Building Customer Loyalty:
Lucky Lab vs. Starbucks

Our team

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Introduction

Lucky Lab’s historical development
+ present day opportunities

Lucky Lab's Growth

Coffee Truck

Founded as a mobile food truck, ideated in Hawaii & built in South Carolina.

2015

Flagship

Moved its headquarters in order "to offer Austinites the best coffee experience in the country."

2017

UT Campus

Signed on with UT Austin to establish 2 on campus locations to reach the student population.

2022

Motivation

As UT students ourselves, we noticed the growing presence of Lucky Lab on campus.

How aware are UT students of Lucky Lab's brand?

How Lucky Lab differentiates itself in this saturated market?

What can Lucky Lab do to increase customer loyalty with their new on-campus locations?

Competitor Analysis

	Locations on Campus	Market Presence	Product Offering	Reward Program
LUCKY LAB COFFEE CO. AUSTIN, TX • EST. 2013	2	Localized presence Strong community connection	Specialty drinks and pastries Pet-friendly offerings	"Lucky Club" Profit shares
STARBUCKS COFFEE	4	Extensive global presence High brand awareness and visibility	Wide range of beverages, snacks, and merchandise Emphasis on consistency and standardization across locations	"Starbucks Rewards"

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Research Question

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Research Question

"How can Lucky Lab Coffee Co. **optimize pricing, order personalization, and promotion strategies** to better compete with Starbucks and **enhance customer loyalty and satisfaction?**"

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Methodology

Conjoint Analysis

Brand

Brand of coffee shop

- Lucky Lab
- Starbucks

Price

Price of the order

- $4
- $5
- $7

Order

Type of the order

- Go-to
- Surprise (seasonal)

Promotion

Coffee shop's promotion

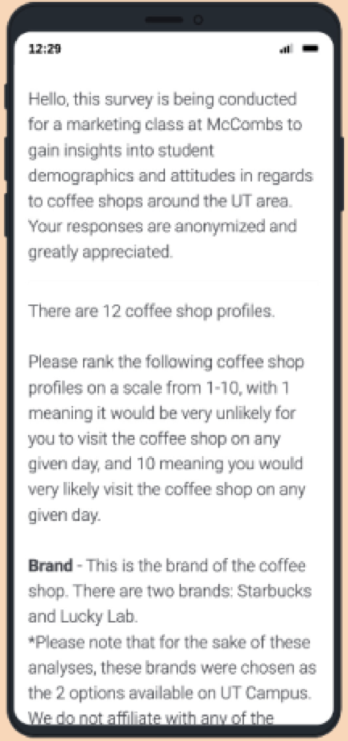
- Punch card
- BOGOF
- Refill for half price

Conjoint Analysis

2 x 2 x 3 x 3 = **36** total possible profiles.
Utilizing the fractional factorial design, we simplified it down to 12 key profiles, which we then imported and made into a Qualtrics survey.

Profile	Brand	Order	Price	Promotion
	2 Levels	2 Levels	3 Levels	3 Levels
1	Lucky Lab	Go-to	4	Refill for Half the Price
2	Lucky Lab	Surprise	5	Buy One Get One Free
3	Starbucks	Go-to	7	Buy One Get One Free
4	Lucky Lab	Go-to	7	Refill for Half the Price
5	Lucky Lab	Surprise	4	Punch Card
6	Starbucks	Surprise	4	Buy One Get One Free
7	Starbucks	Surprise	7	Refill for Half the Price
8	Starbucks	Go-to	5	Punch Card
9	Starbucks	Go-to	4	Punch Card
10	Lucky Lab	Go-to	5	Buy One Get One Free
11	Lucky Lab	Surprise	7	Punch Card
12	Starbucks	Surprise	5	Refill for Half the Price

Surveying Students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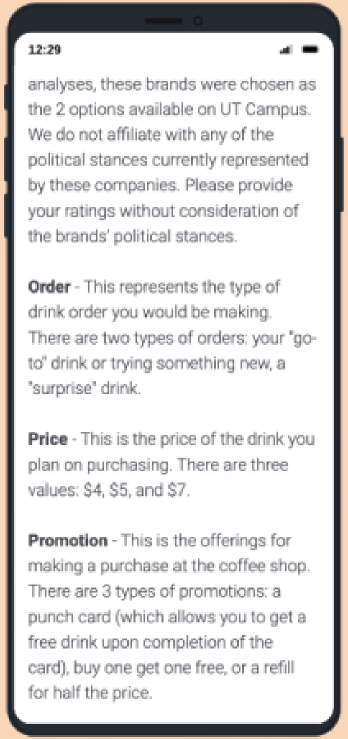
Hello, this survey is being conducted for a marketing class at McCombs to gain insights into student demographics and attitudes in regards to coffee shops around the UT area. Your responses are anonymized and greatly appreciated.

