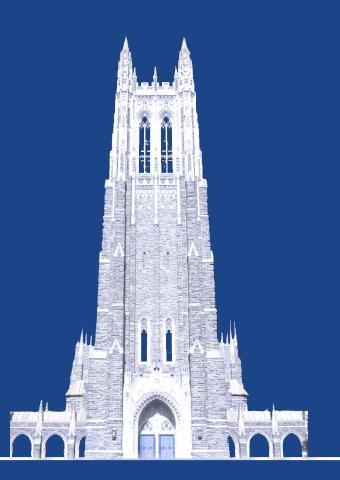
# ★DIIG GreenToGo Deliverable

**DIIG Data Team S20** 

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Jane Zhang - Director of Data Shawn Santo - Faculty Advisor





## Overview

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## Consumer Data & Retention

**Aneesh Gupta & Matthew Wang** 

#### **User Overview**





Data for a total of XX users



Joining: 2017-07-12 to 2020-02-23

End: 2018-08-15 to 2021-03-03



XX active users

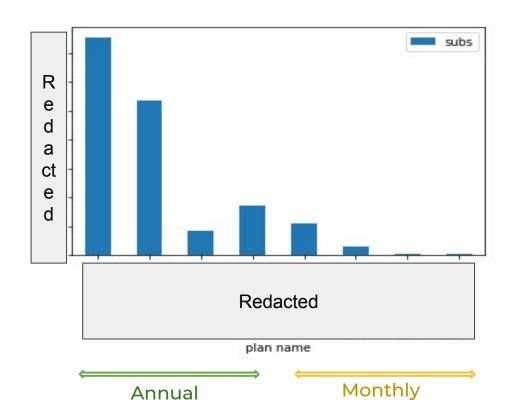


XX users have coupons



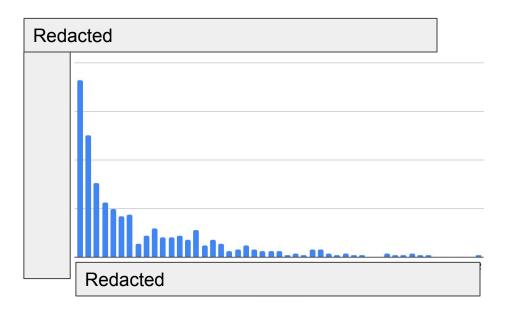
### **Distribution of Plans**

- → Plan X is more popular (also cheaper)
- → XX box plans more popular than XX box plans
- → XX might represent families
- → Offer more incentives for 'shorter' plans. Eg. free trial monthly plan?





## **Active Subscriptions**



#### **XX** active subscriptions

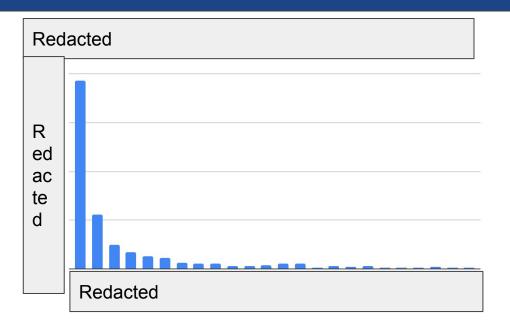
- **XX** active subscribers have not made a checkout.
- **XX** active subscribers have X or more check-outs. (Target Group)

#### Top Restaurants in Target Group:

- 1. R1
- 2. R2
- 3. R3
- 4. R4
- 5. R5



## **Inactive (cancelled) Subscriptions**



- **XX** expired or cancelled subscriptions:
- **XX** users did not use their subscriptions at all
- **XX** users stop after 1-5 uses
- There a couple of cases where users with XX checkouts ended their subscription.



#### **Initial Retention**

Of the XX accounts:

XX

Never log in again after the first day

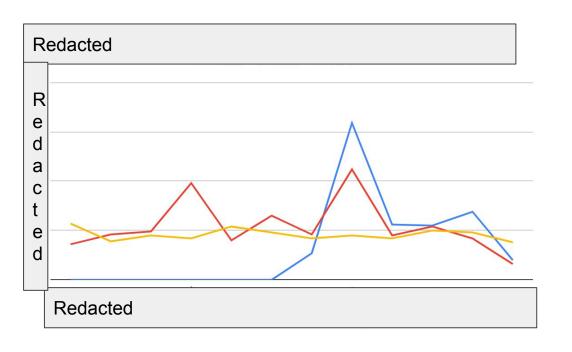
XX

Never log in after the first month

Approximate XX% retention rate for XX+ days



#### **User Growth**



#### Average growth/month

- 2017: XX users
- 2018: XX users
- 2019: XX users
- Steady growth in 2019
- # restaurants double in 2018



### **User Growth in 2020**

- → XX new members have joined in 2020
  - ◆ XX in January, XX in February

Year	January	February
2018	XX	XX
2019	XX	XX
2020	XX	XX

- Impressive growth in 2020 so far. On track to beating all previous years.



