
Assignment 1: Observations and Questionnaires

ENP-0064
Yahav Manor
February 20, 2023



Introduction

The Sink Cafe, Tufts University



- **Description:** Student-run cafe in the Tufts Mayer Campus Center
- **Price range:** \$
- **Rating:** 4.5 ★
- **Service options:**
 - Dine-in
 - Pickup
 - No delivery
- **Services:** coffee, tea, bakery items, combo drink

Goals of User Behavior Research



- **Determine** the factors that **increase or decrease the time** it takes for a barista to complete an order
 - **Analyze** whether these factors **impact how the customers feel** about their experience
 - **Conclude** how to manipulate factors in order to **maximize the cafe's efficiency**
-

Informal Observations



Conducting Informal Observations

Conducted from:

- 12:34:54 PM until 01:16:12 PM on Monday, January 30th, 2023
- 4:29:15 PM until 05: 15: 28 PM on Thursday, February 2nd, 2023

Assessed:

- What actions/activities did the customers do
- What seems to work well?
- What doesn't work well
- Are there aspects of the service that work better for different users

See slide 26 for more information



Informal Observations Results

- Two main factors that decrease efficiency:
 - Casual conversation
 - Time baristas spend doing other tasks (other than casual conversation)
 - ***Do these factors prohibit the best Sink Cafe experience for customers?***
 - **Next steps...**
 - *First:* get more detailed information with an observation checklist
 - *Next:* determine from customers, do these factors contribute to a more frustrating and less efficient experience?
-

Formal Observations

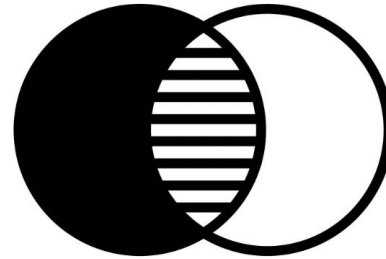
Operational Definitions in Report



- **Barista:** student serving customers
 - **Customer:** person that the barista is serving
 - **Order:** what the customer requests
 - **Casual Conversation Duration:** amount of time involving any form of dialogue between the barista and the customer that does not relate to the order
 - **Waiting Time:** Total amount of time spent not completing a work-related task
-

Accounting for Overlap

- There may be overlap in casual conversation duration and waiting time as the barista completes the second action item on the observation checklist, “Waiting Time”
- The two factors will be measured independently, meaning that the waiting time does not include casual conversation duration



Customer #	Barista #	Action 1: Placing Order	Duration	Casual Conversation Duration
		Starts when the customer approaches the counter	Time it takes to complete task	Any form of dialogue between the barista and the customer that does not relate to the order
		Ends when the customer finishes paying for their order (when they are prompted to remove card, after barista puts cash in register, or after barista confirms that student ID swipe has gone through)	Measured in minutes and seconds	Measured in minutes and seconds

Action 2: Preparing Order	Duration	Casual Conversation Duration	Waiting Time
Starts after the customer finishes paying for their order (more defined in Column C) Ends when the customer walks away from the cafe	Time it takes to complete task Measured in minutes and seconds	Any form of dialogue between the barista and the customer that does not relate to the order Measured in minutes and seconds	Total amount of time spent not completing a work-related task, including talking to a third party, using an electronic device, DOES NOT INCLUDE casual conversation with customer

Observation Checklist Parameters (what is “counted for”)

Formal Observations

- Sunday, February 5th, 2023 from 11 AM - 12 PM
- Observed **2 baristas**
- Observed **10 customers**
- See slide 27 for more information

