

Customer Experience Explore Analysis

Office Supply Company

Cynthia Chou



Photo by Jo Szczepanska on [Unsplash](#)

Introduction

To understand how to better serve our consumers, we will explore three current business challenges by using four different statistical analysis on 18 variables and fabricated data through SPSS, then provide insights and the recommendations to make consumer experience better.

Three Business Challenges

- How consumers perceive our company compared to other 4 competitors?
- What is the key factor to influence consumer's attitude?
- Who is our targeted segment?

Three Important Concepts

- Brand positionings: the impressions of the our company leave on consumers' mind.
- Consumer's attitude: a composite of personal's beliefs, feelings, and behavioral intentions toward our company, such as loyalty.
- Targeted segment: the consumers who prefer our company to others or even loyal to our company.

Four Statistical Analysis

- **How consumers perceive our company compared to other 4 competitors?**
 - Correspondence Analysis: identify the association between certain brand positioning and our company or competitors.
- **What is the key factor to influence consumer's attitude?**
 - Linear Regression: identify what attribute is the influential factor to affect consumer's attitude.
- **Who is our targeted segment?**
 - One-Way ANOVA: compare mean score of each attribute to conduct consumer profiling.
 - Crosstabs: calculate the number of times that a particular combination of attribute and loyalty group occurred, then determine the characteristics of the loyalty group.

Data used in the analysis is collected from online survey

Data Type	Attribute	Description
Interval Data (1-7 agreement scale)	Products	has the products I want
	Brand	has a wide variety of brands
	Unique	has products I can't get at other stores
	Price	has competitive pricing
	Park	has ample parking
	Shopeasy	makes shopping easy
	Checkout	makes checking out easy
	Delivery	has good delivery service
	Coupons	offers store coupons
	Recommendation	I will recommend the office supply company to my friends
	Purchaseintent	I will purchase items from the office supply company in the future
	Preference	I prefer the office supply company to others
	Loyalty	I am loyal to the office supply company
Interval Data	Age	respondent's age
	Spend	amount respondent spent on office supplies per month
Ordinal Data	Loyaltygroup	1-2.99 scale of "Loyalty" represents not loyalty (category 1) 3-5.99 scale of "Loyalty" represents loyalty (category 2) 6-7 scale of "Loyalty" represents most loyalty (category 3)
Nominal Data	Gender	respondent's gender
	State	state where respondent lives in

