



HOW TO FIND THE RIGHT PROMOTIONAL DEALS FOR



STARBUCKS CUSTOMERS

A CASE STUDY PRESENTED BY:
DATA DRILLERS



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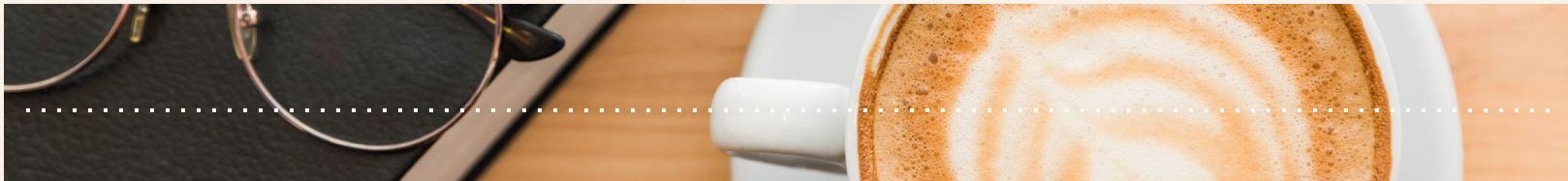
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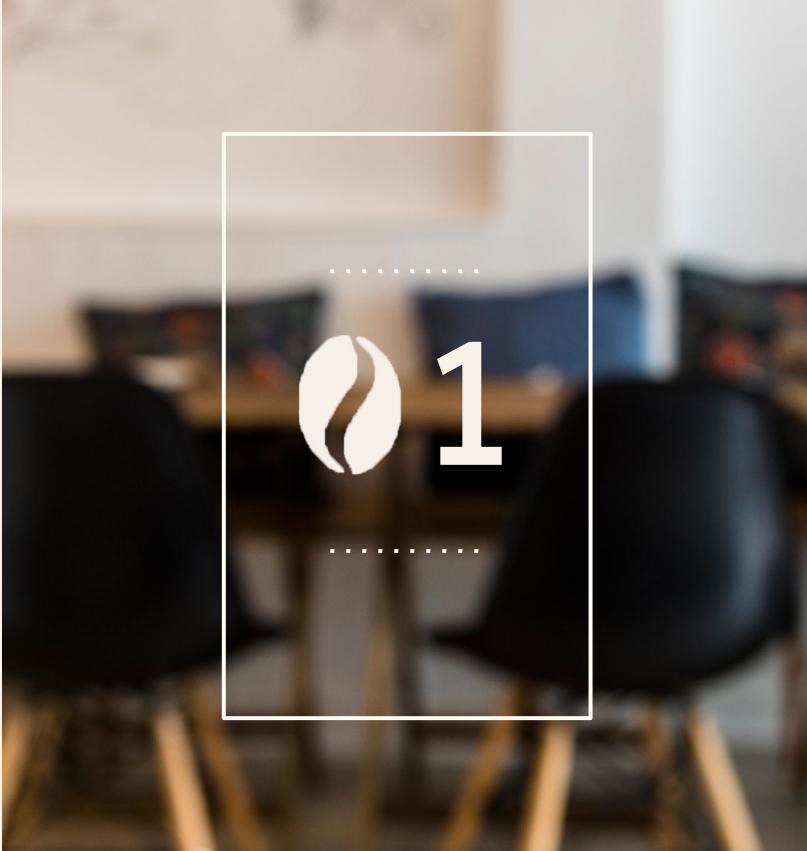
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INTRODUCTION + EXECUTIVE SUMMARY



Why Starbucks?



- **Starbucks** connects with millions of customers every day at more than 30,000+ retail stores in 83 markets (around the world.)
 - Andorra, Argentina, Aruba, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Belgium, Bolivia, Brazil, Brunei, Bulgaria, Cambodia, Canada, Cayman Islands, Chile, China, Colombia, Costa Rica, Curacao, Cyprus, Czech Republic, Denmark, Dominican Republic, Egypt, El Salvador, Finland, France, Germany, Greece, Guatemala, Hong Kong/Macau, Hungary, India, Indonesia, Ireland, Italy, Japan, Jamaica, Jordan, Kazakhstan, Kuwait, Lebanon, Luxembourg, Malaysia, Malta, Mexico, Monaco, Morocco, Netherlands, New Zealand, Norway, Oman, Panama, Peru, Philippines, Poland, Portugal, Puerto Rico, Qatar, Romania, Russia, Saudi Arabia, Serbia, Singapore, Slovakia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Trinidad and Tobago, Turks and Caicos, Turkey, United Arab Emirates, United Kingdom, United States, Uruguay and Vietnam.
 - Coffee farms in Latin America, Africa, and Asia
- **Products:**
 - In-store: Coffee, handcrafted beverages, fresh food
 - Consumer products
 - Coffee & tea, ready-to-drink (RTD)
- **Brand Portfolio**
 - Starbucks Coffee, Teavana, Evolution Fresh, Seattle's Best Coffee and Ethos Water.
- **Consumers**
 - Starbucks consumers range from all genders to all ages across the world
- **In this presentation** we will be applying advanced analytic techniques to increase Starbucks revenue and consumer population.
 - Specifically we will be looking at **Starbucks Consumers** & effectiveness of **Promotional Deals.**



What are we going to be doing?