There are 12 coffee shop profiles.

Please rank the following coffee shop profiles on a scale from 1-10, with 1 meaning it would be very unlikely for you to visit the coffee shop on any given day, and 10 meaning you would very likely visit the coffee shop on any given day.

Brand - This is the brand of the coffee shop. There are two brands: Starbucks and Lucky Lab.
*Please note that for the sake of these analyses, these brands were chosen as the 2 options available on UT Campus. We do not affiliate with any of the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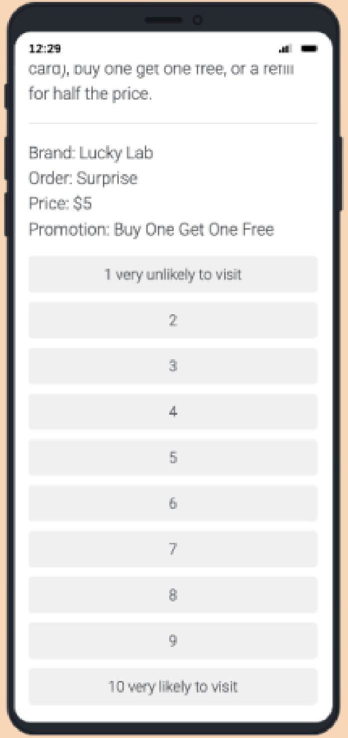
analyses, these brands were chosen as the 2 options available on UT Campus. We do not affiliate with any of the political stances currently represented by these companies. Please provide your ratings without consideration of the brands' political stances.

Order - This represents the type of drink order you would be making. There are two types of orders: your "go-to" drink or trying something new, a "surprise" drink.

Price - This is the price of the drink you plan on purchasing. There are three values: $4, $5, and $7.

Promotion - This is the offerings for making a purchase at the coffee shop. There are 3 types of promotions: a punch card (which allows you to get a free drink upon completion of the card), buy one get one free, or a refill for half the price.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card), buy one get one free, or a refill for half the price.

Brand: Lucky Lab
Order: Surprise
Price: $5
Promotion: Buy One Get One Free

1 very unlikely to visit
2
3
4
5
6
7
8
9
10 very likely to visit

Data Collection

Our Effort to Reduce Bias

- Used a scale to mitigate default effect
- Randomized profile order in survey
- Asked respondents to rate profiles without consideration of the brands' current political stance

Distribution Method

- Administered survey to students from distinct student organizations
- A total of 8 respondents

Persisting Limitations

- Social desirability effect
- Unrepresentative sample
- Limitations of Conjoint Analysis

Respondent Statistics

Gender		Classification		Housing		Area	
Female	7	Junior	3	On-campus	2	West Campus	8
Male	1	Senior	5	Off-campus	6		

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Analysis

Organization of Data into Python to Automate Conjoint Analysis

	Starbucks	Surprise	5 Dollars	7 Dollars	BOGOF	Refill for Half	Customer 1 Rating	Customer 2 Rating	Customer 3 Rating	Customer 4 Rating	Customer 5 Rating	Customer 6 Rating	Customer 7 Rating	Customer 8 Rating
1	0	0	0	0	0	1	5	3	7	4	3	7	6	5
2	0	1	1	0	1	0	6	3	6	3	5	5	7	6
3	1	0	0	1	1	0	5	6	4	9	8	3	6	1
4	0	0	0	1	0	1	2	4	3	3	6	2	4	1
5	0	1	0	0	0	0	5	3	9	3	8	3	4	5
6	1	1	0	0	1	0	6	9	9	8	8	9	5	7
7	1	1	0	1	0	1	3	5	3	3	3	2	3	1
8	1	0	1	0	0	0	6	7	7	3	4	5	7	5
9	1	0	0	0	0	0	8	6	8	5	4	3	8	5
10	0	0	1	0	1	0	7	3	7	7	3	5	7	8
11	0	1	0	1	0	0	2	3	3	3	7	2	4	1
12	1	1	1	0	0	1	4	7	8	4	1	6	4	5

Long Term Goal: Significantly reduce time required to perform conjoint analysis when we want to include many more respondents with minimal user-required modifications!

