Interactive Marketing Attribution with R Shiny

Debbie Trinh

April 7, 2023

Today's Objectives

Introduction

Recap of Insights from Project I

New Insights in R Shiny

Takeaways and Recommendations

Future Work to Improve R Shiny App

Introduction

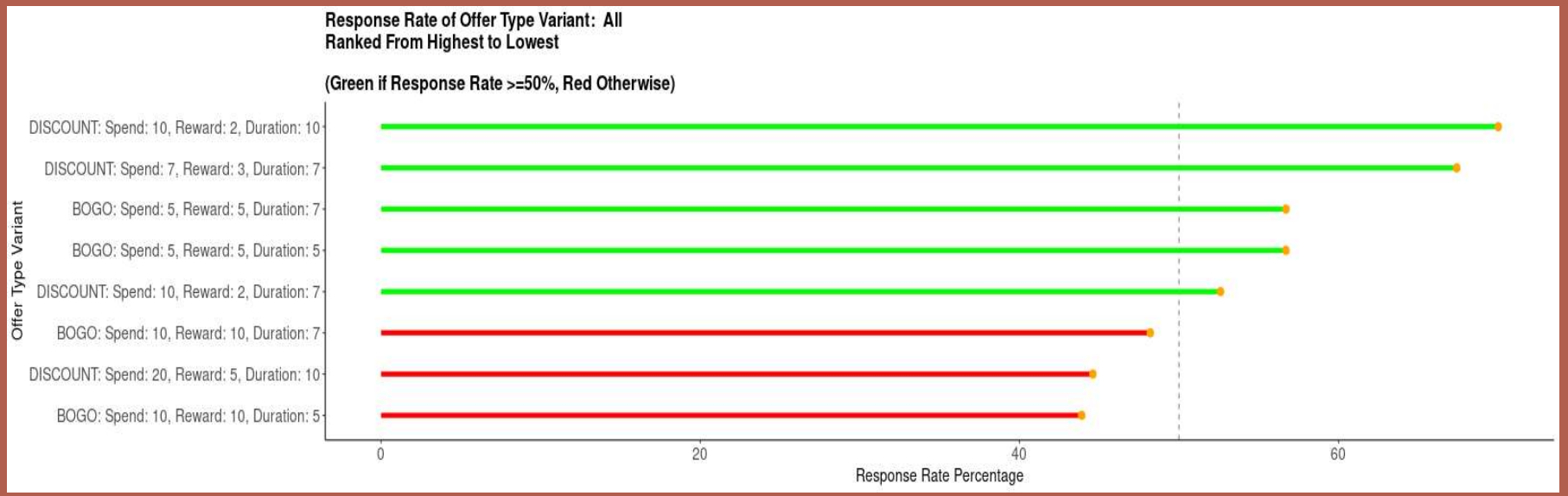
The purpose of this R Shiny app is to present the insights gained from Project I in a more engaging and interactive way, while also introducing three new insights.

These new insights include identifying low engagement users, analyzing the average time between offer sent and transaction, and exploring the decision-making process for selecting new Starbucks store locations.

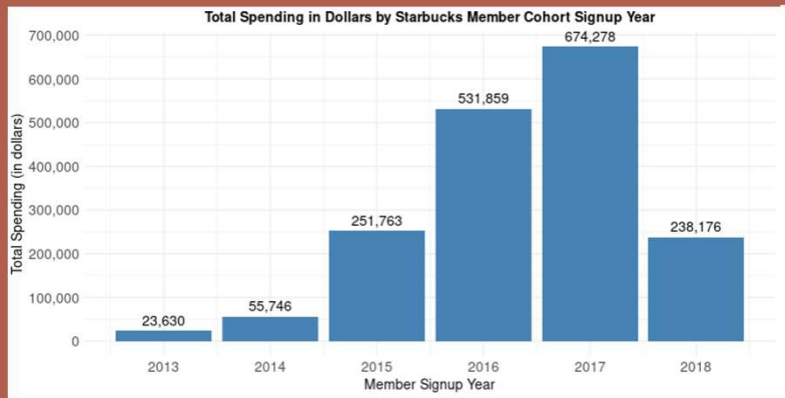
To accomplish this, the app utilizes the Kaggle dataset from Project I and location data from aggdata.com on Starbucks locations in the Americas.