Through these advanced analytic techniques...

1. We will be exploring Starbucks' **customer demographics** to make recommendation to increase sales revenue at Starbucks, including:
 - **Age**
 - **Income**
 - **Gender**
 - **Year**
2. Get ahead of the market by not only learning about customer demographics but the **effectiveness of promotional deals** on increasing revenue.
 - **BOGO (buy one get one free)**
 - **Discount**
 - **Informational**
3. In this presentation we will develop an application and conduct an analysis to make headway on these problems and tackle some of these issues.
4. Executive Ask: **\$20 Million** to further extend the program nationwide





BUSINESS QUESTIONS + HYPOTHESES



How can we help Starbucks?



What can we do to increase revenue?

- Merchandising Division at Starbucks



Customers

1. What kind of customers do we want to target for sales?
 - Which customers use the promotional deals the most?
 - Who should we (the merchandising division of Starbucks) send promotional deals to?



Promotional Deals

1. Which promotional deals are most effective and cost the least amount of money for Starbucks?
 - Attract the most customers for the least amount of money
2. How effective are the different offer types?



What are our hypotheses?



Offers are more attracted to **low-income customers**.



Buy-one-get-one (BOGO) is the most attractive offer to customers.



In order of deal effectiveness, we believe that **BOGO** is the most attractive offer, followed by **discounts**, then followed by **informational offers**.





DATA + METHODS



What we know about customers:

1. **Portfolio:** contains offer IDs and data about each offer
 - a. reward, duration, channels, ID, difficulty, offer type
 - b. Offers sent during the 30-day test period, via web, email, mobile or social media channels, or a combination thereof.
 - c. The offers have varying levels of difficulty (minimum spend) and reward, and fall into one of three categories: Discount, Buy-one-get-one (BOGO), Informational
2. **Customer Profile:** contains demographic data for each customer
 - a. gender, age, ID, when they became a member, income
3. **Transcript:** A list of offer interactions (received/viewed/completed), and all other transactions during the test period
 - a. ID, interactions, value (offer ID or amount spent)



How do we answer our questions with this data?

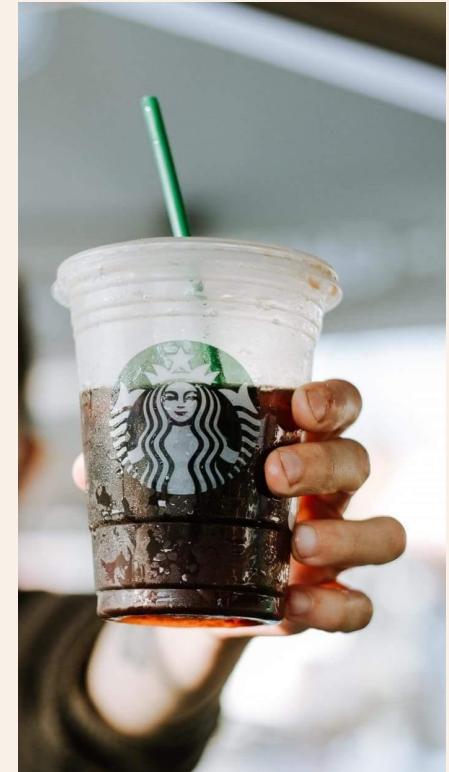
1. Regression Analysis

- a. Impact of deals on spending
- b. Impact of deals on churn

2. K-means Clustering

- a. Segment customers into distinct groups to analyze impact of deals

Assumption: The sample customers during the test period are random samples from the entire Starbucks customers.



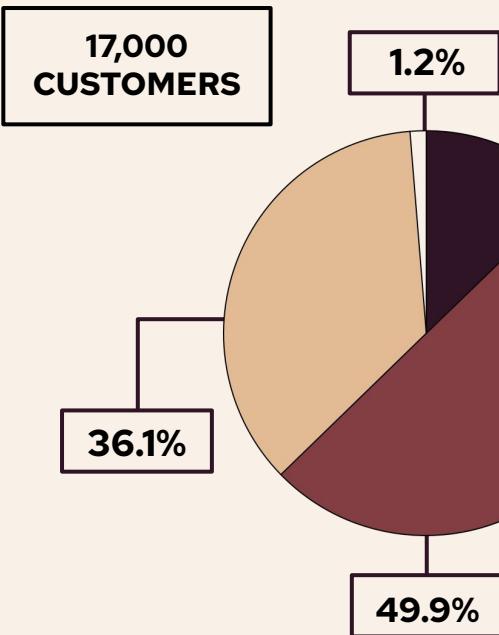


FINDINGS



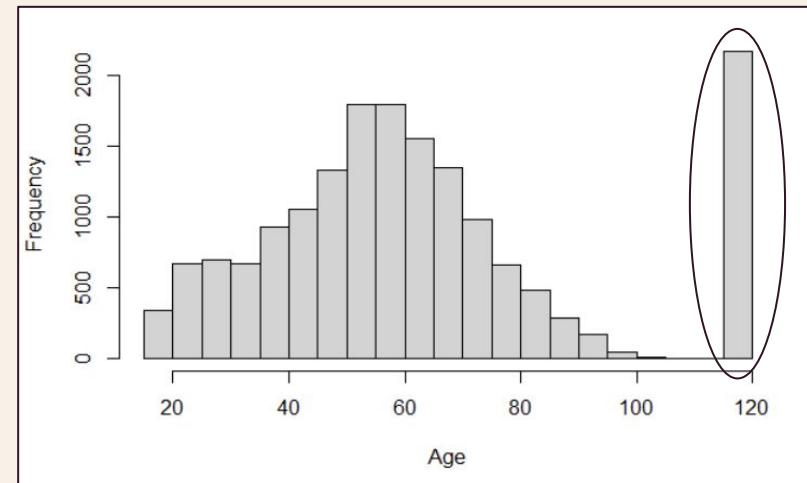
Who are our customers?