Three Steps for All Respondents

1. Fit an ordinary least squares (OLS) linear regression and obtain the independent variable coefficients to be used as the part-worths.
2. Calculate Feature Importances (Ranges).
3. Calculate the Relative Importances.

```python
# Run regression for each customer and get coefficients
models = {}
part_worths = {}
attribute_ranges = {}
relative_importances = {}

for i in range(1, 9): # Replace with the actual number of customers
    y = df[f'Customer {i} Rating']
    X = df.drop(columns=[f'Customer {j} Rating' for j in range(1, 9)]) # Replace with the actual number
    X = sm.add_constant(X)

    model = sm.OLS(y, X).fit()
    models[f'Customer_{i}'] = model

    # Store coefficients (part-worths) and initialize baselines to 0
    part_worths[f'Customer_{i}'] = model.params.drop('const').to_dict()
    for baseline in baselines.values():
        # Set baseline part-worths to 0 if not already present
        part_worths[f'Customer_{i}'].setdefault(baseline, 0)

# Calculate ranges for each attribute and store in attribute_ranges
for customer in part_worths:
    attribute_ranges[customer] = {}
    total_range = 0  # Initialize total range sum for the customer

    for attribute, levels in attribute_mapping.items():
        # Get part-worths for all levels of this attribute, including the baseline
        level_part_worths = [part_worths[customer].get(level, 0) for level in levels]
        level_part_worths.append(0)  # Add the baseline to the level_part_worths
        # Calculate the range
        attribute_range = max(level_part_worths) - min(level_part_worths)
        attribute_ranges[customer][attribute] = attribute_range
        total_range += attribute_range  # Add to total range

    # Calculate relative importance for each attribute
    relative_importances[customer] = {attribute: (range_val / total_range) * 100
                                      for attribute, range_val in attribute_ranges[customer].items()}
```

User-Defined Attributes and Baselines

```python
# Define a structure that maps each independent variable to its attribute
attribute_mapping = {
    'Brand': ['Starbucks'],
    'Order': ['Surprise'],
    'Price': ['5 Dollars','7 Dollars'],
    'Promotion': ['BOGOF','Refill for Half']
}

# Define the baselines for each attribute
baselines = {
    'Brand': 'Lucky Lab',
    'Order': 'Go-to',
    'Price': '4 Dollars',
    'Promotion': 'Punch card'
}
```

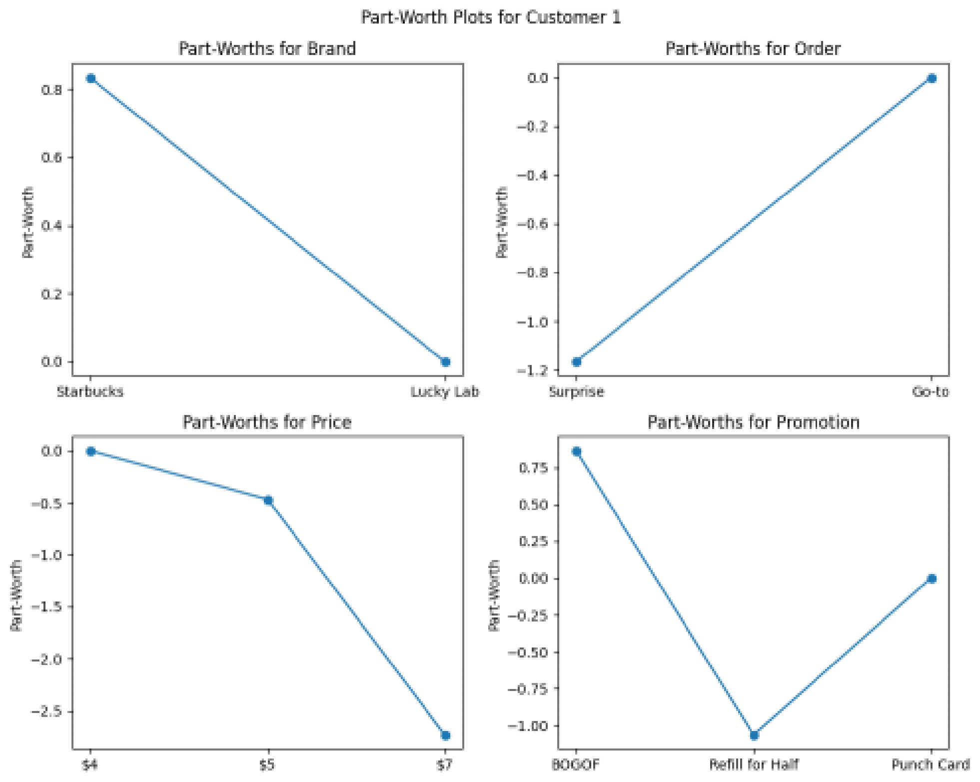
This gives the structure necessary in order to automatically calculate feature and relative importances! The only other setting that needs to be changed is the number of respondents to be analyzed!

