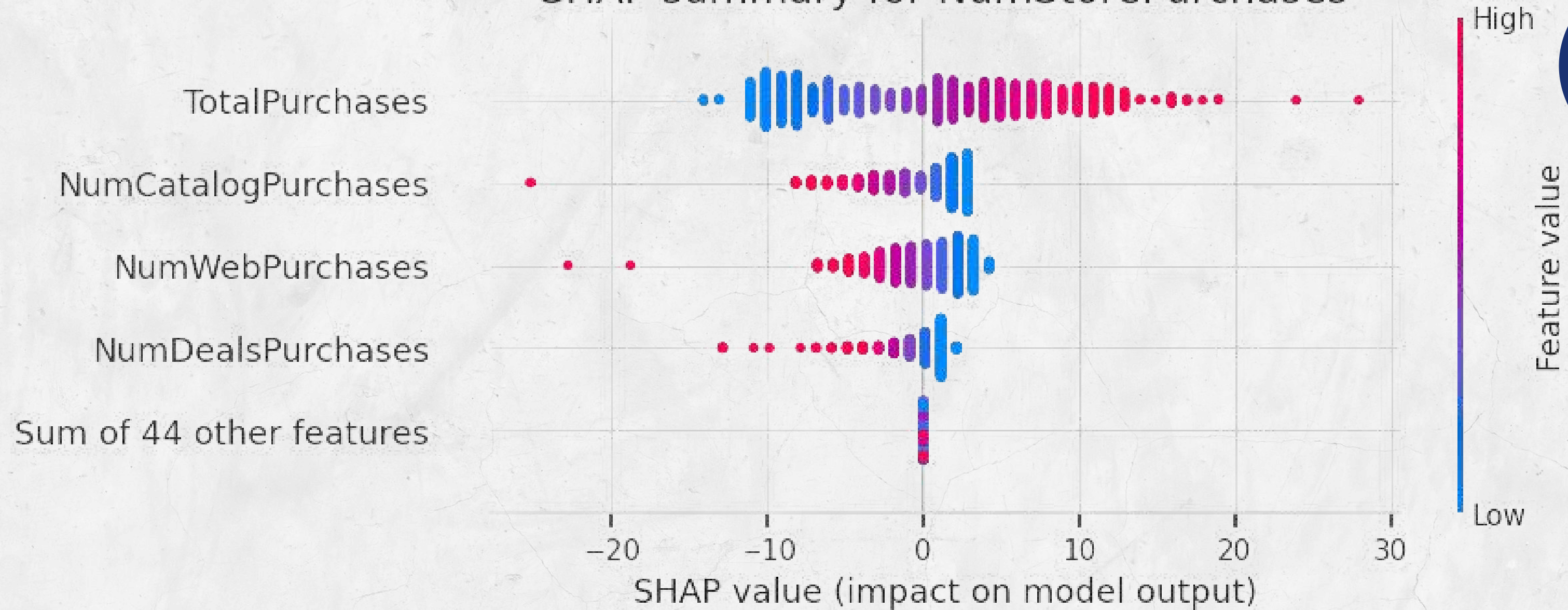


Consumer prefer to purchase at store slightly higher than other channels.
Campaigns, Deals and Catalog are 3 channels that are not really effective.
=> need to check these 3 channels to find out and tackle the problems