GENDER



■ MEN ■ WOMEN ■ NULL ■ OTHER

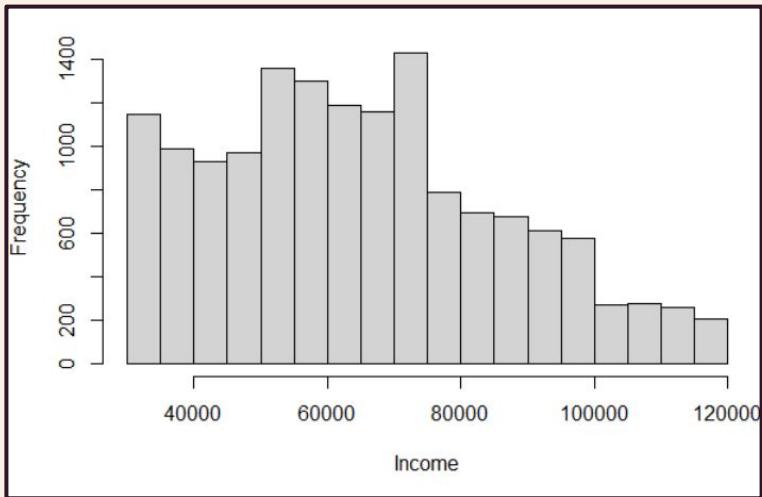
AGE



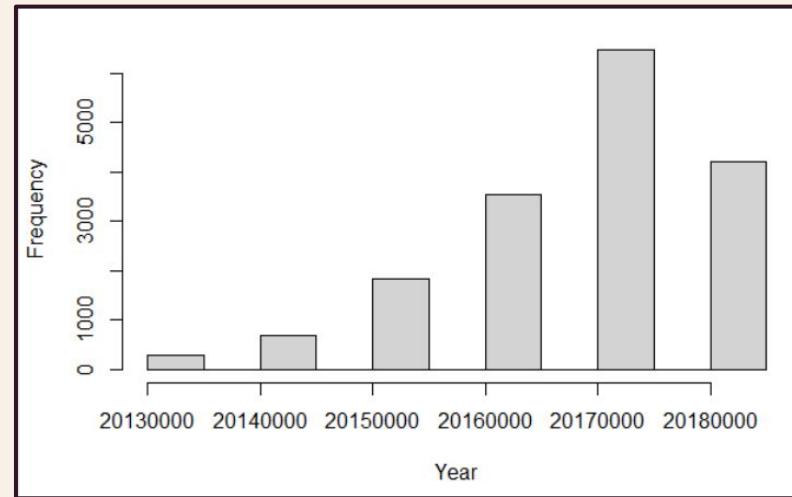
★ SPIKE IN AGE (AT 118) REPRESENTS THOSE WHO DECIDED NOT TO GIVE THEIR AGE (N/A).

CUSTOMER DEMOGRAPHICS (CONT.)