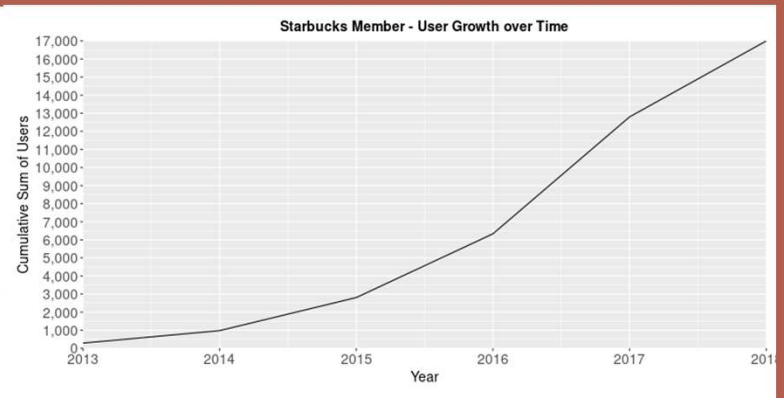
The goal of this R project is to answer the following business question: what areas can the business explore to increase user engagement, transactions, and expand its business going forward?

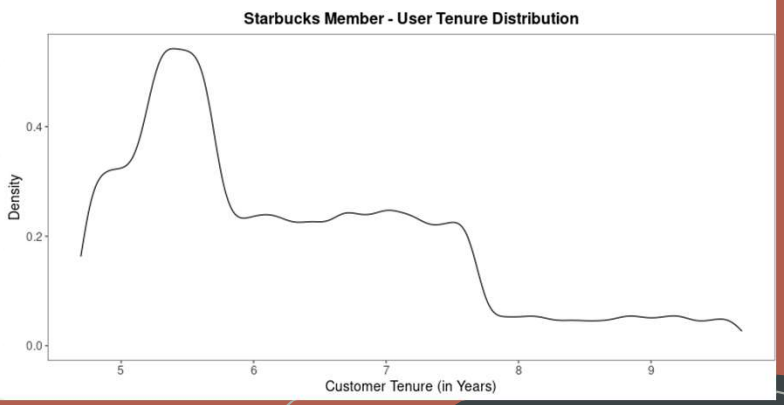
Recap from First Project
Insight 1: Marketing Offer Ranking



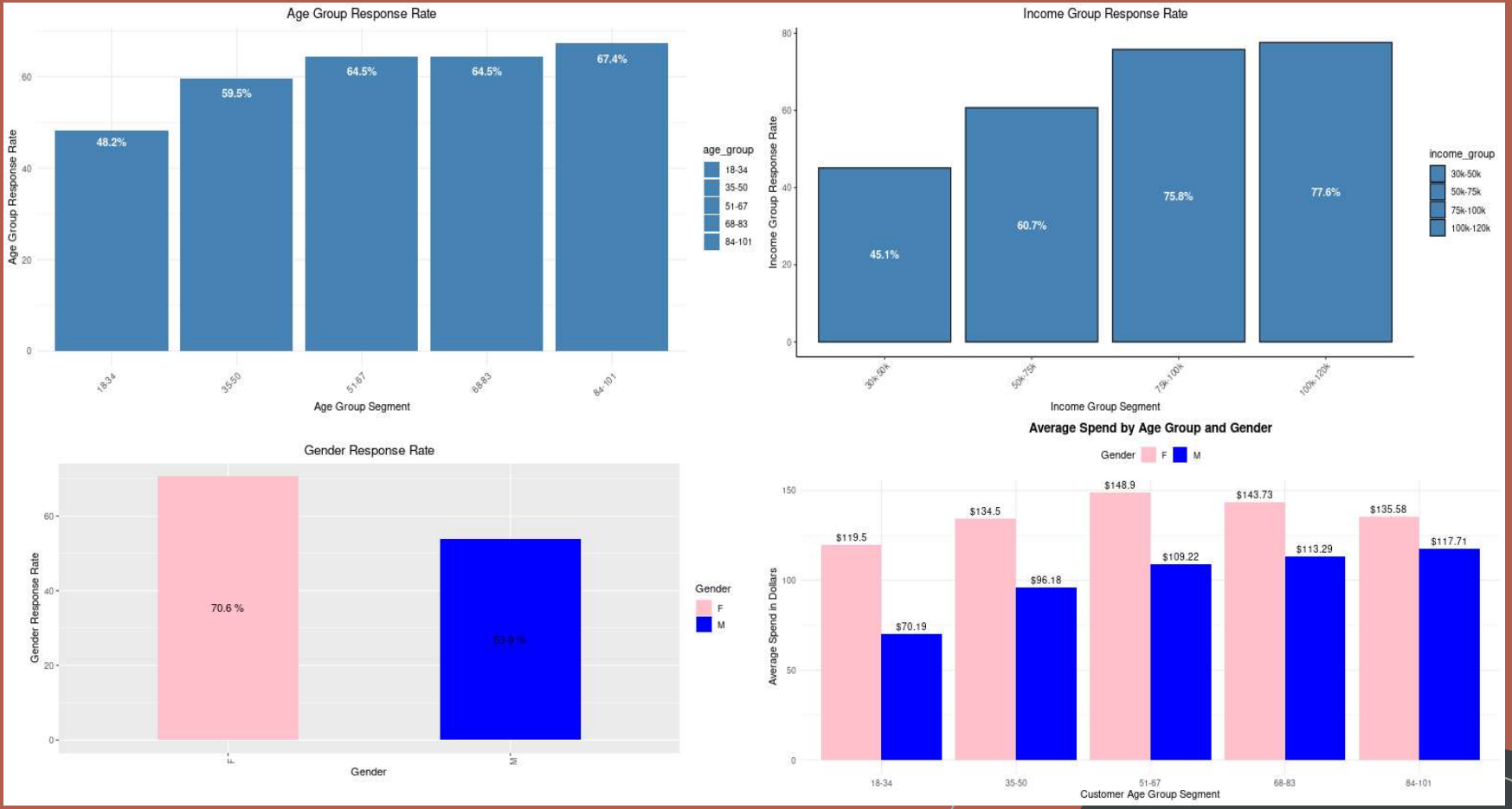
Recap from First Project
Insight 2: Cohort Analysis & User Growth/Tenure