## **Goals & Insights**

- → Increase the amount of users in the Target Group.
  - Focus on promotions at Target Group favorites such as Restaurant X and Restaurant Y
- → Increase subscription rates, retention, and growth rate.
  - ◆ Provide XX
  - Send an email blast to XX
- → Scale company growth by adding incentives.
  - Target consumers and restaurants with XX Strategy to join GreenToGo
  - Example Model: GreenToGo members get XX at restaurants.
     Restaurants promote XX and XX



## **Restaurant Partners**

**Larry Chen** 



#### **Restaurants Checkin Checkout**

	Check-Outs	Check-Ins	% Boxes Returned	% Increase in Check-Outs	Promotions in 2018-19 were effective
2017-2018	XX	XX	XX	XX	Restaurants more
2018-2019	XX	XX	XX	XX	than doubled (from XX to XX)
2019-2020	XX	XX	XX	XX	

Percentage of boxes checked out at restaurants being checked back in is increasing steadily (less boxes are wasted)

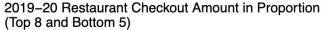
Small increase in restaurant partners a XX% increase

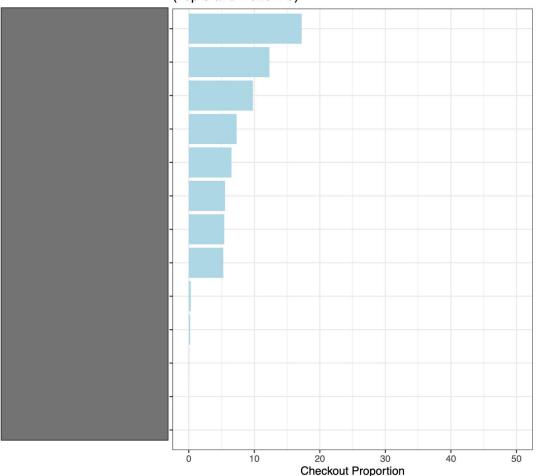
## Proportion of Checkouts

Many restaurants have negligible check-out amounts

Top X is significantly larger than the rest (XX Total restaurant partners)

Restaurants A, B, C consist of nearly XX% of all check-outs





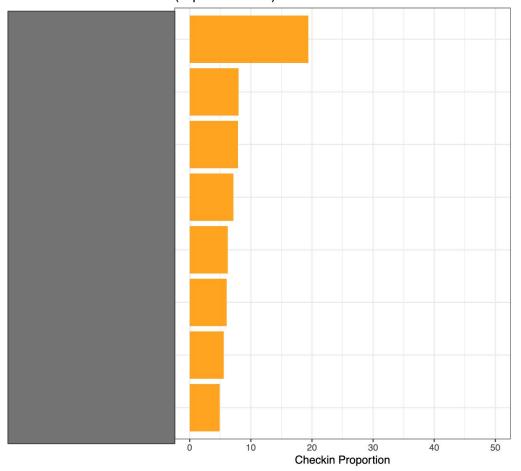
## Proportion of Checkins

The average number of checkins per restaurant is XX in 2019-20

Durham Co-Op is an extreme outlier and counts for nearly XX%

Restaurant A has large check in amount but low check out amount, high potential (explained next slide)

2019–20 Restaurant Checkin Amount in Proportion (Top 8 Locations)





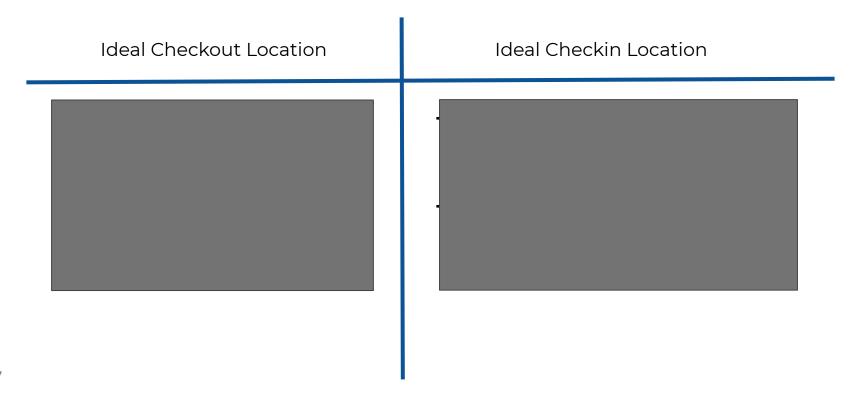
## Top 5 Performing Restaurants (2019)