INCOME LEVEL

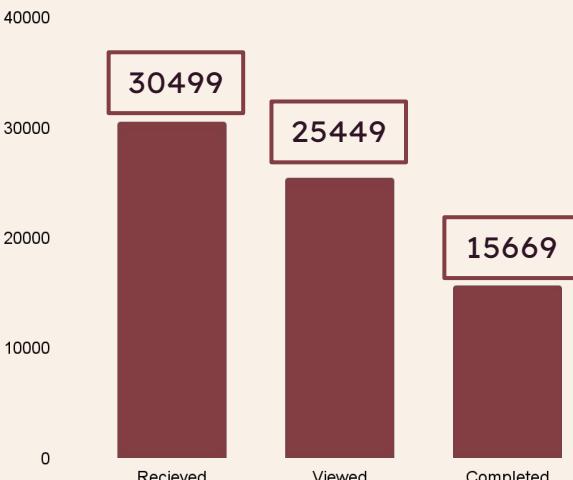


YEAR



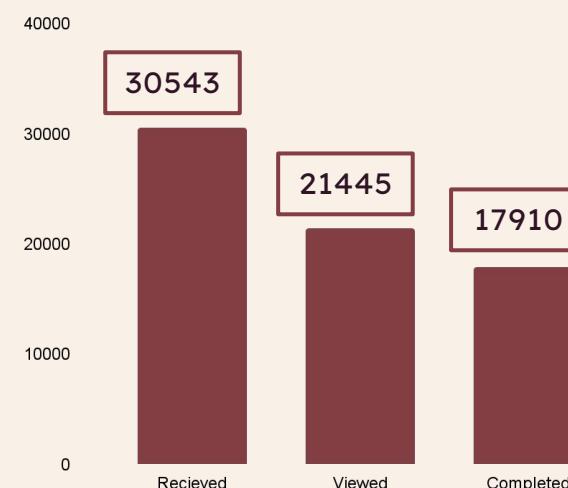
DEAL EFFECTIVENESS

BOGO



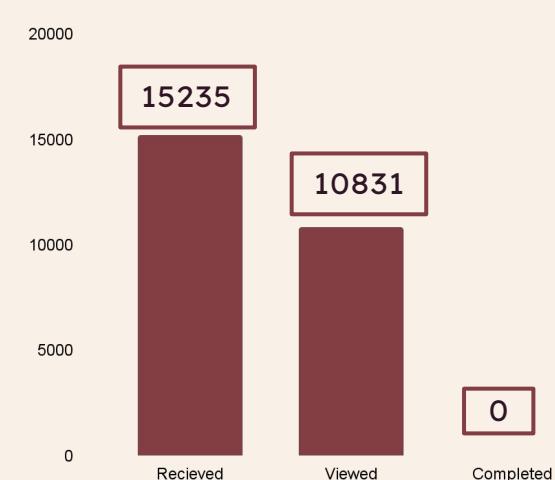
★ **View Rate: 83.4%** ★
Completion Rate: 49.8%