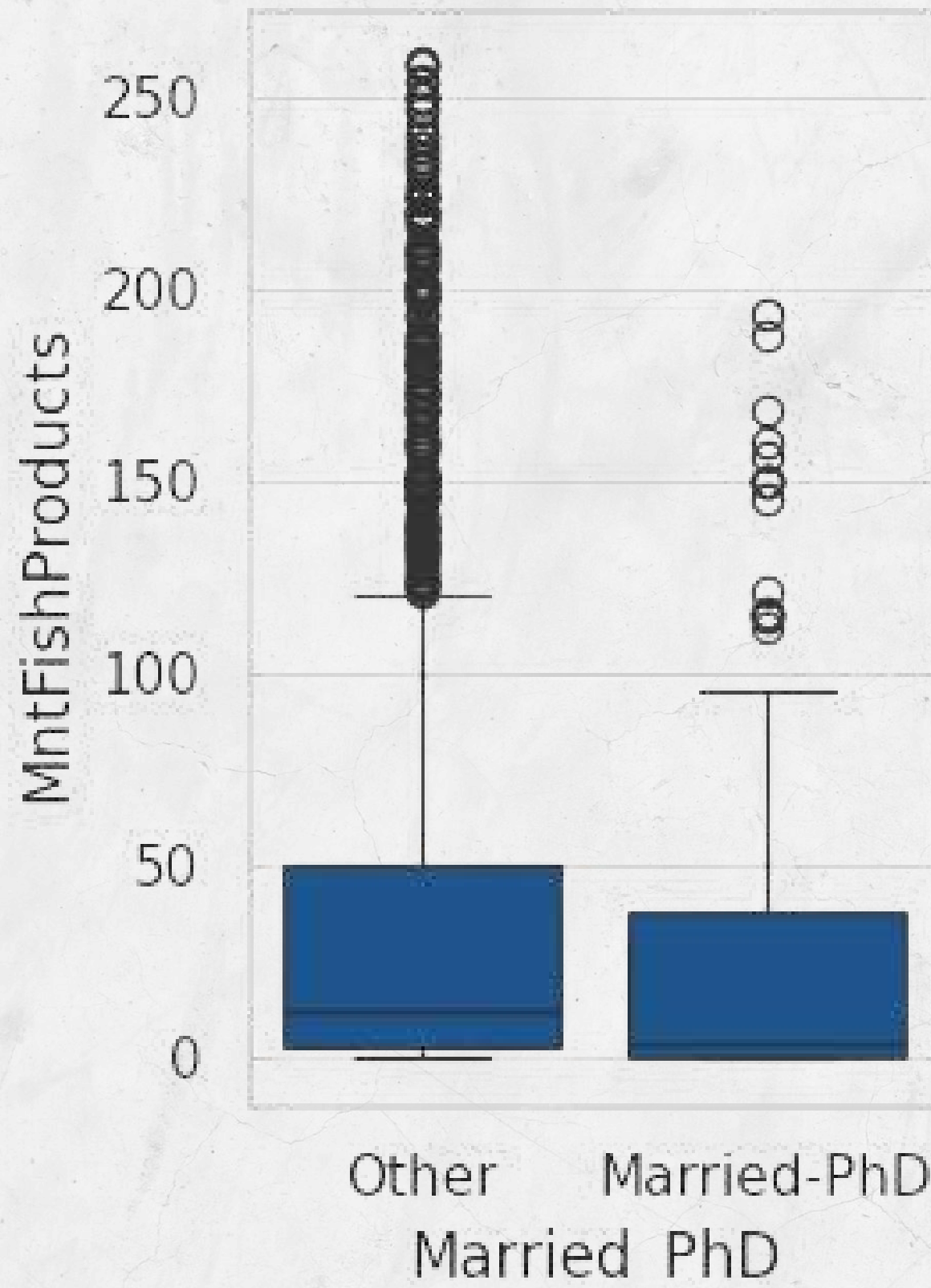
The number of purchases at the store decreases when the number of purchases through catalog, website, or deals channels ('NumCatalogPurchases', 'NumWebPurchases', 'NumDealsPurchases') increases: This indicates that when customers engage in purchasing through catalog, website, or deals channels, their likelihood of purchasing directly at the store decreases.

SHAP summary for NumStorePurchases



These trends illustrate patterns of customer behavior. Customers with higher total purchase frequencies are more likely to prefer shopping at the store, while those engaging more in purchases through other channels such as catalog, website, or deals tend to decrease their preference for direct in-store shopping.

