

# Research

## Research goal

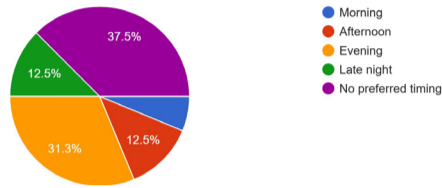
To study how users interact with self-service laundry facilities, identify key usability and service pain points, and explore opportunities to improve efficiency, comfort and overall user experience.

## Target participant groups

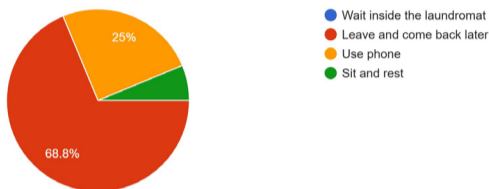
- Target Participant Group 1: Working adults (age: 25-55)
- Target Participant Group 2: Senior citizens (age: 60+)

### Research finding – a. Survey method for Group 1 participant

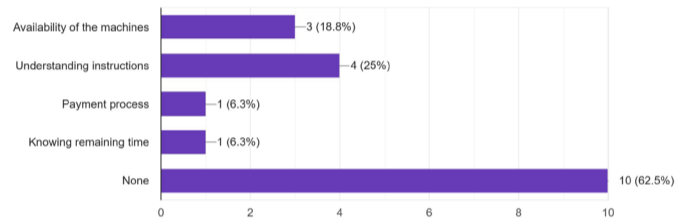
When do you usually visit a self-service laundry?  
16 responses



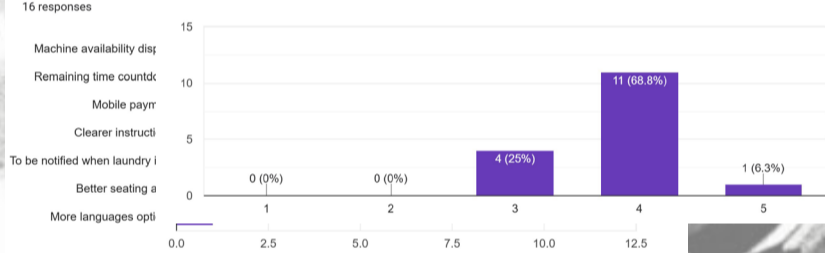
What do you usually do while waiting for your laundry?  
16 responses



Which part(s) of the process do you find difficult or confusing? (You may choose more than one option)  
16 responses



Which features would you like to see? (You may choose more than one option)  
16 responses

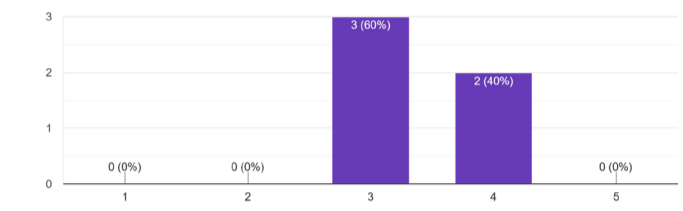


### Research finding – b. Covert Observation method for Group 1 participant

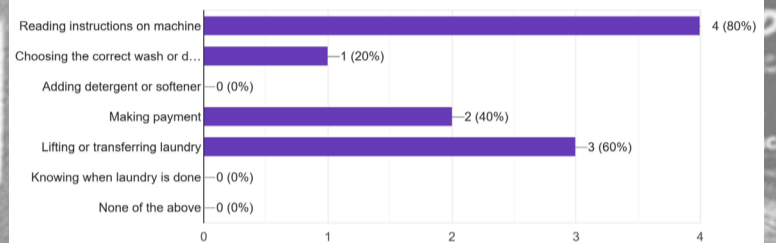
- How do working adults navigate the end-to-end laundry process during time constrained visits?
  - Most users pause to find the available machine and instructions.
- How do users understand and interact with machine controls and instructions without staff assistance?
  - Most users read the step-by-step instruction board before using the machines.
  - They took longer time to decide which extra options they want to use for their laundry.
- How do working adults manage waiting time while their laundry is in progress?
  - Most users leave the self-service laundry facility and come back when the laundry is almost done.
  - One of them came back when their laundry is almost 15 minutes done.
- How do users handle payment at the facility?
  - All of them were able to make payment successfully.
- How do users respond when issues arise? (e.g. machine errors, full machines, missing items)
  - At the time of observation, there was no issue. But there is a step-by-step instruction on what to do in case of emergency. There is also a contact number if there's any inquiry.