DISCOUNT



View Rate: 70.2%
★ **Completion Rate: 58.6%** ★

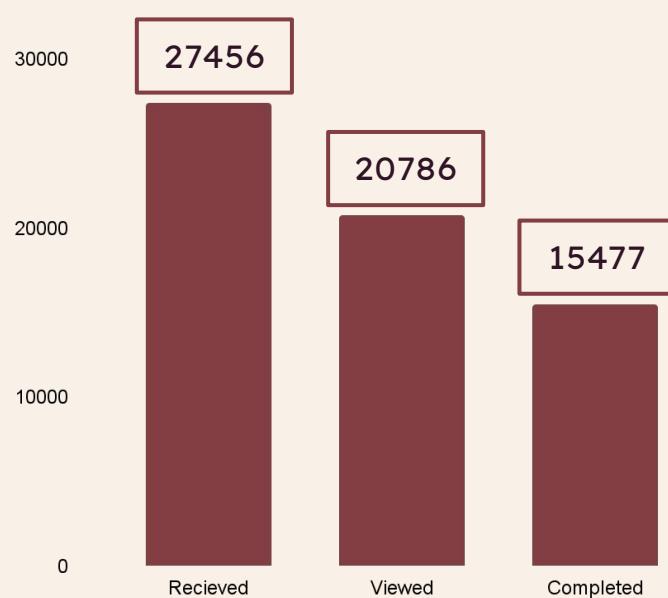
INFORMATIONAL



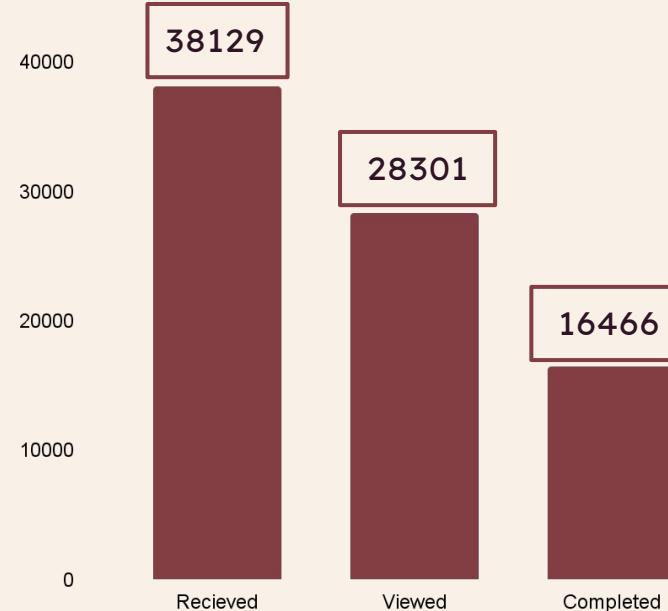
View Rate: 71.1%
Completion Rate: 0%

Does gender affect the effectiveness

Female Consumers



Male Consumers

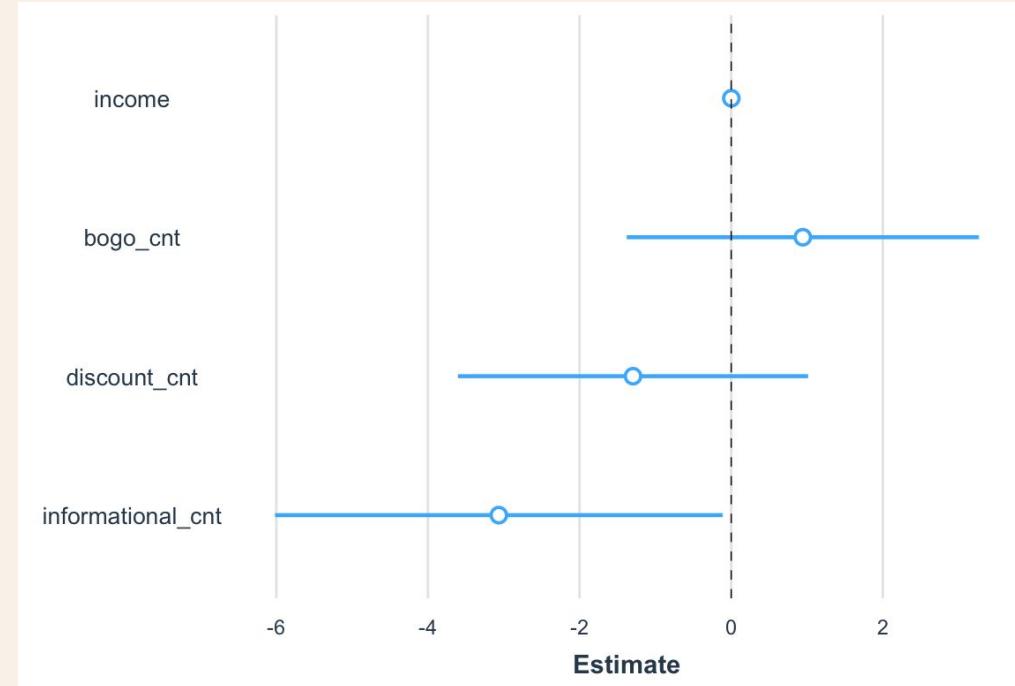


★ View Rate: 75.6% ★
★ Completion Rate: 56.4% ★

View Rate: 74.2%
Completion Rate: 43.2%

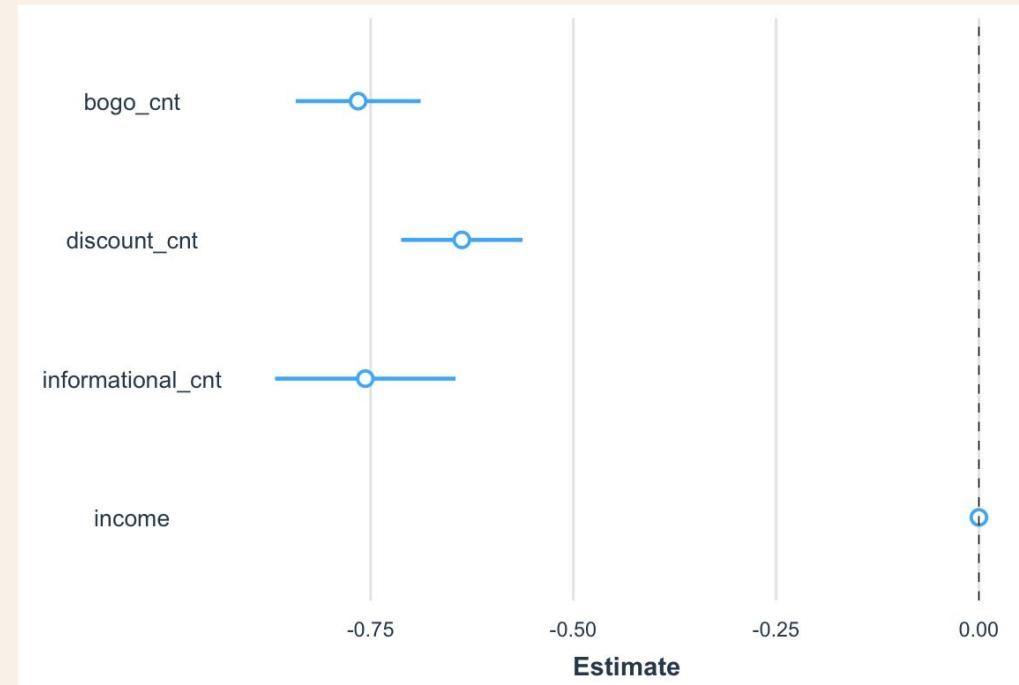
Analyzing Impacts on Spending

- Buy One Get One has a positive effect on customer spending
- On the other hand, discount and informational have negative effects on customer spending



Analyzing Impacts on Churn

- All three deals (Buy One Get One, discount, & informational) reduce customer churn rate

