Marketing Analysis
Customer Segmentation

Qingyuan Zheng

Contents

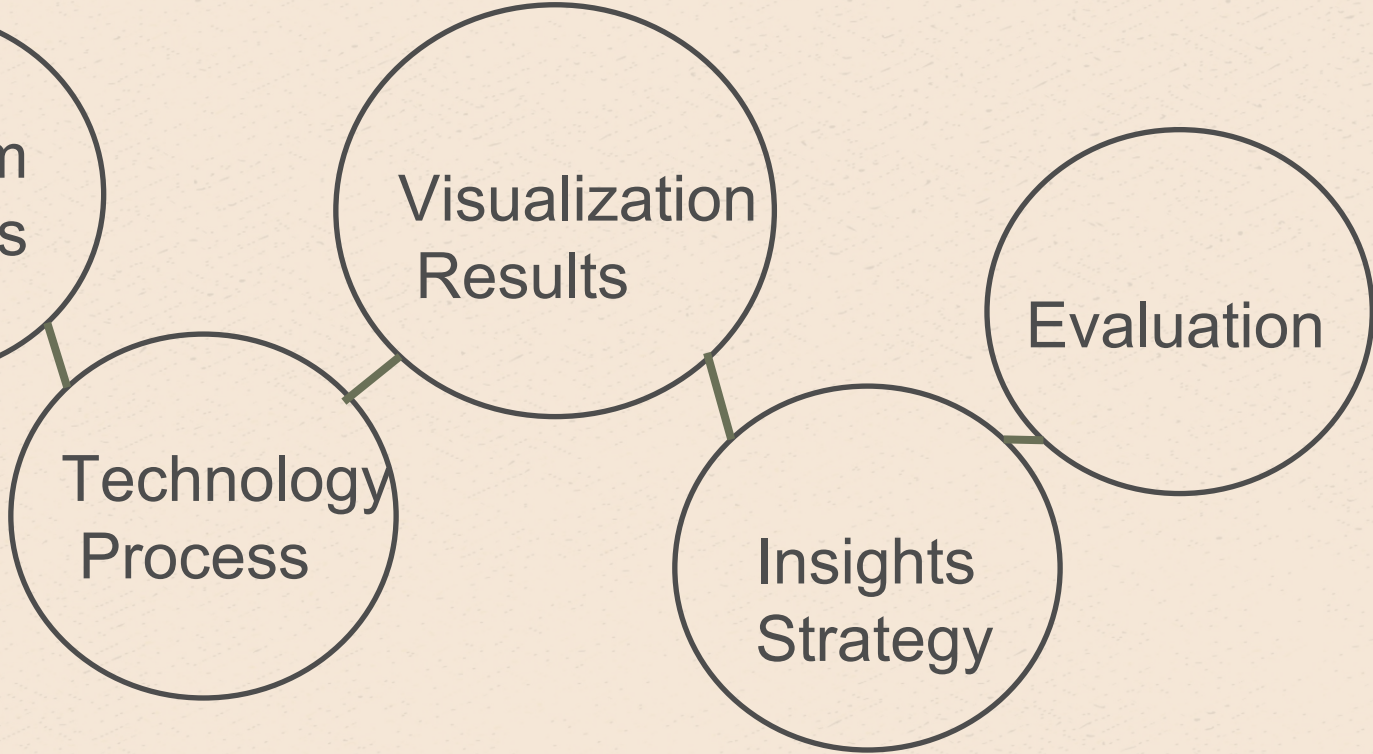Problem Analysis

Technology Process

Visualization Results

Insights Strategy

Evaluation

Problem

01	02	03
Context	Data Meanings	Purpose

Data Preparation

Dimensionality Reduction

T-SNE PCA

Clustering
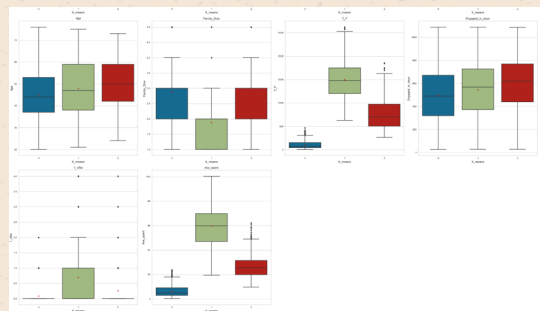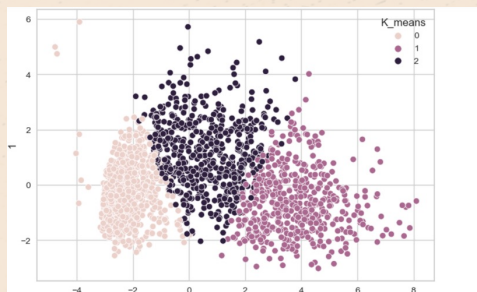
Technology Process