### Research finding – c. Survey method for Group 2 participant

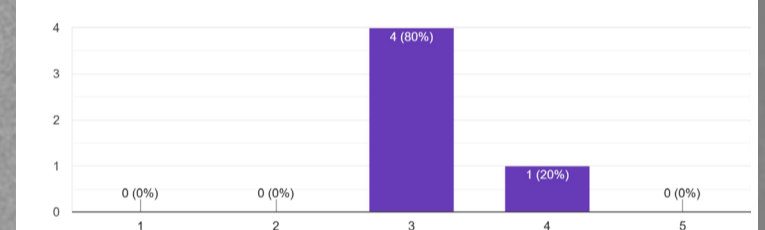
How easy is it for you to understand and operate the washing and drying machines?  
5 responses



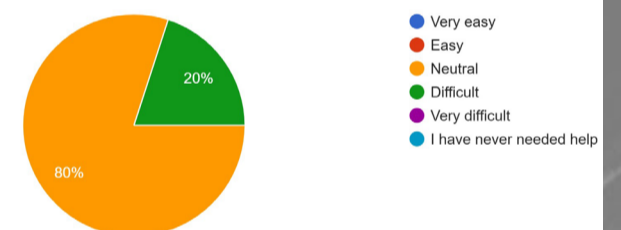
Which part(s) of using the self-service laundry do you find the most challenging? (select all that apply)  
5 responses



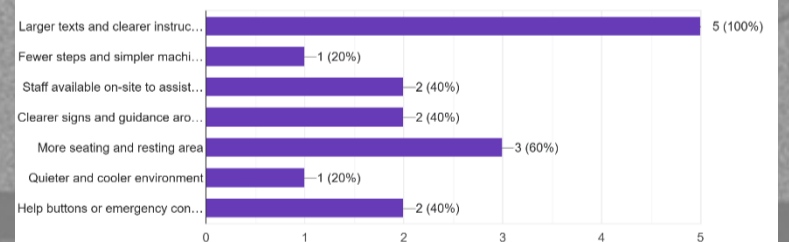
How comfortable do you feel while waiting for your laundry to finish?  
5 responses



When you need help at the laundry facility, how easy is it for you to get assistance?  
5 responses



What improvements would make self-service laundry facilities easier or more comfortable for you to use?  
5 responses



### Research finding – d. Covert Observation method for Group 2 participant

- How do senior users navigate the facility and machines from entry to exit?
  - Most users will look for the available machines at the bottom
- What difficulties do seniors encounter when operating washing and drying machines?
  - Most users have to squint their eyes to read the instructions as the texts are very small
  - They usually go to Kopitiam for coffee
- How do seniors manage time while waiting for laundry cycles to complete?
  - They transfer their laundry load by load in small portions to the nearest dryers
- How do seniors handle physical tasks such as loading, unloading, and transporting laundry?
  - They transfer their laundry load by load in small portions to the nearest dryers
- How do seniors seek help when they encounter problems or uncertainty?
  - They ask other people for help when needed
  - One of them just left the place when they encountered a problem