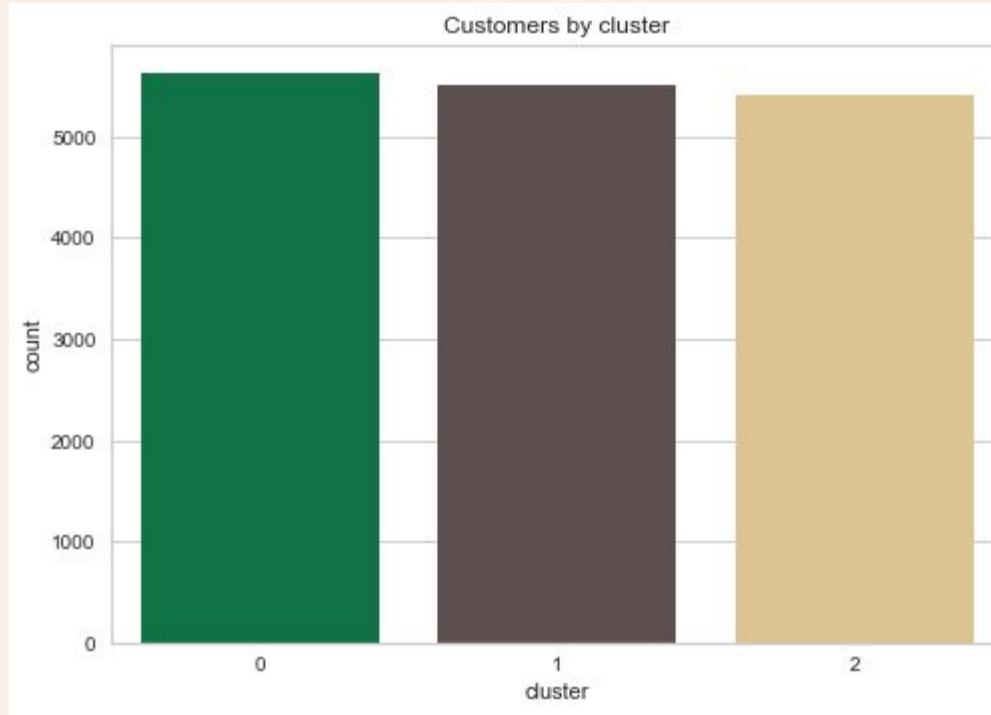


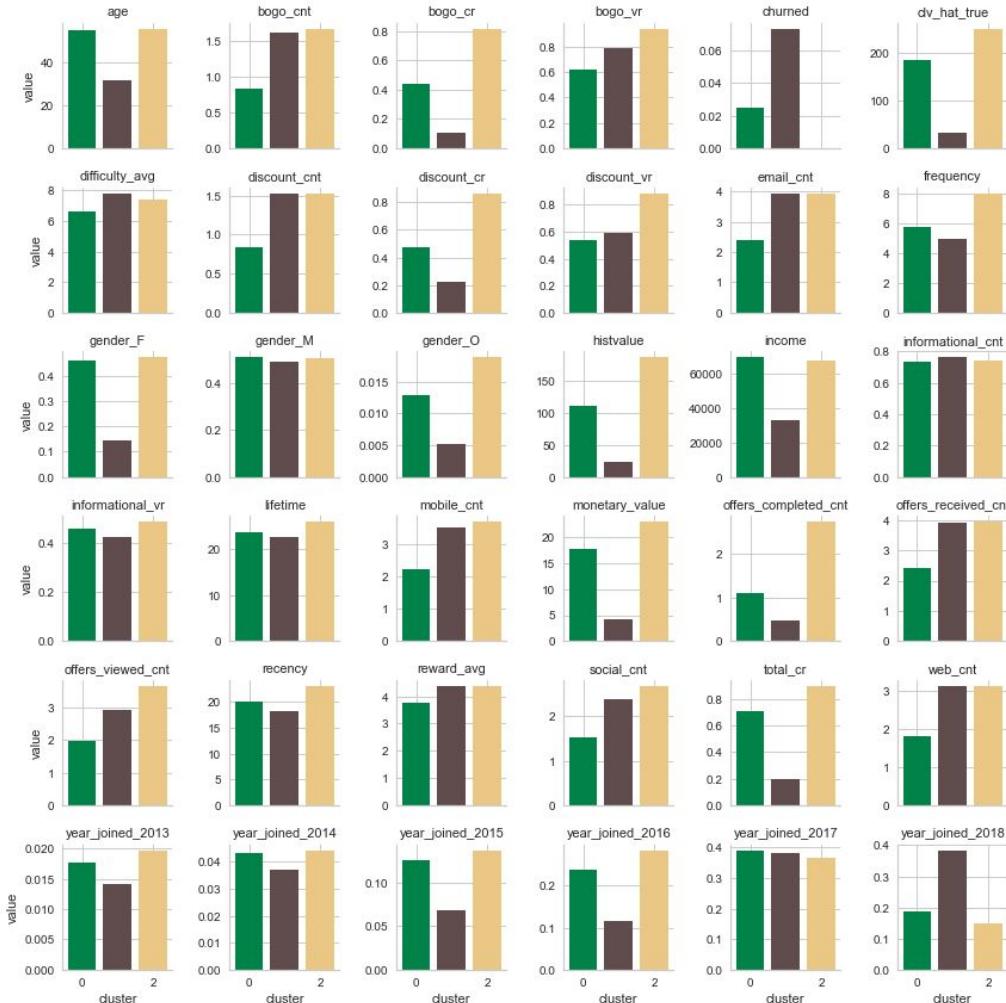


CLUSTER ANALYSIS

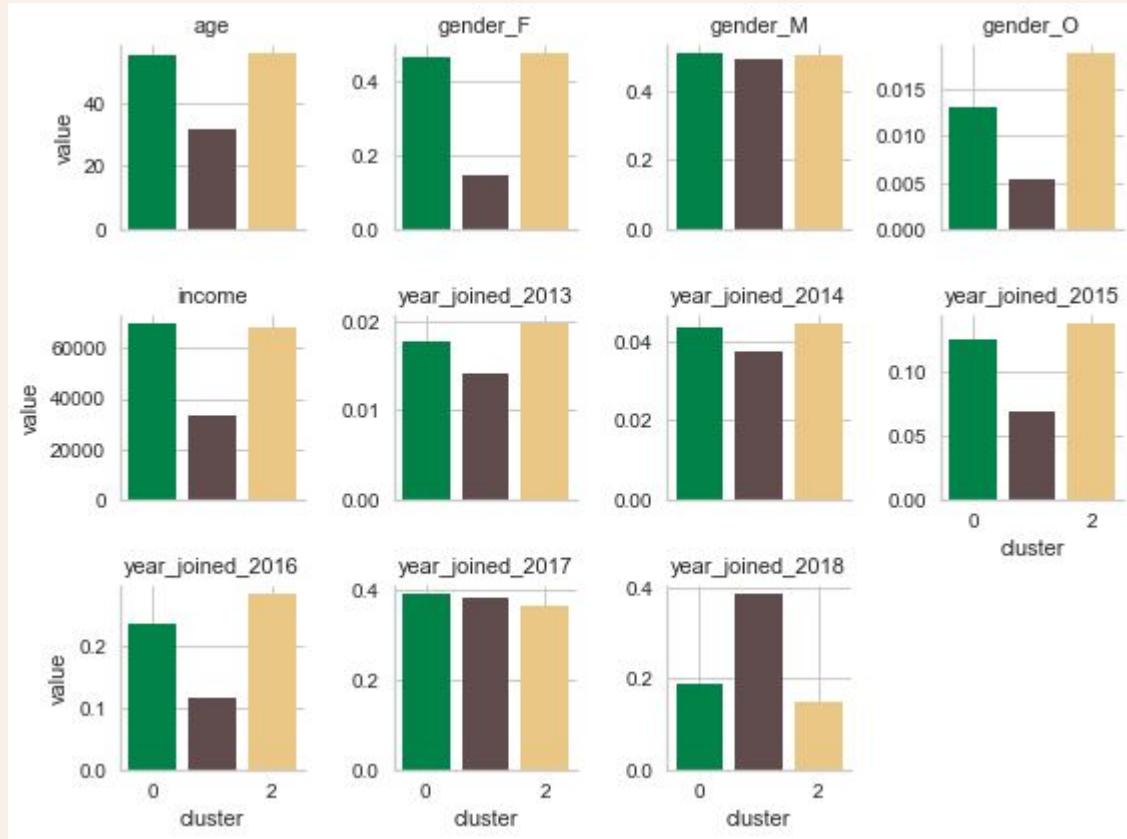


Clustering Numbers

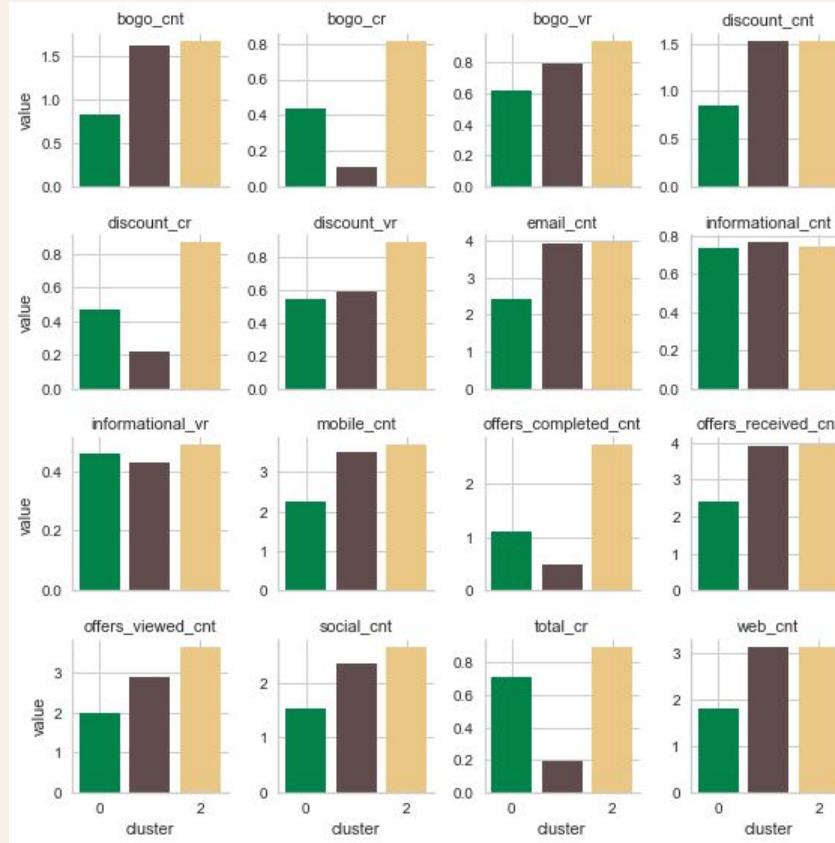




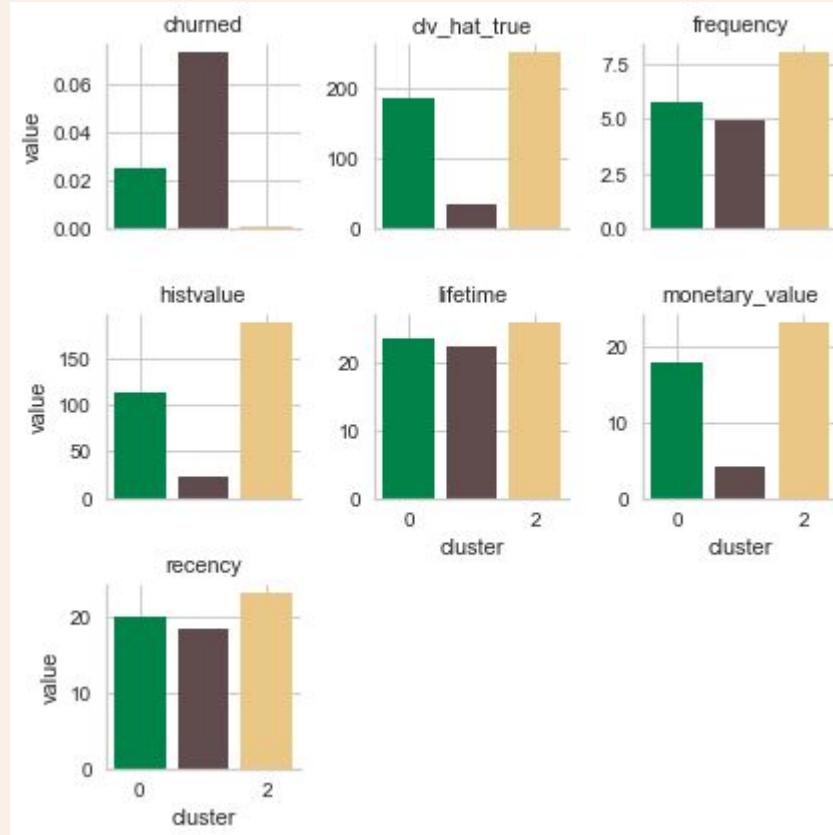
Demographic Breakdown



Deals Breakdown



Purchases Breakdown





DISCUSSION OF FINDINGS



Discussion: Understanding our Customers

■ Demographics

- Men make up majority of Starbucks customers
- 40 - 65 is the most common age group
- 50K - 70K is most common income group
- Most orders are under \$10



Discussion: Our Target Customers

■ Segment 1

- Older, wealthiest group
- Tend to spend a pretty high amount
- Get the least amount of deals but convert at a solid rate
- Should focus on this group to earn more

■ Segment 2

- Younger, less wealthy group
- Really small order amounts
- High churn rates, low CLV
- Get lots of deals but convert at a low rate
- Should focus on other groups instead

■ Segment 3

