

# Smart Mirror

Redesigning shopping experience

## Final Project Report

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## Context

Whenever we go cloth shopping alone or with someone, there are few inconveniences we face like lack of information on the product variation and availability, having to carry a lot of items to the trial room, or having to making multiple trips to trial room.

We realized that the **retail shopping experience** has a lot of space for improvement towards being user centric and efficient.

So our **customer segment** here are the cloth shoppers who visit the physical store.

## Research

### Primary Research - User Interviews

For us to analyze the current scenario of retail shopping experience in physical stores we needed to talk to the users to learn in detail about the our speculation of their pain points and experience in general.

We chose interview as the medium of research to answer the questions we had related to different aspects of the shopping experience. Our interview consisted of 4 participants.

#### Our interview questions:

What kind of a shopper are you? Impulsive, Cost oriented, Preplanned

What are the things that attract your attention towards a retail cloth store?

What is the first thing you look for when you get into the store?

What are the problems you face while browsing items?

How often do you request for help from the staff and what are the reasons?

Do you take cloth for trial before purchasing?

What are the inconveniences that you faced in the trial room?

What aspects of online shopping do you miss in physical stores?

# Secondary Research - Literary Review

## Literary Review

To understand the current state of technology and service available to work with, we started our process of gathering information from various sources to get familiar with the context.

Our sources of research as follow,

Building a Better Shopping Experience

<https://www.nurun.com/en/our-thinking/future-of-retail/building-a-better-shopping-experience/>

Transforming The Shopping Experience

<http://www.cmo.com/features/articles/2017/7/27/5-ways-retailers-can-transform-the-shopping-experience.html#gs.vfwajg4>

The Elements Of A Great Shopping Experience

<https://www.forbes.com/2009/07/13/retail-customer-service-entrepreneurs-sales-marketing-wharton.html#7f76988221ab>

Experience as a differentiating factor

<http://marketing-sciences.com/importance-store-environment-work-harder/>

Forecast of shopping landscape

<http://www.bbc.com/capital/story/20171123-why-shopping-is-about-to-become-all-about-the-experience>

Sales correlation with experience

<https://www.retaildive.com/ex/mobilecommercedaily/new-in-store-shopping-experience-how-retailers-can-drive-sales-with-apps>

## Research Insights

Irrespective of the kind of shopper the participant seem to be attracted towards a store with discounts and sale on display. A range of activities that a shopper could do is influenced by the arrangement of the cloth sections and ease of navigation within the store.

For most of the participants the lack of information about the product seem to be an inconvenience while looking for clothes. Lack of staff to help with the querience was a concern.

The lack of trial rooms cause long ques. Multiple trips to the trial room due to incorrect size or style of the garment. Which adds to the time taken in the que at the checkout counter.

A common expectation from participants was the inability to check the reviews of the products in the physical stores.

We also realized that it's now time for retailers to bring the online and in-store shopping experiences together. We should create seamless experiences that connect touch points between desktop, mobile, and in-store engagements.

# Problem Synthesis

After gathering insights from user interviews and secondary research we needed to make sense of the all the information we gathered. We started by mapping various pain points that was gathered to various stages of the retail shopping experience.

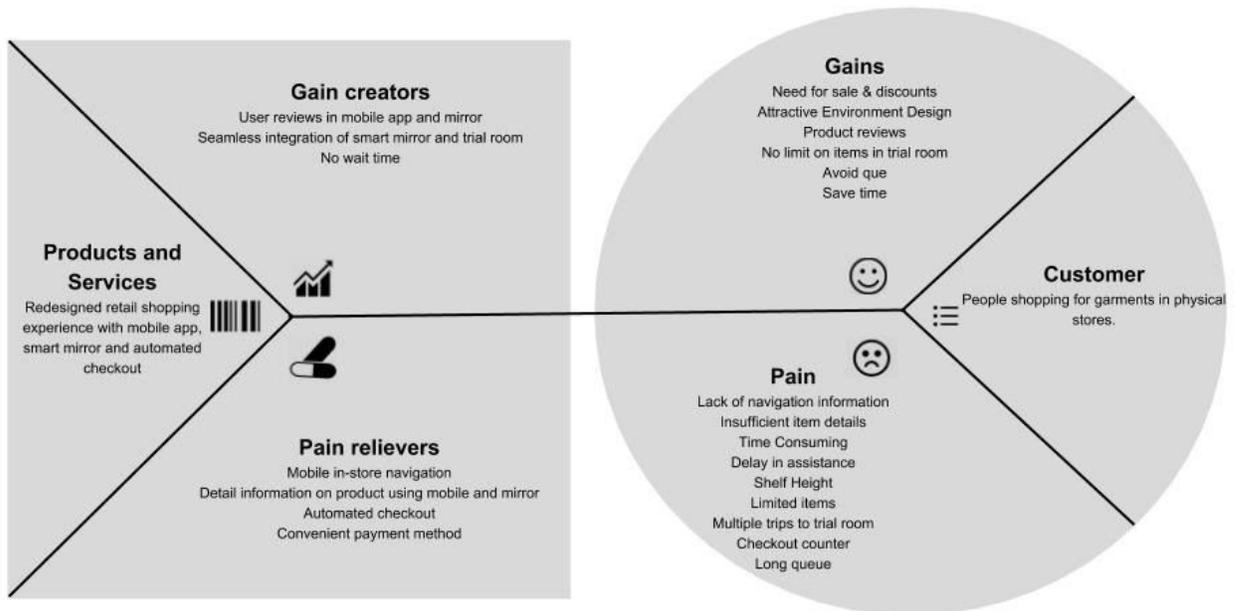


# Ideation

We started our ideation phase by brainstorming for various solutions that could fit in at different stages of the retail shopping experience. We used affinity diagramming to categorize key points from various solutions our team came up with. The initial ideation was represented in the form of rough sketches.

[ROUGH SKETCHES HERE]





## User Journey

Making sure to keep in mind the user's perspective while deciding the solution to go with, we designed a few storyboards based on our solution representing user journey through different phases of the retail shopping experience.

Each storyboard explored various ways in which shoppers can go through the shopping process. The scenarios were a combination of including a mobile app, excluding mobile app, using the smart mirror, skipping the smart mirror, etc.

Consolidated storyboard



## Physical Prototype

We start our prototyping with paper given how disposable it is, it enabled us to perform quick modification and easy user testing of preliminary concept for the service solution.

[PAPER SCREENS HERE]

## User Testing & Feedback

[questions & answers]

## Wireframing

We start our prototyping with paper given how disposable it is, it enabled us to perform quick modification and easy user testing of preliminary concept for the service solution.

[WIREFRAMES HERE]

## User Testing & Feedback

[cognitive walkthrough, questions & answers]

## High Fidelity Prototype

We start our prototyping with paper given how disposable it is, it enabled us to perform quick modification and easy user testing of preliminary concept for the service solution.

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## User Testing & Feedback

[questions & answers]

## Future Recommendations

Adding the ability to share photos or short video clips with friends to get their opinion on the garment while trying out in front of the mirror. Ability to simultaneously see and compare trial videos of previously tried products. Extensive testing of physical prototype specifically for ergonomics. Research on usability of robot assistant to fetch items to try on in the trial room and deliver packed items to checkout kiosk. Researched more on alternative method of input for the smart mirror to improve ease of use and learnability. Finally work on developing a functional physical prototype using Raspberry Pi and Airbar.