## Research finding – Core parts of the service business

- Entering the Laundromat**
  - Users stop at the entrance to check the pricing
  - Users usually pause to find the available machine and instructions.
- Using washer and dryer**
  - Users tend to re-read instructions before using the machine.
  - Users tend to squint their eyes in order to read the features of each setting for the washer and dryer
- Payment process**
  - QR code payment (PayNow) is preferred by working adults
  - Senior citizens normally use coins to pay
- Waiting for laundry**
  - Not many seating area for users to rest while waiting, therefore a lot of people leave to run errands before coming back to unload their laundry
  - Those waiting in the laundromat normally spend their time using their phones
- Completion and leaving the Laundromat**
  - Most users will come back before their laundry is done
  - Most users squeeze their laundry inside their bags and leave immediately instead of packing at the packing area

## Research finding – Touchpoints

- Entering the Laundromat**
  - Touchpoints:
    - Instruction board at the top of the wall
    - Locate available machines to wash and dry laundry
    - Screens on washer and dryer to indicate their current status
- Using washer and dryer**
  - Touchpoints:
    - Choose wash settings such as temperature, wash and dry periods and any special washes
- Payment process**
  - Touchpoints:
    - Making payment (PayNow and coins)
- Waiting for laundry**
  - Touchpoints:
    - Multitasking activities (eating, shopping, phone using)
    - Check the progress from machine display
- Completion and leaving the Laundromat**
  - Touchpoints:
    - Transfer clothes to bags/baskets/trolleys
    - Exit laundromat

# Mappings

## Journey map

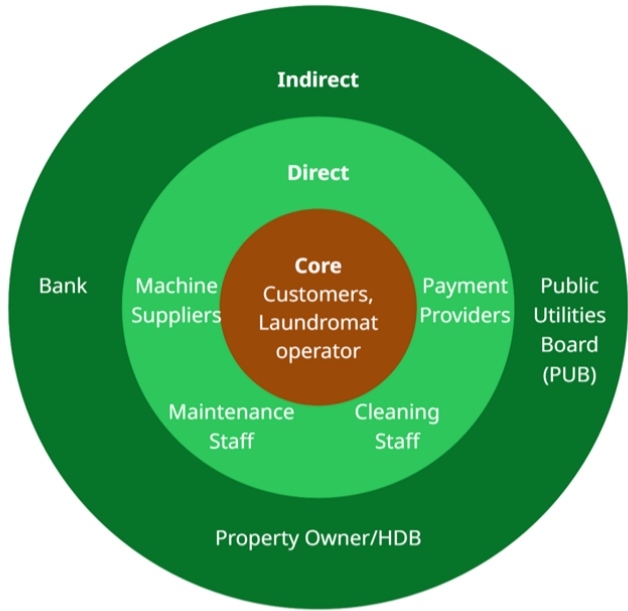
**Persona: Mdm. Goh**  
46 y/o Assistant Manager of a tech company

**Goal**  
Mdm. Goh wants to finish the laundry efficiently and smoothly during the weekend, so she can focus more on her family and personal time.

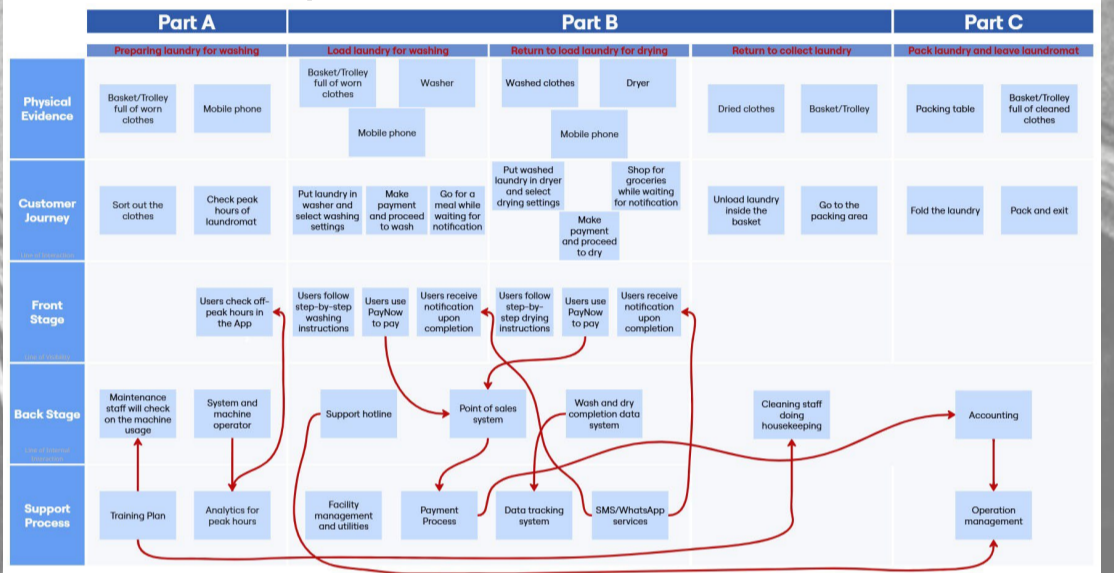
**Scenario:**  
During the weekend, Mdm. Goh does her laundry at the self-service laundromat, uses the waiting time to dine and shop nearby, and depends on the status updates or notifications to return promptly when laundry is ready.