- Wealthy group who are most frequent visitors
- Respond really well to all deal types, convert at the highest rates
- Have the highest average order amount
- Should continue marketing towards this group



Discussion: Breaking Down the Promotions

Promotions

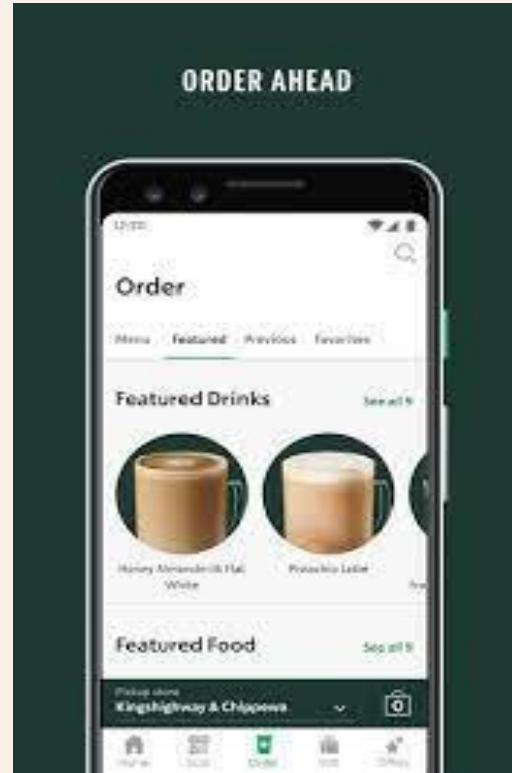
- BOGO has the highest view rate of 83.4%
- Discount has highest completion rate of 58.6%
- Informational Offer has 0% completion rate.



Discussion: Deals are Successful

Promotions

- BOGO deals are correlated with increased spending
- All 3 deals are correlated with decreased churn
- Deals are helping make customers spend more and stay loyal longer





RECOMMENDATION AND IMPACT



RECOMMENDATIONS

Promotions

- **Expand the program nationwide**
 - **Focus on Discount Deals and BOGOs**
 - BOGOs had the highest review rate and but a lower completion rate than Discount deals
 - BOGOs require higher minimum spending
- **decrease required minimum amount to attract customers**
- **Member Exclusive Deals**
 - Large member population: 16 millions users, in total, in the US alone (2020)
 - To promote signing up



RECOMMENDATIONS

Customers Focus

- Target **Older Customers**
 - Tend to be more responsive to our promotions and deals
- Send promotional deals to **customers with >\$80,000 income**
 - Tend to spend the most per order and come back frequently
- **Recent members (2016 - now)** are more likely to spend money at Starbucks
 - Send Promos to customers who are active on the Starbucks app (active this past year)



IMPACT

E(Revenue Increased) = Estimated Additional Visits

- * Average Purchase Amount
- * Customers (app users - 20mil)
- * Estimated Success Rate

OUR NUMBERS

Focus on Segment 1 and Segment 3

\$39M

Segment 1

—
Expected Annual Revenue
Increased

\$13M

Segment 3

—
Expected Annual Revenue
Increased

\$52 Million

Annual Increase in Revenue



THANK YOU!

QUESTIONS?

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