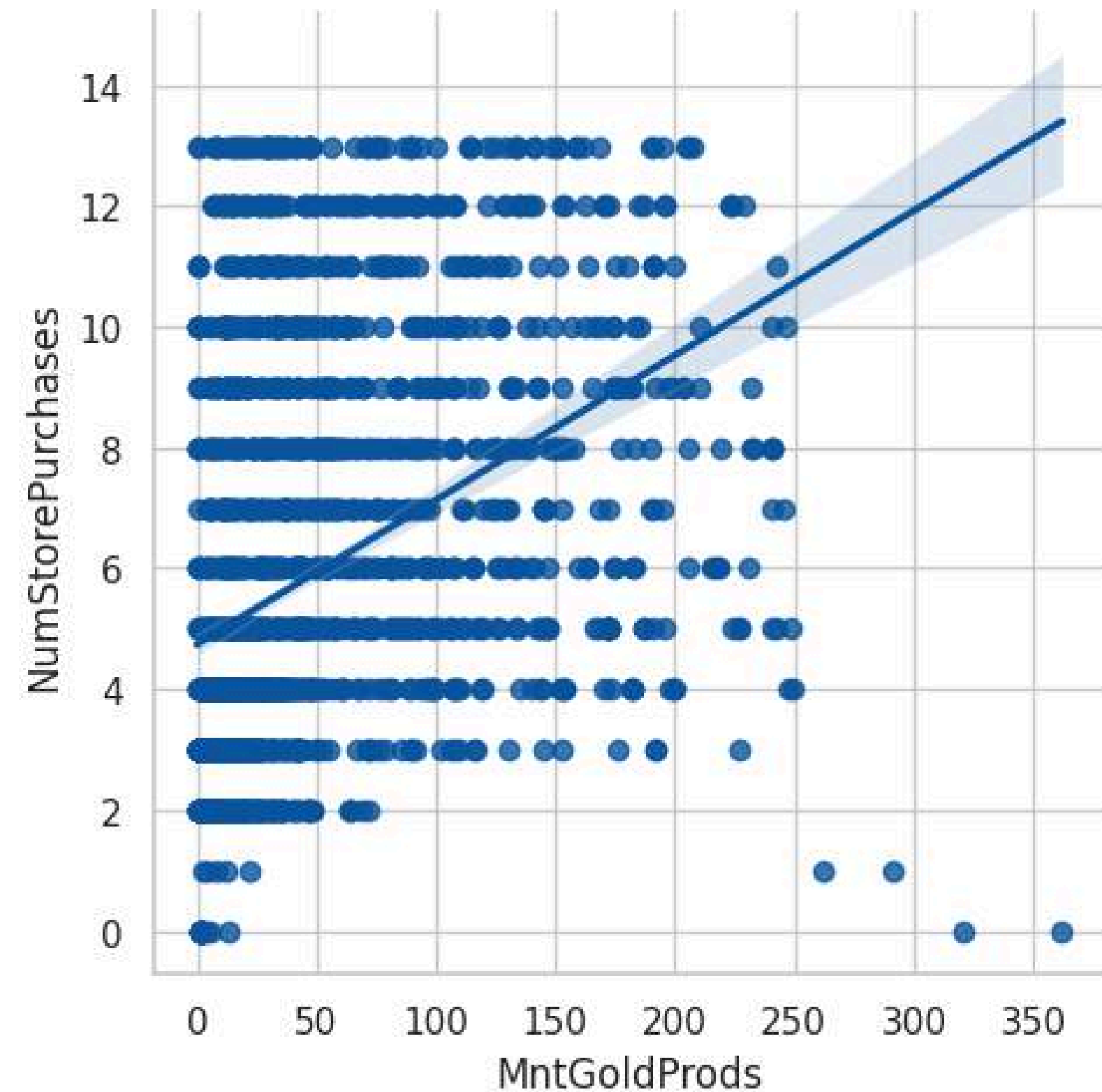
Fat axit Omega 3 in fish is good for brain. Do married and PhD group have higher consume than the rest ?



alpha 0.05
t-test p-value: 0.005

Contrary to conventional wisdom, our analysis suggests that there is no discernible difference in fish consumption between the married and those holding doctoral degrees, when compared to other demographic segments.

Assumption: Gold buyers tend to be more conservative. Therefore, those who have spent above average on gold in the past 2 years will have more in-store purchases. Please prove or refute this statement using an appropriate statistical test.