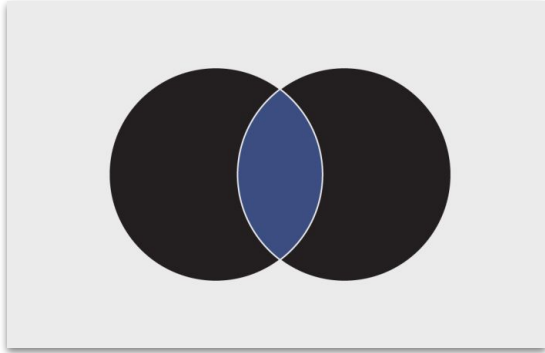
Customer #	Barista #	Action 1: Placing Order	Duration	Casual Conversation Duration	Action 2: Preparing Order	Duration	Casual Conversation Duration	Waiting Time
1	1	Barista greets, customer orders an iced tea, customer pays with Jumbocash	24 seconds	0 seconds	Pulls plastic cup from stack Pours drink from a beaker-like container Adds ice and a cap Twirls cup	1 minute, 20 seconds	0 seconds	0 seconds
2	2	Barista greets and asks customer about necklace, customer answers with where they got the necklace from, customer orders a coffee, customer pays with Jumbocash	41 seconds	22 seconds	Pulls plastic cup from stack Grinds espresso Places portafilter in machine Waits for machine to finish Talks to customer about store similar to where they purchased the necklace from Removes portafilter from machine Adds milk Adds a cap	3 minutes, 55 seconds	56 seconds	42 seconds
3	1	Barista is interacting with a third party that has approached the Sink (did not order) after the customer approaches the counter Barista greets, customer orders a drink, barista mentions that not many people order that drink and asks what customer likes about it, customer answers, customer pays for drink with credit card	50 seconds	28 seconds	Pulls insulated cup from stack Pumps syrup into cup Grinds espresso Interacts with third party Places portafilter in machine Waits for machine to finish Removes portafilter from machine Adds milk Adds a cap	2 minutes, 8 seconds	0 seconds	58 seconds

Formal Observation Statistics

Average time for Action 1	Average casual conversation time for Action 1	Average time for Action 2	Average casual conversation time for Action 2	Average waiting time for Action 2
<i>33.3 seconds</i>	<i>10.5 seconds</i>	<i>2 minutes, 2.7 seconds</i>	<i>16.6 seconds</i>	<i>16.8 seconds</i>

- Casual conversation can increase the time it takes for a barista to complete an order by **27.1 seconds**
- Time that barista spends not completing work-related tasks can increase time to complete an order by **16.8 seconds**

Similarities between Baristas



- Both seem experienced, neither had trouble with any machinery or terms
- Both did not take too long/too little of time to prepare a drink (no remarkable outliers)
- Both baristas' gender presentation was female
- Both seemed to enjoy their jobs (joyful tone when interacting with customers)

Differences between Baristas

Barista 1	Barista 2
Participated in any form of casual conversation: 4/6 Casual conversation was always a compliment/question about where the customer purchased a certain article of clothing - Likely more social Interacted more with customers	Participated in any form of casual conversation: 1/4 Only participated in one form of casual conversation where she recognized the customer from a class - Likely more reserved Interacted more with third parties

Possible Usability Concerns



- Casual conversation and time not spent completing work-related tasks can hinder the efficiency of the Sink
- There is a **clear increase in time** that it takes for a customer to receive their order **as a result of casual conversation duration and waiting time**
- Important to assess how the *customer* feels in relation to how the *barista* acts
- Next step: distribute questionnaires to customers of the Sink
 - Assess opinion on the efficiency of the Sink
 - Is it for a quick drink to pick-up or a form of social interaction?
 - What do the customers *want*?

Questionnaire



Questionnaire

- 11 total questions
 - 2 demographic questions
 - 2 close-ended questions with odd number of responses
 - 2 close-ended questions with even number of responses
 - 1 question with a rating scale
 - 1 question with a binary response
 - 1 open-ended question
 - 2 questions aimed at understanding emotional response
- Distributed to friends, classmates, and customers in line at the Sink
- 7 responses
- **See slides 28-30 for more information**

Questionnaire Findings (on average)



Average rating for efficiency (out of 5)	Average rating for friendliness (out of 5)	Average rating for overall experience (out of 5)
2	4	3



Questionnaire Findings (on average)

- **Sometimes** order from the Sink
- **Sometimes** indulge in casual conversation
- “I go to the Sink to socialize”
 - A little / None at all
- “I go to the Sink to quickly pick up an order”
 - A little / None at all



Questionnaire Findings (on average)