Sample Output for Respondent 1

```
Part-Worths for Customer 1
--------------------------
Starbucks            : 0.83
Surprise             : -1.17
5 Dollars            : -0.47
7 Dollars            : -2.73
BOGOF                : 0.87
Refill for Half      : -1.07
Lucky Lab            : 0
Go-to                : 0
4 Dollars            : 0
Punch card           : 0

Attribute Ranges for Customer 1
-------------------------------
Brand                : 0.83
Order                : 1.17
Price                : 2.73
Promotion            : 1.93

Relative Importances for Customer 1
-----------------------------------
Brand                : 12.5
Order                : 17.5
Price                : 41.0
Promotion            : 29.0
```



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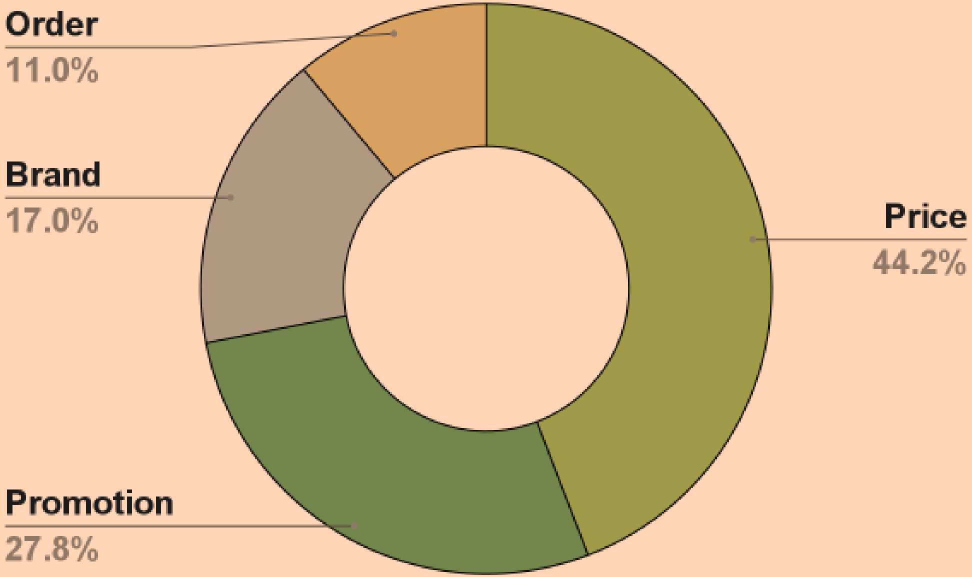
Results

