CUSTOMER
SEGMENTATION
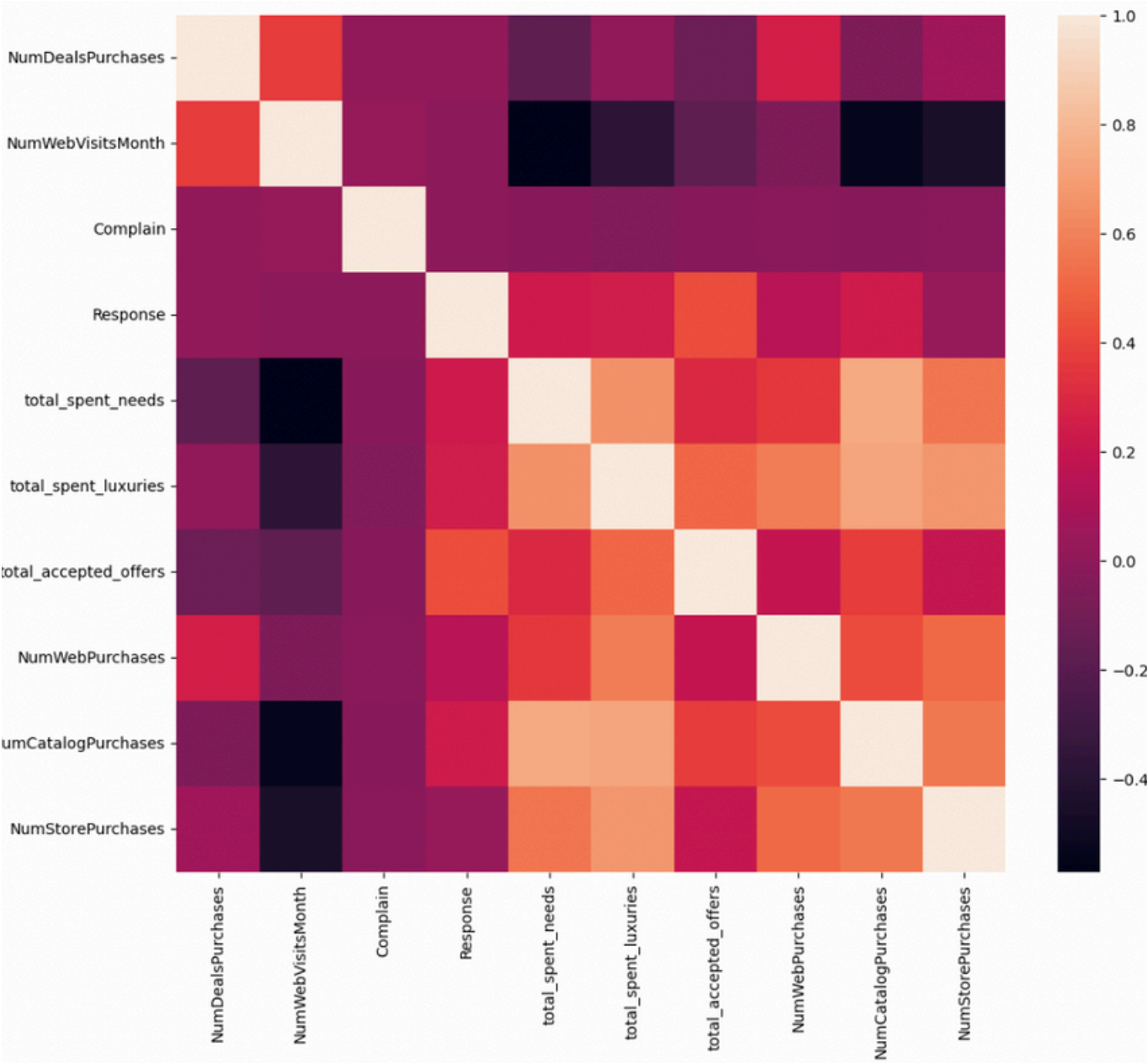
Problem

Definition

Our company has limited resources, how can we use them in the most efficient way possible?