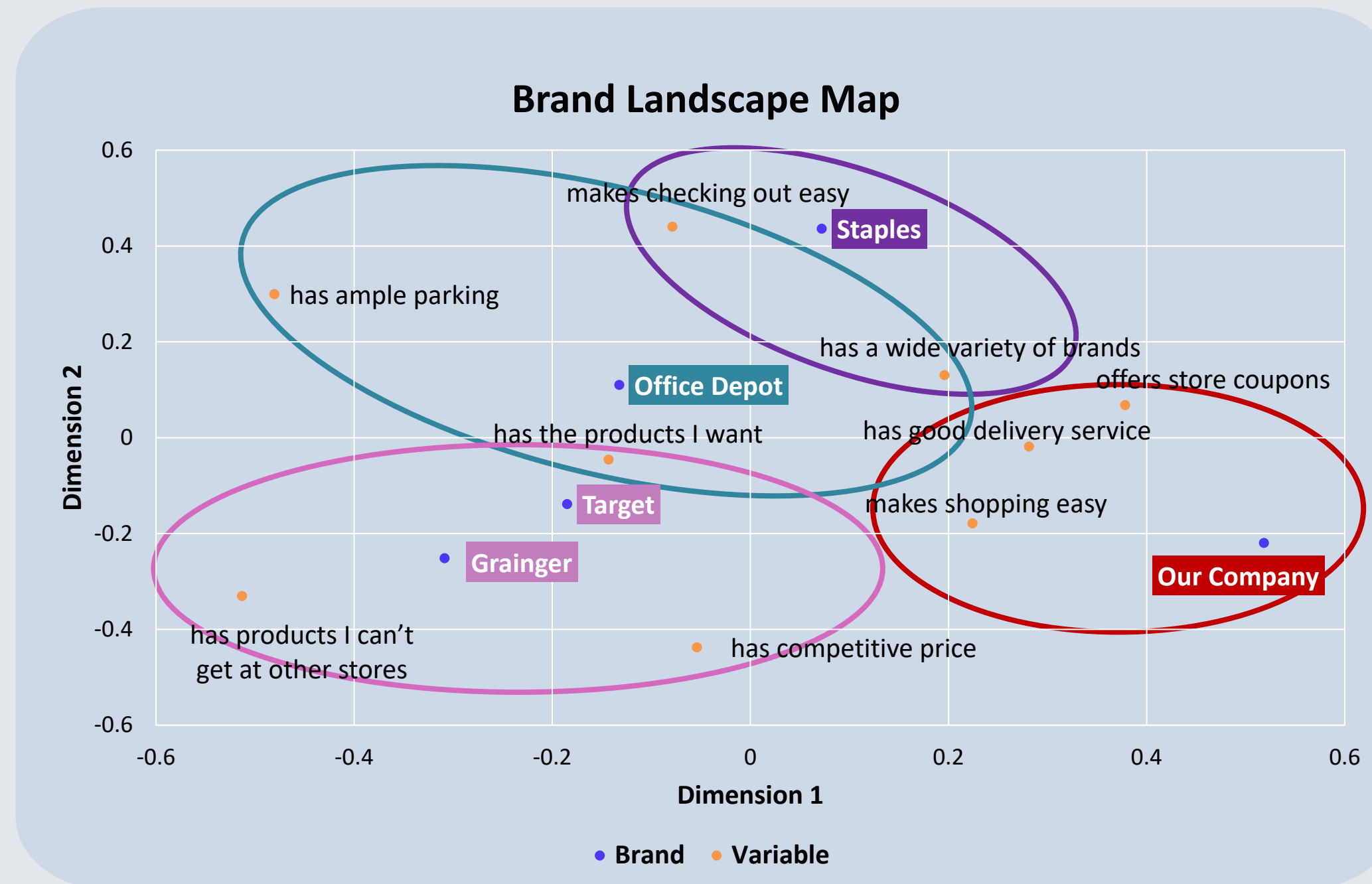
FIRST : Brand

How consumers perceive our company compared to other 4 competitors?



Photo by [Jason Goodman](#) on [Unsplash](#)

Comparison of Brand Positionings between Our Brand and Competitors



We use T2B scores of 9 company positionings across brands to run correspondence analysis, then create the map. We calculate distance between positioning and brand to identify brand positioning associated with our company or competitors. In the map, we choose the points with distance smaller than 0.4 to be the same group.

Summary of Brand Positionings

Positionings/Brand	Our Company	Office Depot	Staples	Grainger	Target
has the products I want		✓		✓	✓
has a wide variety of brands		✓	✓		
has products I can't get at other stores				✓	✓
has competitive pricing				✓	✓
has ample parking		✓			
makes shopping easy	✓				
makes checking out easy		✓	✓		
has good delivery service	✓				
offers store coupons	✓				

- The table indicates that our top competitor will be **Office Depot**. Office Depot not only holds the most positionings, it also owns some positionings we don't have. For consumers, they believe that Office Depot has **the products they want, a wide variety of brands, ample parking space and easy checking out**.
- The aspects marked yellow are the potential factors we need to focus on to improve consumer experience.

SECOND : Performance

What is the key factor to influence consumer's attitude?



Photo by [Marten Bjork](#) on [Unsplash](#)

Performance of Linear Regression Models

We use 4 consumer's attitude scores ("Recommendation", "Purchaseintent", "Preference", "Loyalty") as outcome and 9 company positioning scores ("Product", "Brand", "Unique", "Price", "Park", "Shopeasy", "Checkout", "Delivery", "Coupons") as predictors in the Linear Regression. By running Linear Regression four times separately, we can identify if certain predictor scores increases, the consumer's attitude scores increase as well. Therefore, this predictor could be key factor to drive certain consumer's attitude.

Linear Regression Results:

Outcome	R-square	Significance
Recommendation	73.4%	<0.001
Purchaseintent	61.1%	<0.001
Preference	66.7%	<0.001
Loyalty	76.9%	<0.001

Model Analysis:

- Overall, four models are well fitting with over 60% of variance in outcomes interpreted by the 9 predictors.
- All models are able to provide relevant explanatory power because significance are smaller than 0.05.

Summary: These four models can describe which brand positioning will be key driver to influence consumer's preference, purchase intent, willingness of recommendation and loyalty.

The Influential Factors of Each Consumer's Attitude

Attribute	Recommendation	Purchase Intent	Preference	Loyalty
has competitive pricing	0.944	0.825	0.907	0.992
has ample parking	0.187	0.155	0.167	0.189
has products I can't get at other stores	N/A	0.127	N/A	N/A
has the products I want	0.115	N/A	N/A	N/A

The table demonstrates the standardized coefficients of all significant attributes (p-value smaller than 0.05) across 4 outcomes, excluding the attributes with p-value larger than 0.05. We can utilize the table to identify which attribute could be key driver for 4 outcomes and it will be our top priority.