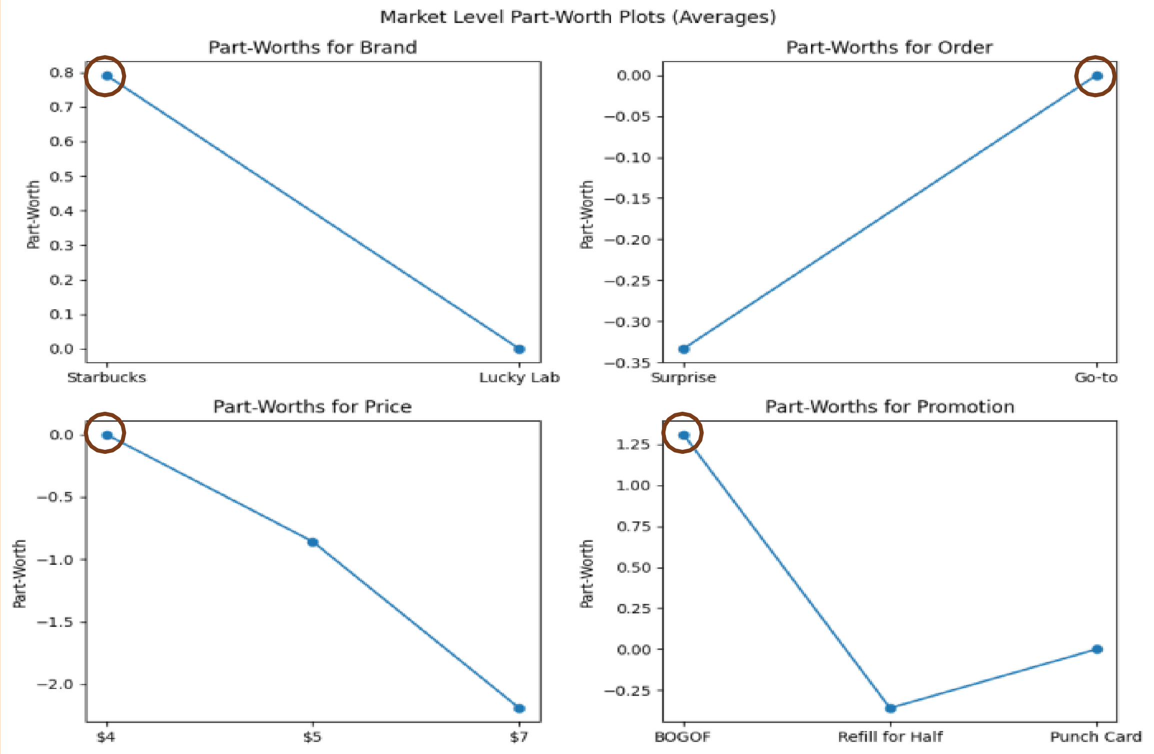
Market Level - Relative Importance

Importance Ranked:

1. Pricing strategies
2. Substantial promotions
3. Brand
4. Ordering type



What is the market level ideal profile?



= ideal profile

Ideal profile

Level	Part-worth
Starbucks	0.792
Lucky Lab	0
Surprise	-0.333
Go-to	0
$4	0
$5	-0.858
$7	-2.192
Buy One Get One Free	1.308
Refill for Half the Price	-0.358
Punch Card	0

Ideal profile

Brand: Starbucks

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Market Level - Price Per Util

Customer	Price per Util ($)
Customer 1	-1.51
Customer 2	-3.75
Customer 3	-0.67
Customer 4	0.58
Customer 5	0.09
Customer 6	-0.93
Customer 7	0.62
Customer 8	3.54
Market Level - Average	-0.25

Market Level - Price Per Util

Customer 1: would be willing to pay $1.51 more for each additional util

Customer	Price per Util ($)
Customer 1	-1.51
Customer 2	-3.75
Customer 3	-0.67
Customer 4	0.58
Customer 5	0.09
Customer 6	-0.93
Customer 7	0.62
Customer 8	3.54
Market Level - Average	-0.25

Market Level - Price Per Util

Customer	Price per Util ($)
Customer 1	-1.51
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Customer 3	-0.67
Customer 4	0.58
Customer 5	0.09
Customer 6	-0.93
Customer 7	0.62
Customer 8	3.54
Market Level - Average	-0.25

Customer 4: would need to be paid $0.58 for each additional util

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Recommendations

Key Insights

"How can Lucky Lab Coffee Co. better compete with Starbucks and enhance customer loyalty and satisfaction?"

1. Students are not going to on-campus cafes for an "experience" and are instead going on a typical coffee-runs for functional purposes.
2. Students are price-conscious and comparing these pricing across cafes are vital in choosing their brand of choice.
3. Students prefer instantaneous gratification over long-term promotional options when it comes to rewards programs.

Recommendations

Market Level Relative Importance	44.2%	27.8%	11%
Attribute	Price	Promotion	Order
Ideal Profile	$4	BOGOF	Go-To
Strategy	Decreasing price discrepancy for sizes Offer milk substitutes for little/no additional cost	Introduce more frequent BOGOF deals (during holidays or peak study times) either as a standalone deal or through student org collabs	Rebrand menu to highlight year-long classics in addition to seasonal drinks

Conclusion

1 Our goal was to optimize pricing, order, and promotional strategies to help Lucky Lab increase its customer loyalty at UT.

2 We designed and performed a conjoint analysis, surveyed 8 current UT students, and found key insights regarding our attributes.

3 Based on our analysis of students’ preferences, we devised strategic recommendations for Lucky Lab to implement.

Thank you!

Any Questions?