Redacted

- → Top 5 restaurants makeup XX% of checkouts in 2019
- → Bottom 15 restaurants makeup XX% of checkouts in 2019
- → Should focus resources/ad on these top 5~10 restaurants

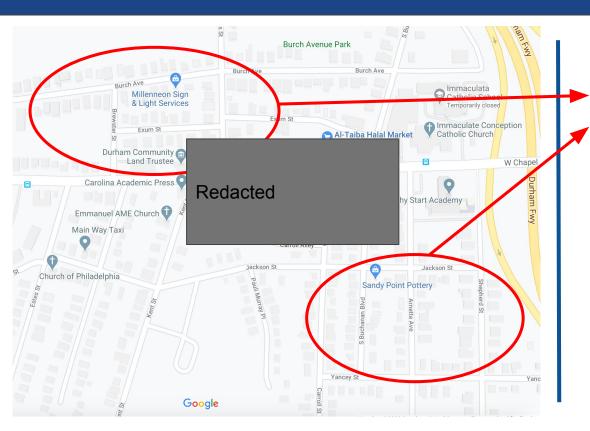


## Main Takeaways from Checkout and Checkin





## Map of XX (Checkin Outlier)



- → Living areas all around XX
- → Could be smart installing additional check-in locations at establishments like XX
- → Customers might make a drive to get take-out, but they are unlikely to drive far just to return the box



## Corporate & Coupon Codes

**Phillip Harmadi** 





#### **ALL CUSTOMERS**

XX% use CORPORATE codes

Total: XX people

**SUBSCRIPTION:** 

Continue	Cancel
XX	XX
XX%	XX%

XX% don't use any CORPORATE codes

Total: XX people

**SUBSCRIPTION:** 

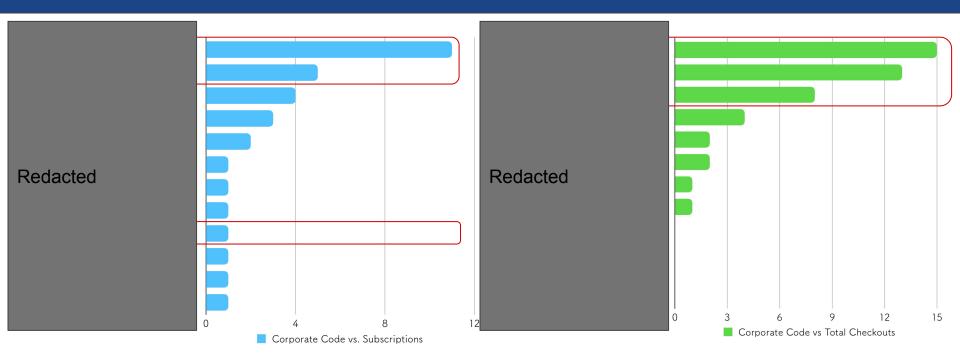
Continue	Cancel
XX	XX
XX%	XX%

Corporate code: X% \_ continuation rate

2-sample t-test: p-value obtained is XX > 0.05 (statistically NOT SIGNIFICANT)



## **Effectiveness of Corporate Codes**

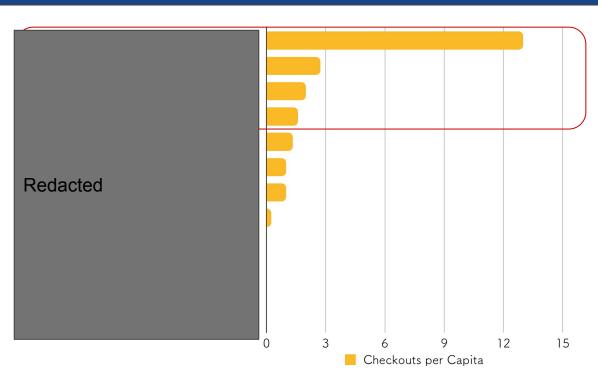


These 3 codes have the highest number of checkouts

Nudge more checkouts through XX



### Which Corporate Codes are More Successful?



These 4 codes have high number of checkouts per subscription with that corporate code