The Ideas

Advertising to an entire consumer base is not feasible anymore, we need to better understand our customer so that we can better serve them.

How do we better understand our customers?

Customer segmentation through clustering

Who are our customers?

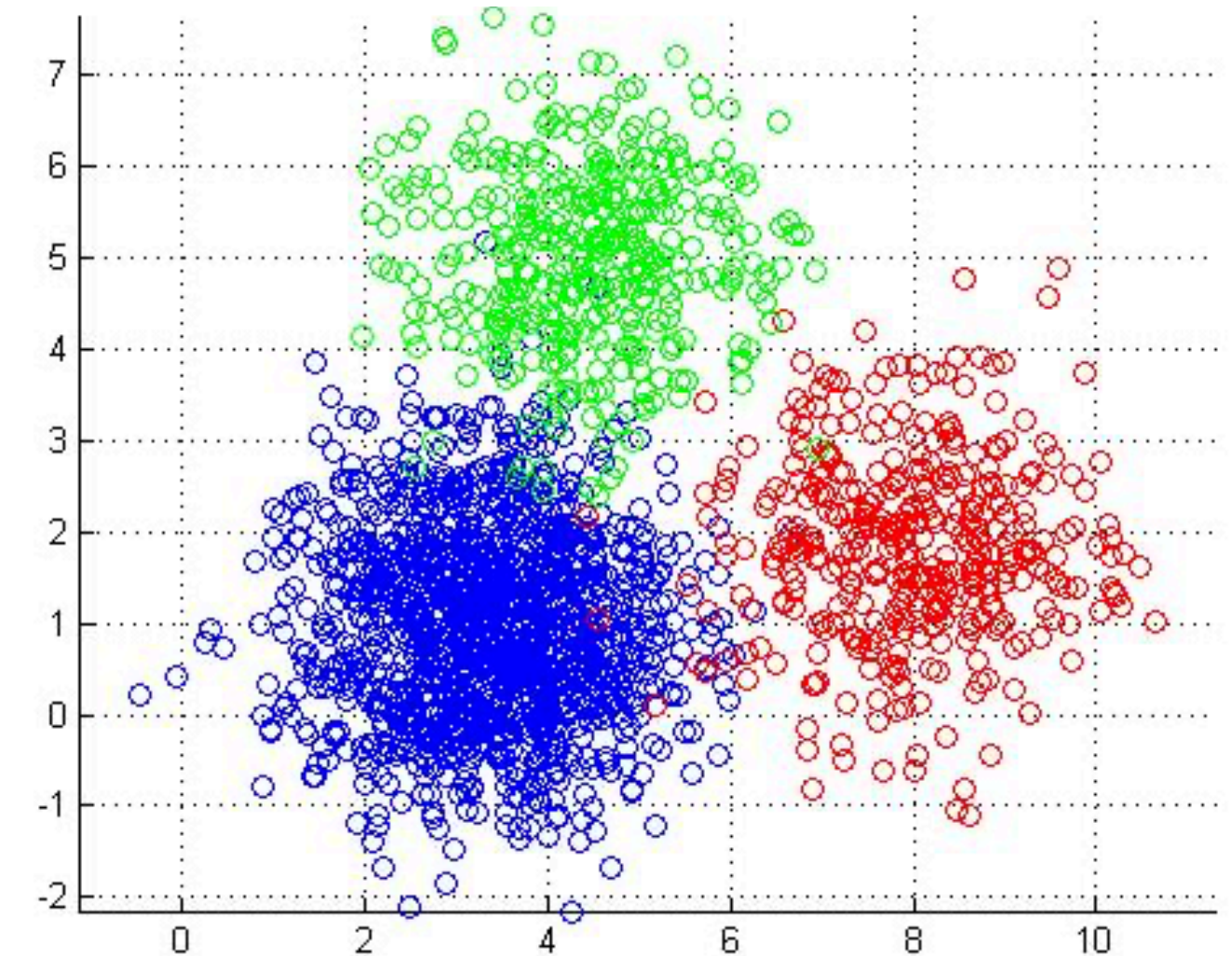Examine the data we have and what they can tell us

How are they similar?