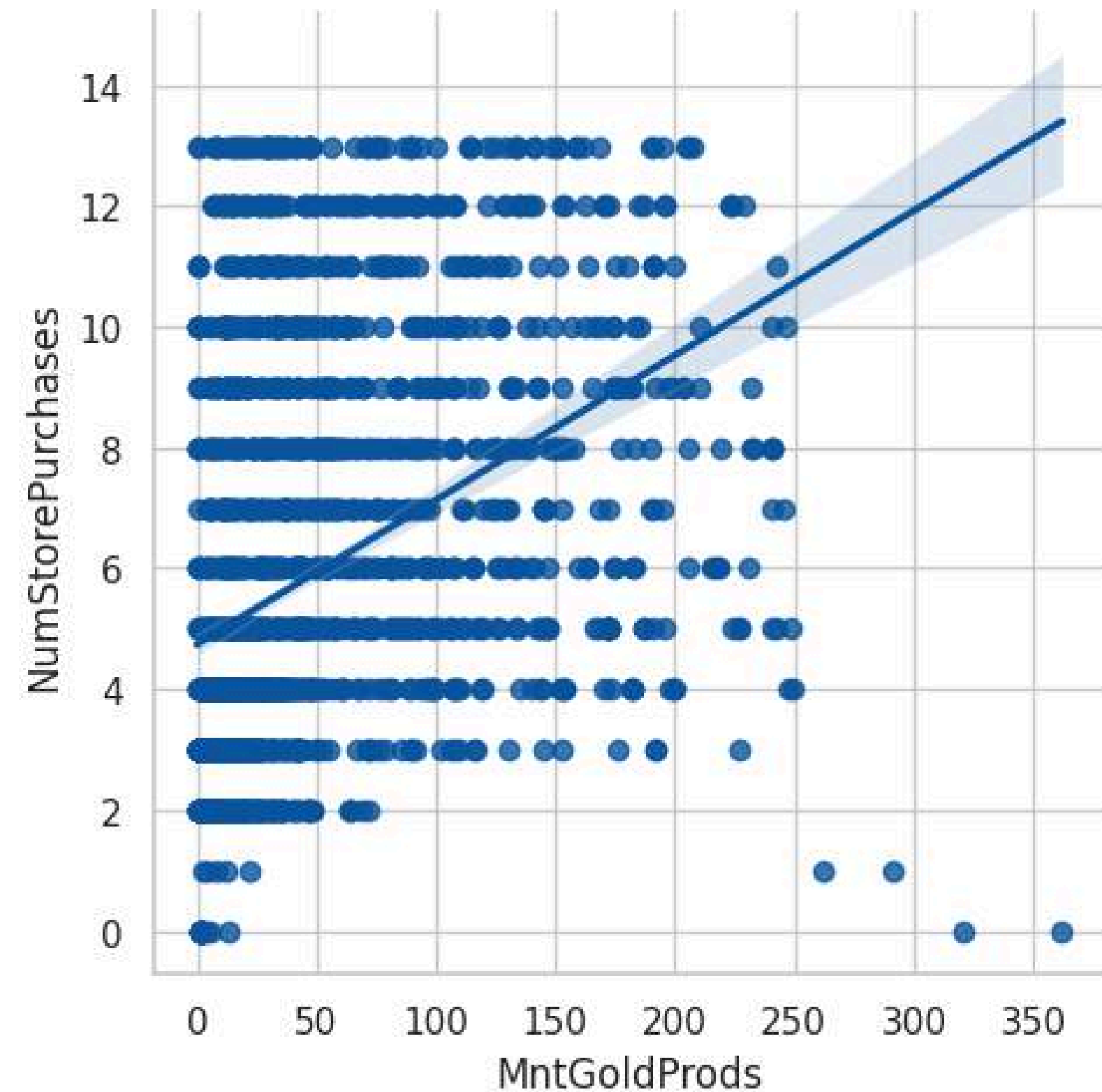
```
Kendall correlation (tau): 0.3927160395725131  
Kendall p-value: 3.55881817905435e-152
```

There exists a robust correlation between gold acquisitions and in-store shopping activity. This finding not only sheds light on consumer preferences but also unveils an intriguing insight into purchasing behavior.

- Beyond Bullion: While gold traditionally symbolizes wealth preservation and investment security, its allure transcends financial markets. The affinity for gold transcends into consumers' retail experiences, influencing their shopping behaviors.

Assumption: Gold buyers tend to be more conservative. Therefore, those who have spent above average on gold in the past 2 years will have more in-store purchases.

Please prove or refute this statement using an appropriate statistical test.



Kendall correlation (tau): 0.3927160395725131
Kendall p-value: 3.55881817905435e-152

The Psychology of Luxury: Gold, often synonymous with luxury and prestige, exerts a subtle yet profound influence on consumer decision-making. Our analysis suggests that individuals investing in gold demonstrate a propensity for premium shopping experiences, including in-store purchases.

Recommendation & Conclusion





- Tailored Marketing Strategies: Armed with the knowledge of this correlation, marketers can craft targeted campaigns that resonate with gold enthusiasts, leveraging their affinity for luxury goods to drive in-store foot traffic and sales.
- Enhanced Customer Engagement: By understanding the symbiotic relationship between gold acquisitions and in-store shopping, businesses can tailor their offerings and experiences to cater to the discerning tastes of this consumer segment, fostering deeper connections and loyalty.
- Implement educational campaigns highlighting the health benefits of omega-3 fatty acids found in fish. Tailor messaging to emphasize the importance of incorporating fish into a balanced diet for cognitive health and overall well-being.
- Current campaign performance is good





THANK YOU