K-Means
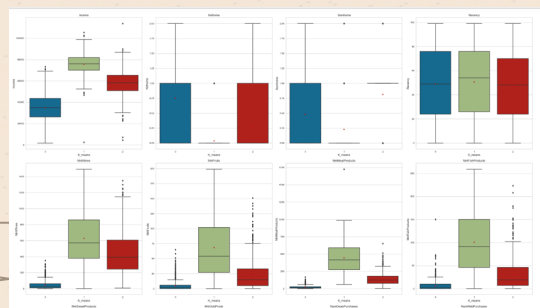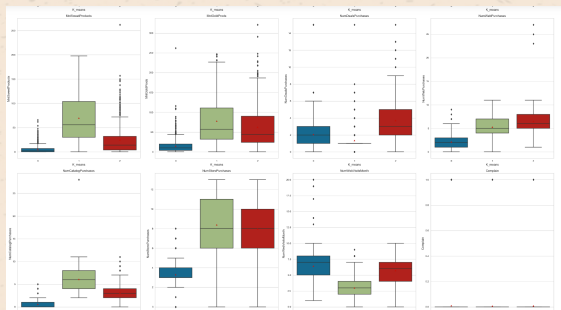
K-Medoids
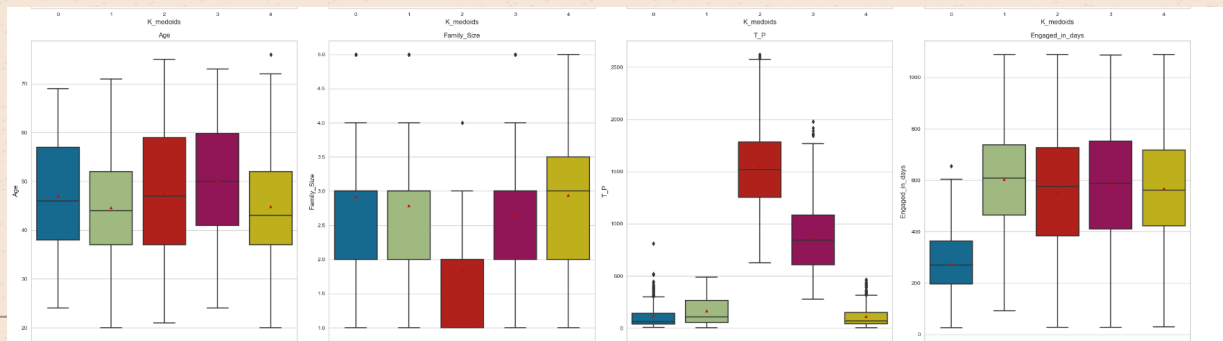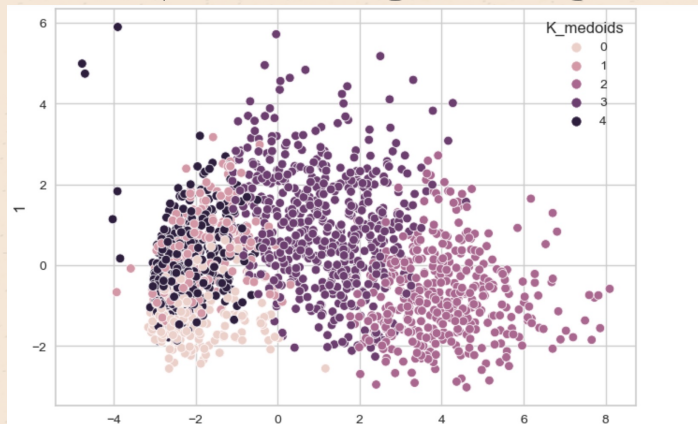
Hierarchical Clustering