Using clustering algorithms to segment the customers

Proposed
Model

Step 1

Perform EDA. Identify customer demographics, tendencies, and correlations

Step 2

Use PCA to determine the impactful variables

Step 3

Test different clustering algorithms to see which makes the best clusters

Step 4

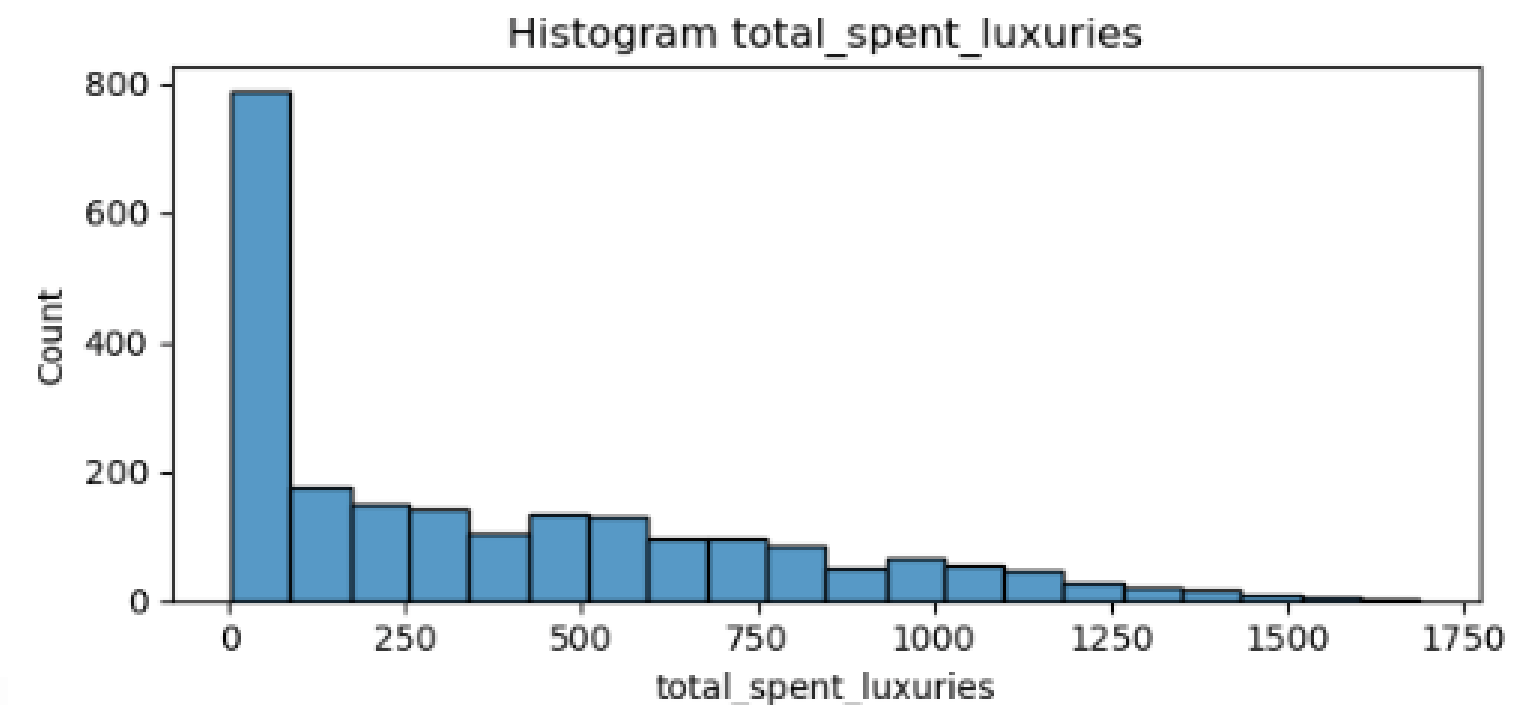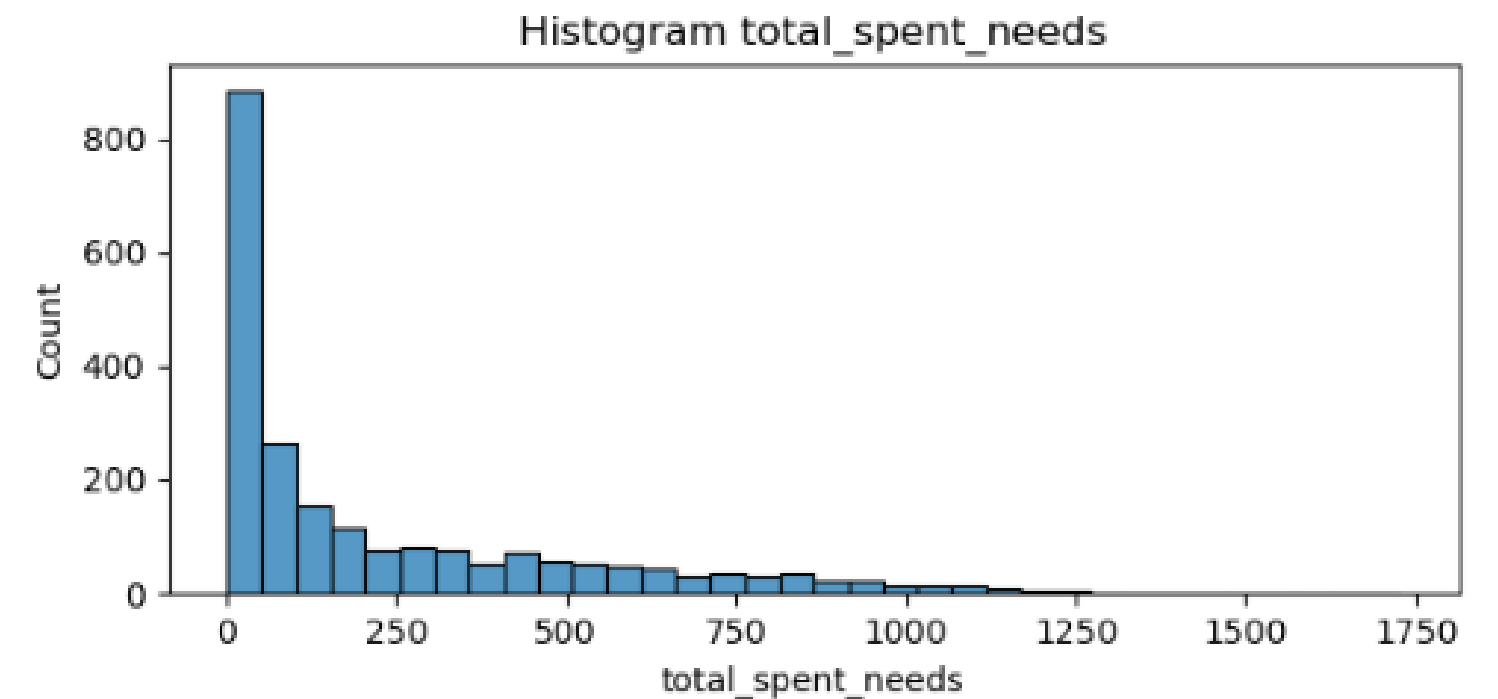Profile the clusters and make recommendations based off the profile