- Across four consumer's attitude, both **“has competitive pricing”** and **“has ample parking”** are the top 2 significant aspects to affect consumers' preference, purchase intent, willingness of recommendation and loyalty.
- As for “has products I can't get at other stores”, it is the key factor for consumers to recommend our company to others when they can buy the products only at our company.
- In terms of “has the products I want”, it is the indicator that whether our company can meet consumers' need will affect the likelihood of their purchase at our company in the future.

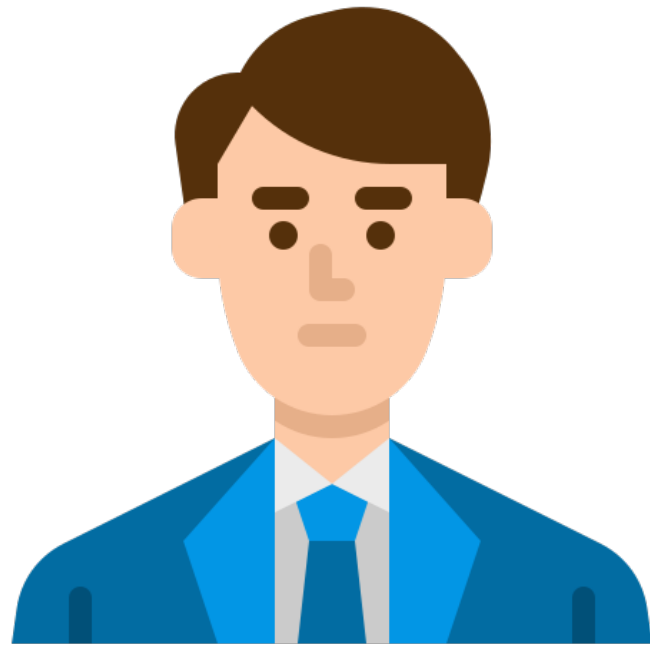
THIRD : Consumers

Who is our targeted segment?



Photo by [Dylan Gillis](#) on [Unsplash](#)

By calculating the frequency of subgroups from Gender, Age, Spend and State, we choose the subgroup with highest frequency for each aspect to profile our targeted segment.



Our Targeted Segment

WHO: 25 to 34 aged man

WHERE: Connecticut and Massachusetts

HOW MUCH: spent \$25 to \$74 on office supplies per month

Based on “Loyaltygroup”, our targeted segment will be **the group most loyal to our company**, who hold 6-7 scale of “Loyalty” score. Targeted segment accounts for 44% of total number of customers.

By comparing mean scores of 9 company positionings across 3 loyalty groups through ANOVA analysis, most loyal consumers are satisfied with aspects below:



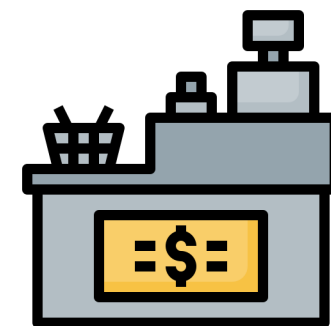
Our Products



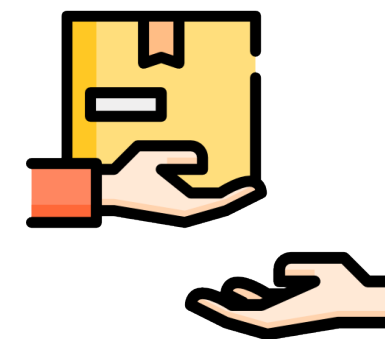
Wide Variety
of Brands



Easy Shopping



Easy Check Out



Delivery



Competitive Price

The result also indicates that each group is not satisfied with **product differentiation** and **ample parking lots**, but all of them have high scores on **effectiveness of coupons**.

Insights and Recommendations

Brand Positionings

Overall, our company is the brand with:



Store Coupons Offer



Easy Shopping



Good Delivery Service

Key Driver of Consumer's Attitude

For consumers, these factors are influential:



Competitive Price



Ample Parking



Product Differentiation



Has Product Consumers want

Recommendation

After analyzing our brand positionings and influential factors for consumer's attitude, we suggest company to focus on aspects below:

- Products: **conduct monthly survey** to ensure consumers are satisfied with our products and identify which type of products we can add to current categories to differentiate our products with other competitors.
- Parking lots: **collaborate with nearby parking** lots to expand current parking space.
- Price: **provide seasonal discount**, not limited to the holidays such as Black Friday or Christmas.

Targeted Segment

We care about how to retain and acquire most loyal consumers. We suggest company to develop loyalty program for our targeted segment on aspects below:

- Products: grant **early access to special deals** or create **an exclusive collection of office supplies** with competitive price.
- Shopping Experience: create **additional check out counters** to decrease consumers' waiting time.
- Customer Service: launch **24/7 free shipping** along with customized options.
- Price: provide **higher rewarding or discounts** on products.