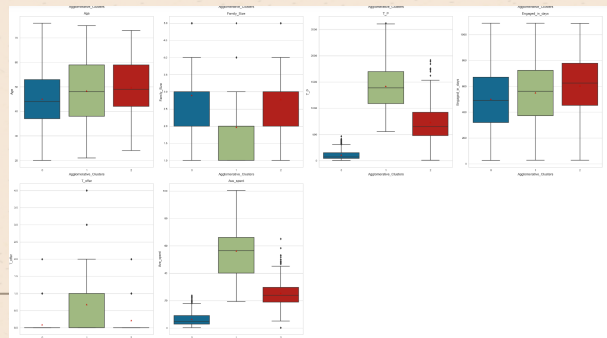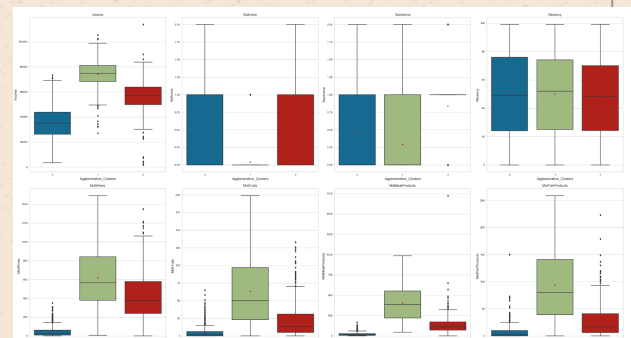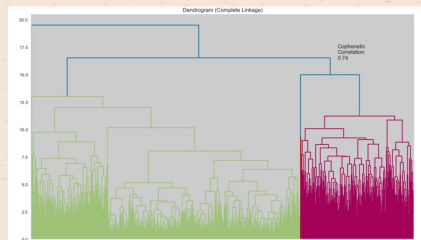
DBSCAN
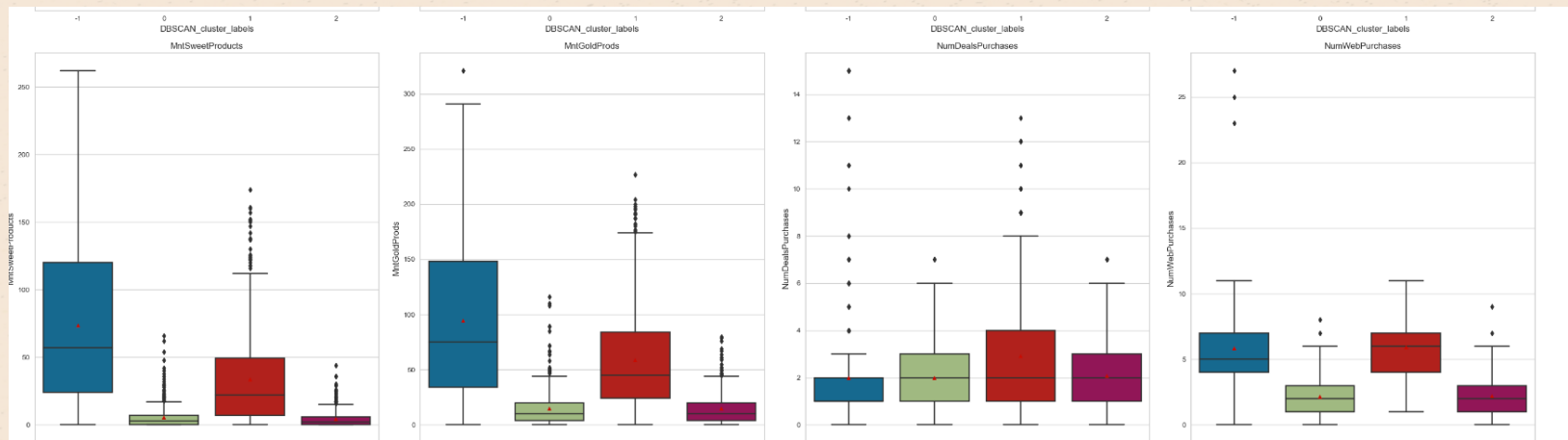
Gaussian Mixture Model
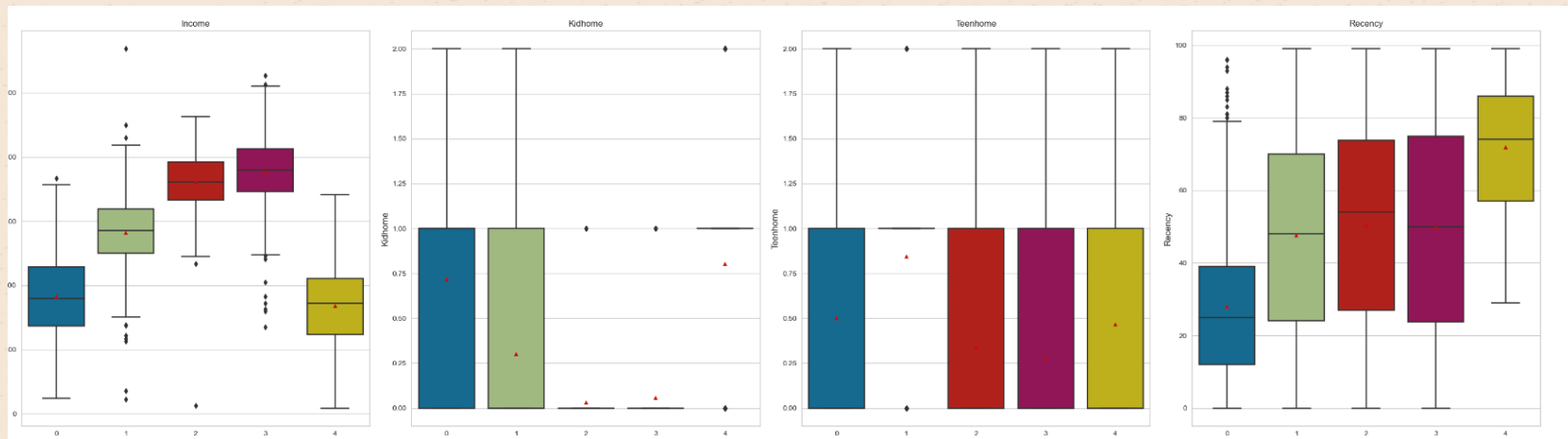
Finds & Insights