- *Popular responses for what customers find frustrating:*
 - “The line is very long and takes a while to get what you want.”
 - “Time”
 - “Time it takes for my order...”
 - “Time and mediocre drinks”
 - **Common theme: TIME**
- *Popular responses for what customers find enjoyable*
 - **One response** talked about **casual conversation**: “Baristas are friendly...”
 - **All other responses** talked about “vibe”, “lighting”, “good quality”

Insights

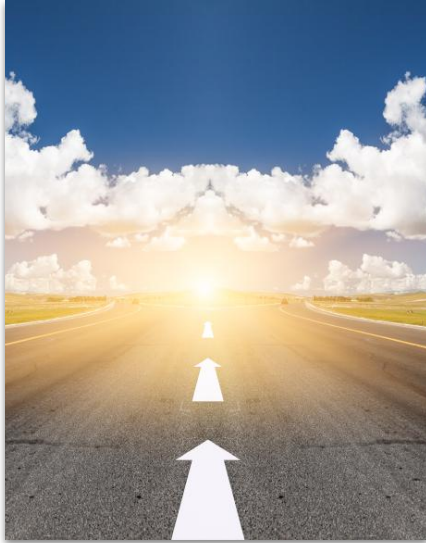
Implications

- **Most** survey respondents are frustrated by the line at the Sink
- Only **some** enjoy the social aspect of the Sink
- **Most** survey respondents find the staff to be more friendly than they are efficient
- **Socializing is GREAT! But, *not everyone wants this kind of experience when ordering from a cafe***

Solutions

Accommodate for those that want a **quicker, less social experience** at the Sink:

- **Mobile order:** add an option to mobile order from the Sink for quick pick up!
 - **Open up a new cafe** (like the Tower in Tisch Library) that will have a quick pick-up
 - Must be in an accessible place on campus, just as much as the Sink is
 - Will bring new jobs for students!
-



Opportunities for Future Research

Conduct more observational studies under different conditions

- Dewick Dining Hall was closed, could have influenced the way people viewed the cafe

Distribute questionnaire to a more diverse group

- Use Tufts student apps like “Sidechat” to increase sample size
- Place QR code for survey at the Sink (with permission)

Find ways to reduce casual conversation/waiting time for customers that are in a rush

- Figure out how to implement previously mentioned solutions!
-

Appendix

Informal Observation Log

<https://docs.google.com/document/d/1mtK8XFtitP3gthlxa2hg43HAME2Kyki6zaGYcsGyX1g/edit?usp=sharing>

Observational Checklist and Summary of Criteria

<https://docs.google.com/spreadsheets/d/100lg3I ilGy0QfIXa5Xh5-qBGniTlqTJxFKiTBGDbfA/edit?usp=sharing>

Original Questionnaire and Summary of Feedback

https://docs.google.com/document/d/1sVSbZDa_S5EJkD2CuHp_dTzkyhxJLxdgC8FR14bGEAU/edit?usp=sharing

Revised Questionnaire

https://tufts.qualtrics.com/jfe/form/SV_26riUCzoJKbsBT0

All 7 Questionnaire Responses

<https://docs.google.com/spreadsheets/d/1uCB0hsVTfFZD-7ATa-kwReHPvcxZexl2gaiQU2nJINc/edit?usp=sharing>

—

The End

Image References

Image References

Apostadero, A. (n.d.). [Untitled illustration of the Sink Cafe]. The Tufts Daily.

<https://tuftsdaily.com/news/2021/03/05/the-sink-losing-business-due-to-covid-19-restrictions-has-plans-to-draw-back-customers/>

[Untitled illustration of a target]. Inc.

<https://www.inc.com/marcel-schwantes/science-says-only-8-percent-of-people-actually-achieve-their-goals-here-are-7-things-they-do-differently.html>

@Kilroy79. (n.d.). *Overlap, overlay, intersection, opacity or transparency icon. Black and white color circles with hatching in an intersect area. Adjustable stroke.* Shutterstock.

<https://www.shutterstock.com/search/opacity>

Full document of references here:

https://docs.google.com/document/d/1b77m5Rna1MyBZhCEyfxMAfhm7wn8qQ4EkaqdlS_J52jM/edit?usp=sharing