The Market

Key Findings & Insights

Our most important finding that was consistent in all the techniques we tested, is that there is a large group of similar customers who make very few purchases

There's potential in emphasizing higher priced products

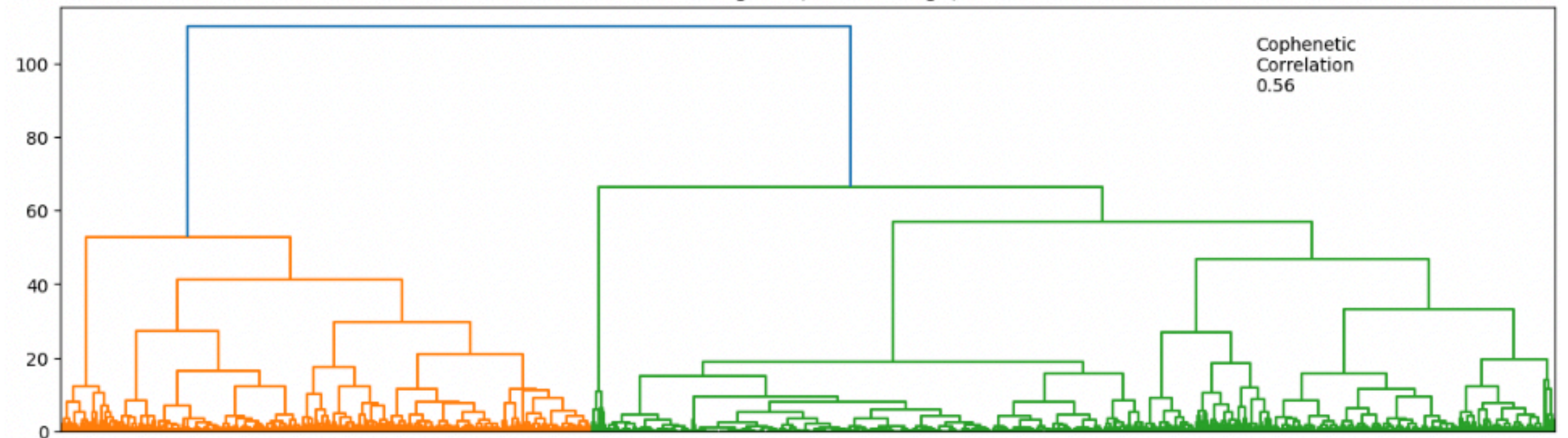Education and income need to be, unsurprisingly, essential in our marketing decisions

Histogram total_spent_needs

Histogram total_spent_luxuries

About The Plan

The Market

The Clusters
Analysis

We found that Hierarchical Clustering produced the most cogent clusters.

Cophenetic Correlation 0.56

Cluster 0

Large number of high income, educated adults with few or no children. Relatively high spending

Cluster 1

Middle class families with one or more children. They look to get the most bang for their buck.

Cluster 2

Single parents with high education.

Cluster 3

Largest cluster with very low purchasing power. Least education and lowest income.

Cluster 4

Highest spending cluster made up of high educated and our highest income customers with no children. These are our most receptive customers to marketing campaigns
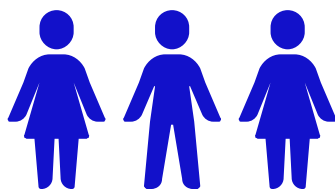
Cluster 5

Smallest cluster made up of the customers who have complained in the last 2 years.

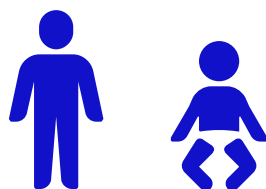# Recommendations
& Next Steps

Eliminate as much waste as possible and re-focus our use of resources on higher profit opportunities
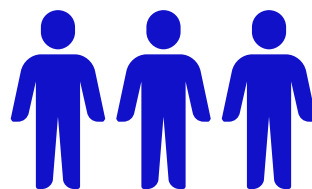
+100%

Grow Cluster 4

Invest in Instagram and Facebook ads that are able to target users that fit this cluster profile.

Encourage Loyalty in Cluster 3

They should feel appreciated and given ample reasons to keep coming back

Continue Testing

Presentations are typically speech meant to inform new idea.

+10%

Benefit Of
Our Proposal

We will be much more efficient with our resources. With our prior strategy our accepted campaign rate was roughly 9% because so many offers went to people who were never going to purchase anything in the first place

9% ⟶ **20%**

THANK YOU