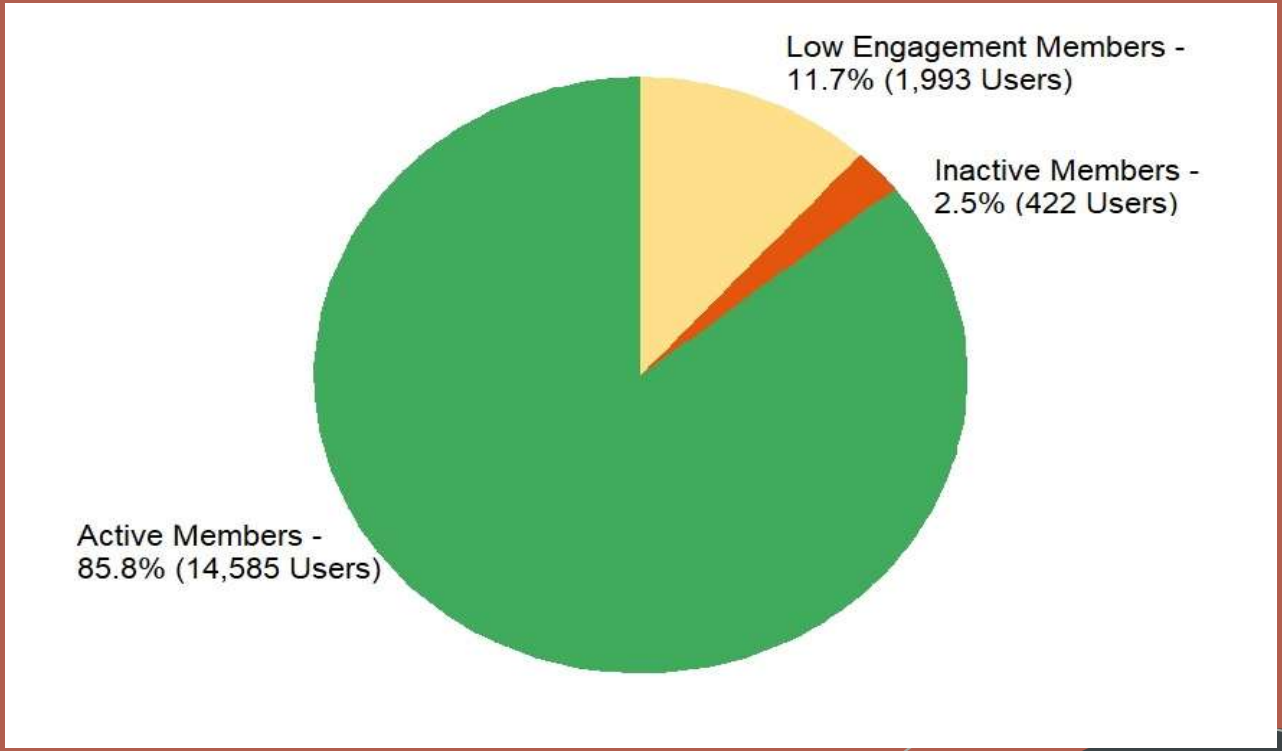


Recap from First Project
Insight 3: Response Rate by User Segment

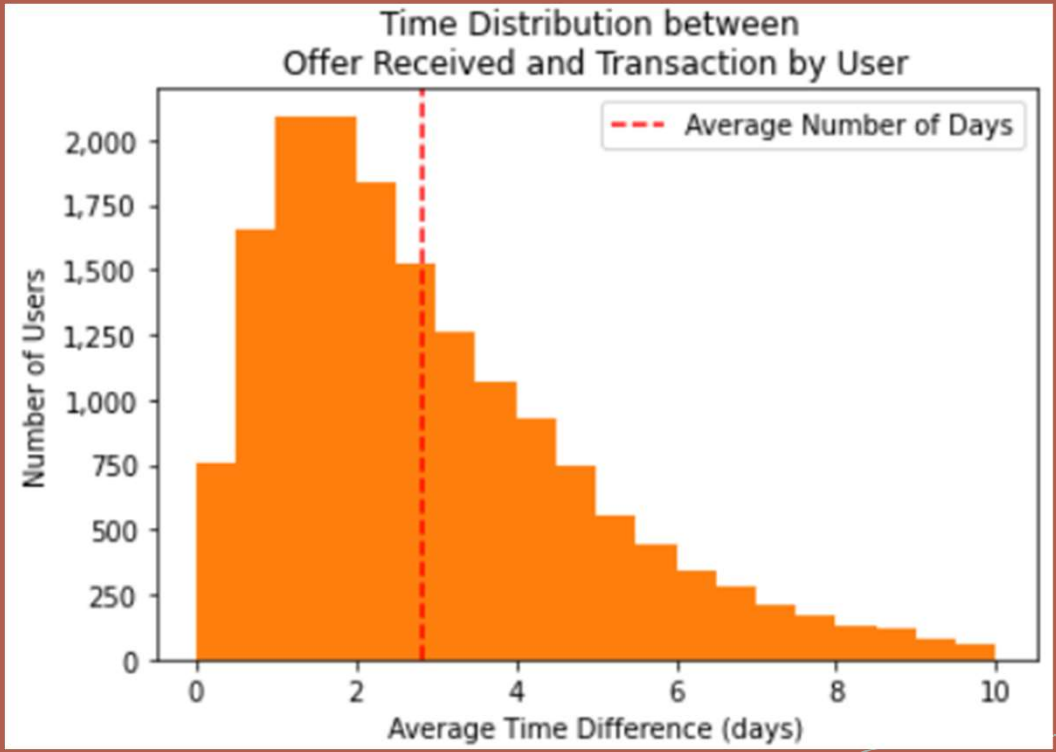


New Insights in R Shiny

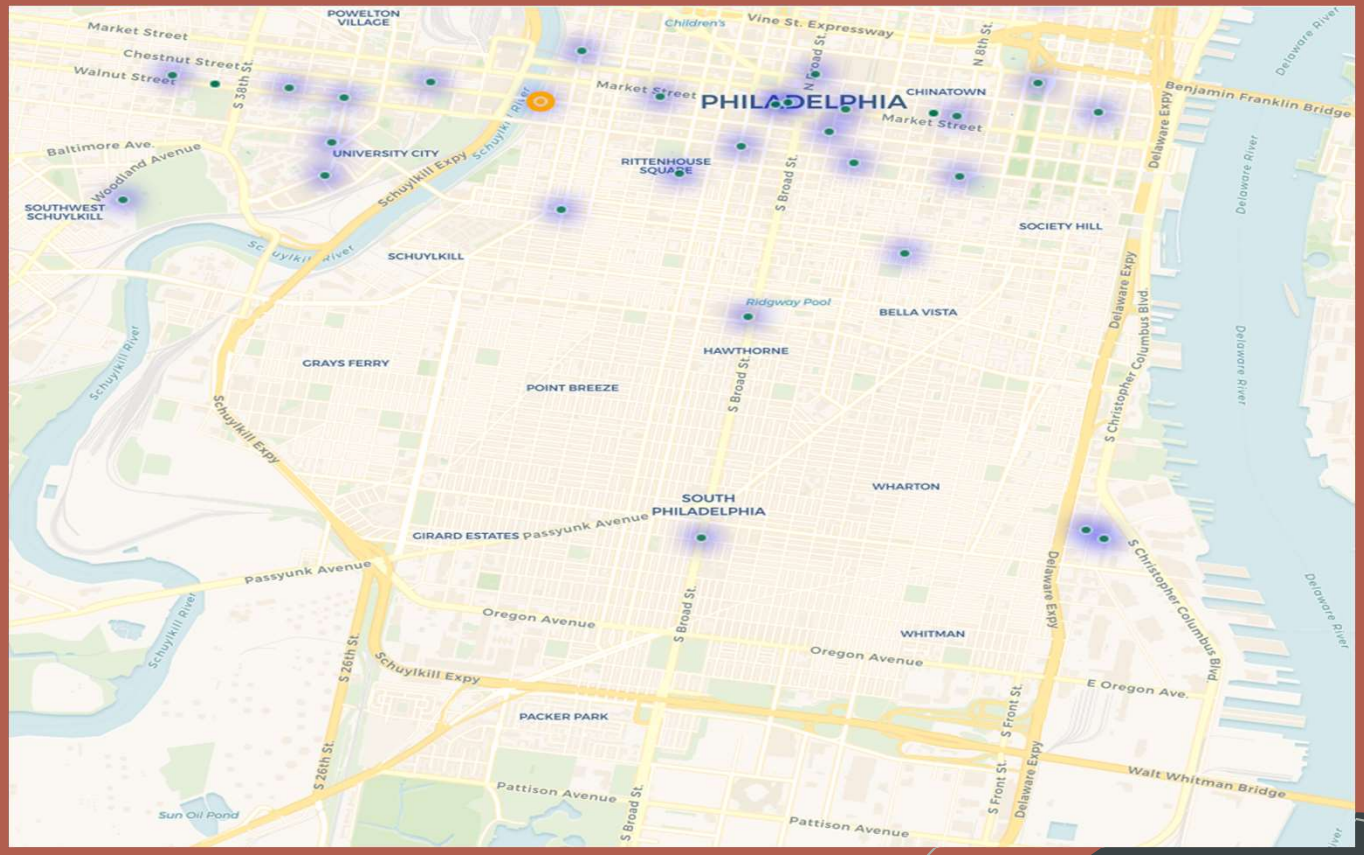
Low Engagement Users Spotlight



Analyzing Time Taken Between Offer Received and Transaction



Where to place the next Starbucks store?



Takeaways and Recommendations #1

Based on defining low engagement users as spending less than or equal to average order value, there are 12% (1,993) of users in this dataset that fall under that category. To reengage low engagement users, Starbucks can incentivize them by introducing new seasonal items at a discount and rewarding them with bonus stars for trying them out.

Takeaways and Recommendations #2

The average time between receiving a marketing offer and making a purchase is approximately three days, with the majority of users taking action within one to three days. Use this as a baseline to assess user engagement of new users and/or the effectiveness of new marketing offers.

Takeaways and Recommendations #3

Starbucks is prioritizing the expansion of its US store locations with a focus on take-out only and pick up over the next two years. Considering this, a recommended location for the next Starbucks store is by the Philadelphia 24th and Chestnut luxury apartments. This location is highly visible and conveniently accessible for commuters and fitness enthusiasts.

Future Work to Improve R Shiny App

1. Add a slider to the Active/Low Engagement/Inactive Member pie chart to allow users to dynamically adjust the transaction value that defines low engagement.
2. Add a gender or age group segment dropdown for the time between offer received and transaction visualization to compare how the time distribution varies by segment.
3. Improve the map by overlaying it with US census data on population density, growth, and other indicators of promising neighborhoods. This will help identify potential locations for new Starbucks stores that appeal to customers who will purchase from the new take-out-only store model.

You don’t have to be great to start, but you have to start to be great.

Zig Ziglar

Thank You

Debbie Trinh

https://www.linkedin.com/in/debbietrinh/

New York City Data Science Academy

January 2023 Cohort