High Income   70000-80000

Firstly, their spent on fish, fruits, wine are more outstanding compared with other groups than meat and sweat and gold.

Secondly, almost in all models' results, the high income group conduct the most purchase in store while not very low in web.
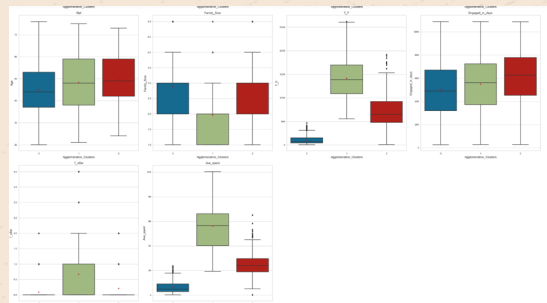
Thirdly, the high income group usually include the oldest part of people. Then, the high income group often appear in smaller family with less kids and teens, that is within 2 members .

Moreover, the high group's web visiting time usually are lower and they accept campaign more than others.

Finds & Insights

Middle Income   50000-60000+

Their consumption situation of wine and gold are most close to high income group. Other categories still have respectively large distance.

They buy products with discount also at most.

Their web purchase deeds amounts are similar to the low incoem group but the store shopping deeds are obviously higher than low income group.

Their recency is always the longest.

Finds & Insights

Low Income. 30000-40000+

Their consumption on meat are very low;

Their general spent, average, total, categories, are lowest;

Their offline consumption deeds are seriously lower than the others but online converts;

Low and middle income group both hold very tiny acceptance rate of the offer in campaign.

Solution and Strategy

Marketing Solution for **high income group:**

1.1 Therefore, if we want to increase the advertisement burget targeted at high income group, we should concentrate more on fish, fruits, wine for more obviouse effects.

1.2 The product supply and advertisement assignment should pay more attention to high income group's preferred categories and consumption preference. Considering about the oldest age group's hobbies and psychologies to cover their needs.

1.3. The products recommendation for high income group can be prone to the product more appropriate for small family winthin 2.

Solution and Strategy

Solution for **middle income group**:

2.1. Combine the middle income group into the high income group as the targeted group of wine and gold. Because the two groups' consumption ability are not very different in these two categories.

2.2 Recommend or apppear more discounts tips for middle income user on website.

2.3. Show more products related to middle and low groups and suitable for family size of 2-3 members on web rather than store.

Solution for **low income group:**

3.1. Optimize or design some particular campaign towards low and middle income group;

3.2. Provide more attractive products, discounts or campaign on web targeted at low income group.

What people say about me

Employer 1

"I have been impressed by the quality, attention to detail and creative approach brought to every project made"

Employer 2

"Projects and campaigns are always taken to another level with ideas that come from this person. Digital marketing and content creation experience is quite evident"

Employer 3

"This person has a strong technical understanding in order to develop successful strategies. Highly recommended for any kind of project or task"

Employer 4

"Content creation is top-notch, with engaging yet professional writing style tailored to different audiences while keeping a steady brand message"

How did I achieve success?

Benefits

1.1, 1.2: Increase advertisement efficiency and effects

1.3: increase sales volume help consumer find right things easily.

2.1: Avoid advertisement and marketing campaigns need to be personalized for too many groups so that save cost.

2.2,2.3: increase sales volume help consumer find right things easily.

3.1: increase marketing campaign effects;

3.2: increase sales volume help consumer find right things easily.

Cost

- marketing and advertisement redesign and increasing cost;

- supply line, store and web store's products reassign and management cost.

Risk

This kind of strategy improvements towards subdivided groups may not cause obvious effects on revenue but increase cost at the same time.

Our consumer group's situation are not stable, the clustering distribution may change in short term but we cannot follow it all the time so we cannot ensure our strategy is always right.

Thanks!

Do you have any questions?