	PRE	DURING			POST	
<b>Timeline</b>	Preparing laundry for washing	Load laundry for washing	Return to load laundry for drying	Return to collect laundry	Pack laundry and leave laundromat	
<b>Touchpoints</b>	Sort out the clothes, Check peak hours of laundromat	Put laundry in washer and select washing settings, Make payment and proceed to wash, Go for a meal while waiting for notification	Put washed laundry in dryer and select drying settings, Make payment and proceed to dry, Shop for groceries while waiting for notification	Unload laundry inside the basket, Go to the packing area	Fold the laundry	Pack and exit
<b>Channels</b>	Laundry basket, Peak hours graph in App	Washer, Washer selection panel, Payflow QR code	Dryer, Dryer selection panel, Payflow QR code	Laundry basket, Packing table	Packing table	Trolley
<b>Thoughts &amp; Emotions</b>	Worried about the laundry basket being full, Frustrated about the long wait time	Relieved that the laundry is being washed, Happy about the meal, Annoyed about the long wait time	Relieved that the laundry is being dried, Happy about the groceries, Annoyed about the long wait time	Relieved that the laundry is ready, Happy about the packing area	Relieved that the laundry is packed, Happy about the trolley	Relieved that the laundry is packed, Happy about the trolley
<b>Opportunities</b>	Online Dashboard to check peak hours	Bigger selection panel	Mobile SMS/WhatsApp	Credit card payment		Longer packing table

## Stakeholder map



## Service blueprint



## Key insights

- Users get frustrated when machines, payments, or notifications fail, hence it is important for these things to operate smoothly.
- Clear updates and timely notifications let users leave and run their errands while their laundry is washing and drying, so that they can manage their time efficiently.
- Users can check when the laundromat is busiest so they can avoid long waits, plan their visits more efficiently, and do their laundry without stress.

## Frame/Reframe How Might We statement

- How might we make the machines easy to use so anyone can start their laundry without hesitation or confusion?
- How might we let users know exactly when their laundry will be done so they can leave and return without worry?
- How might we make waiting time feel useful and comfortable for users when they are running errands or grabbing a meal?
- How might we help users see patterns of peak and off-peak hours to better plan their visit to the laundromat?

## Ideation outcomes

Ideation Outcomes:

- **Users can check the off-peak hours in the app**, so they can do their laundry when the laundromat is not crowded to prevent long waits and frustrations.
- **Users will receive notifications when their laundry is done**, so they can run their errands while their laundry is being washed/dried.

## Idea to test

Ideas Generated:

- Mobile laundromat app – Users can check off-peak hours proceeding to the laundromat for their service.
- SMS Notification – Users have the choice to get notified when their laundry is done. They can key in their contact numbers before they proceed to payment.

## Service prototyping – Overview Map