#### **Suggestion:**

Strategize a plan to increase referrals within these corporate codes

## **Coupon Code & Continuation Rate**



#### **ALL CUSTOMERS**

X% use COUPON codes

Total: XX people

#### **SUBSCRIPTION:**

Continue	Cancel
XX	XX
XX%	XX%

XX% don't use any COUPON codes

Total: XX people

#### **SUBSCRIPTION:**

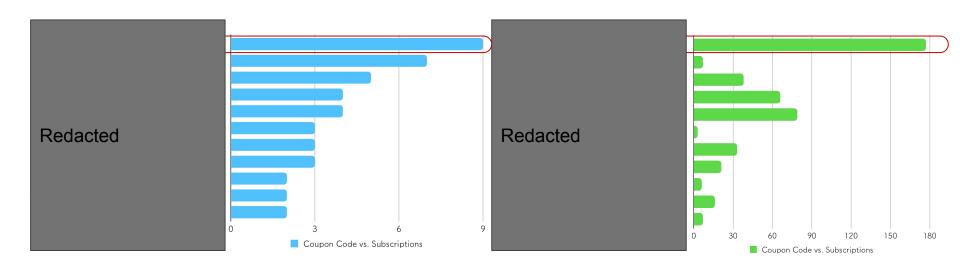
Continue	Cancel
XX	XX
XX%	XX%

Coupon code: X% higher continuation rate

2-sample t-test: p-value obtained is XX < 0.05 (statistically SIGNIFICANT)

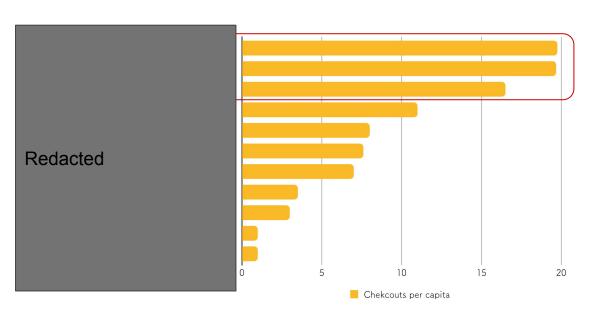
## Effectiveness of Coupon Codes

**Coupon X stands out!** Analyze specifically on customers using Coupon X. Why can this coupon have high number of **subscriptions** and **checkouts**?





## Which Coupon Codes are More Successful?



#### **Suggestion:**

- Consider patterns and trends among high-performing coupons (#X, #X, #X)
- Apply the trend for future coupons and customers



#### **Continuation Rate**

#### → Key Points:

- ♦ Higher continuation rate = higher customer loyalty
- ◆ Corporate code: X% higher continuation rate
- ◆ Coupon code: X% higher continuation rate

#### → Suggestions:

- ◆ Use corporate code only if it is proven to increase profitability
- Definitely continue to use coupon code

#### → Remarks:

- ◆ Sample size is considerably small
- Analysis results can be more credible with more samples as the company grows in the future



## Takeaways (1/3)

- → Consumer Data & Retention
  - Most popular subscriptions are plans X
  - Reach out to subscribers who \_\_\_
  - Free trial service could increase growth and retention



## Takeaways (2/3)

### → Restaurant Partners

- ◆ Top 5: X
- X restaurants are poor checkout locations
- New Checkin locations near X, potentially at X or



## Takeaways (3/3)

- → Corporate and Coupon Codes
  - Continue the use of coupon codes due to X customer loyalty
  - Analyse why certain codes have higher checkouts per capita
  - Identify trends in high-performing codes: Types of restaurants, customer demographics

## DIIG Data Team Spring 2020



Larry Chen Class of 2023 Stats + CS



Aneesh Gupta
Class of 2022
ECE + CS



Phillip Harmadi Class of 2023 Stats + Econ



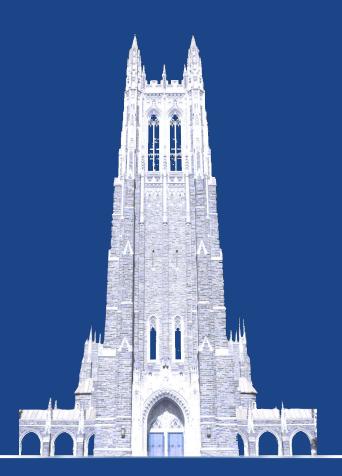
Matthew Wang
Class of 2023
CS + Econ



Jane Zhang Class of 2023 CS + Stats

## DIIG Thank You

- → Questions?
- → Next Steps



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