



Inclusive Design Movement

- The Dream Team



Welcome to our universal design toolkit. We offer these guidelines as simple starting points for meaningful change.

Our goal is not to establish a sense of universal principles. It is simply to reflect on our own design process in implementing an inclusive solution at Starbucks.

We believe that through awareness and an understanding the process, you can design with our strategies as simple starting points towards an inclusive world.

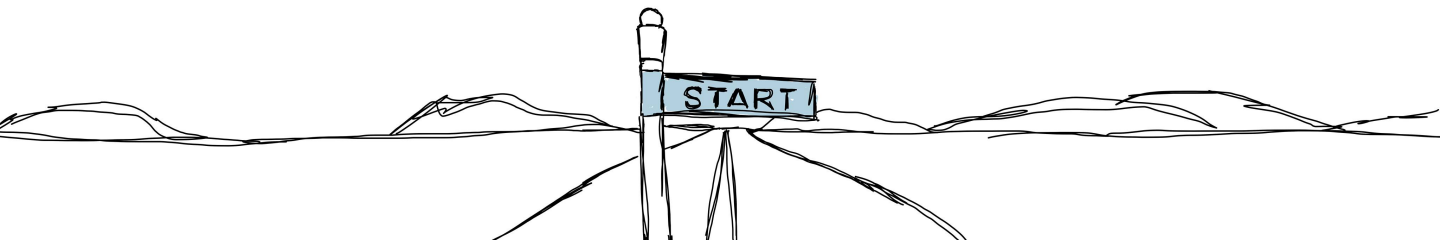
-Dream Design Team

This is not a template. It is a starting point.

We as designers have a responsibility to be able to make our product, as well as our process, accessible to a general public. To do so, we created this toolkit to help story tell our design intervention.

Over time, design has evolved, from an esoteric field, where expertise was necessary, to one that “no longer understands itself through the classes of artifacts it produces”. We believe good research should be accessible and understandable in order to inspire innovative change

Care and Capacities of Human-Centered Design
by Ian Hargraves



Who are we?

We are The Dream Design Team, a group of Master's students that study Digital Media at Georgia Tech.

Our goal is to use the power of design to conceive, plan and realize all products that serve all human purposes.

We believe creativity is about finding connections we didn't realize existed before.

Our research allowed us to slowly begin to uncover information from the various fields of knowledge



Critical Thinking

We are creating, but we must remain critical.

We approach design from various lenses that inherently skew the data we come back with. We are limited by our senses in our capacity to collect information therefore we look at the world with biased and impartial lenses.

Criticism is a social process. Over the months of our research, only by critiquing ourselves and hearing critiques from others were we able to delve deeper into the problem space. While we are designing for everyone, our goal is to avoid stigmatization and stereotyping.

"The Peculiar Logic of Evaluative Criticism" The Rhetoric of Fiction, William Booth
Inclusive Design: Cultivating Accountability toward the Intersections of Race, Aging, and Disability. Aimi Hamraee



~~Exclusive~~ Inclusive Design Approach

If we can identify the extreme cases of mismatched human interaction and solve for those, it can be extended to many.

According to Microsoft's Inclusive Design, designing for someone with a permanent disability, benefits someone with a situational limitation.

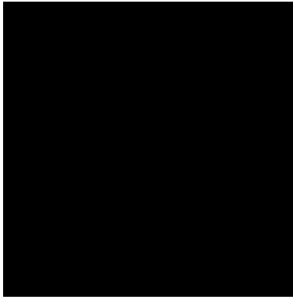
Designing with extreme forms of inaccessibility in mind is taking a step towards an inclusive world.

Designing for Starbucks



This project involves the design of the Starbucks coffee shops. Through hours of observations, interviews, and participation , we initiated our research by trying to understand the environment, and the people in it.

We want to study the user's interaction with the product and service to identify **mismatched interactions**. We wanted to put people in the center from the start of the design process.



**But in doing that, who
are we excluding?**

Who doesn't go to Starbucks? We cannot stick to what's inside the box of the realm of Starbucks. We must think outside it. We must learn from diversity. Who is outside the box? People with disabilities could not access this restaurant.

First, let's look at Microsoft's definition of disability

Disability



Personal
Health
Condition

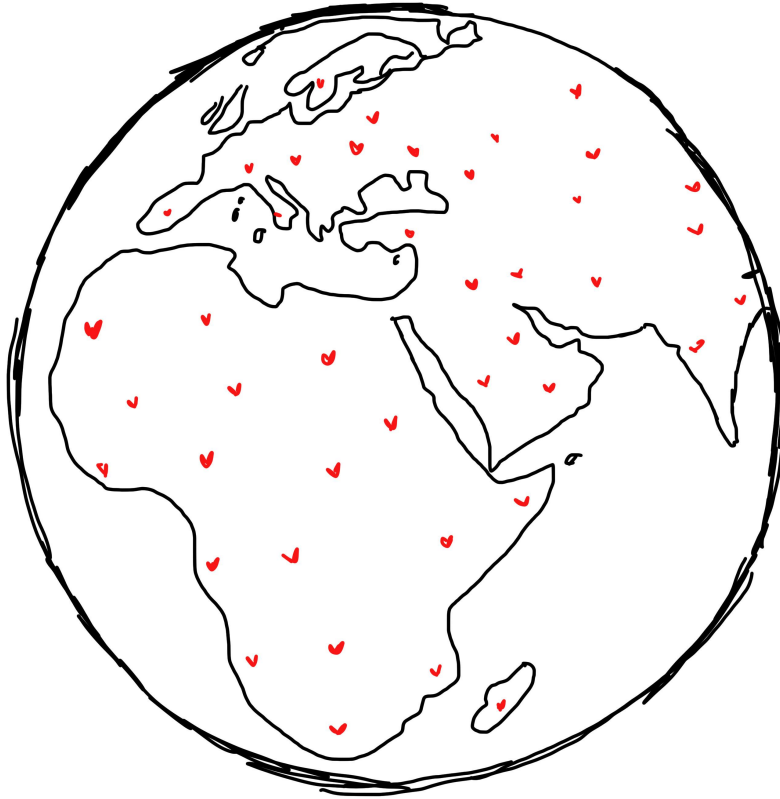
Everyone has different kinds of problems/disabilities. We don't want to stigmatize this group by solely considering people with health conditions.

Disability



Mismatched
Human
Interactions

"As soon as there is a misunderstanding (mismatched human interaction), problems arise. That is where good design is essential." Don Norman



By understanding the lessons we learned from our process, we hope you can consider a new approach to exploring mismatched human interactions. In designing for extremities, we can all design more inclusively

1

■ Start your problem framing



For our project, we are trying to **improve** the Starbucks experience for **everyone** involved in the experience of the line.

improve?

First, how do you define **everyone**? Don't just look at the users visibly in your space. Explore potential users who are invisible. Who's being excluded?

everyone?

What does improve really mean? Will the improvement only target one group and exclude another?

2.

Deconstruct elements of the environment you're exploring

Break down the space. Zoom in and zoom out.

100 Brainstormed ideas we explored

User research
Data collection
Interviews
Observation
Miscommunication?
Logistic approach
User Centered design
Unit of analysis
Multitasking
Problem finding
Design Methods
Constant variable
Transition space
Ergonomic analysis
Language barriers

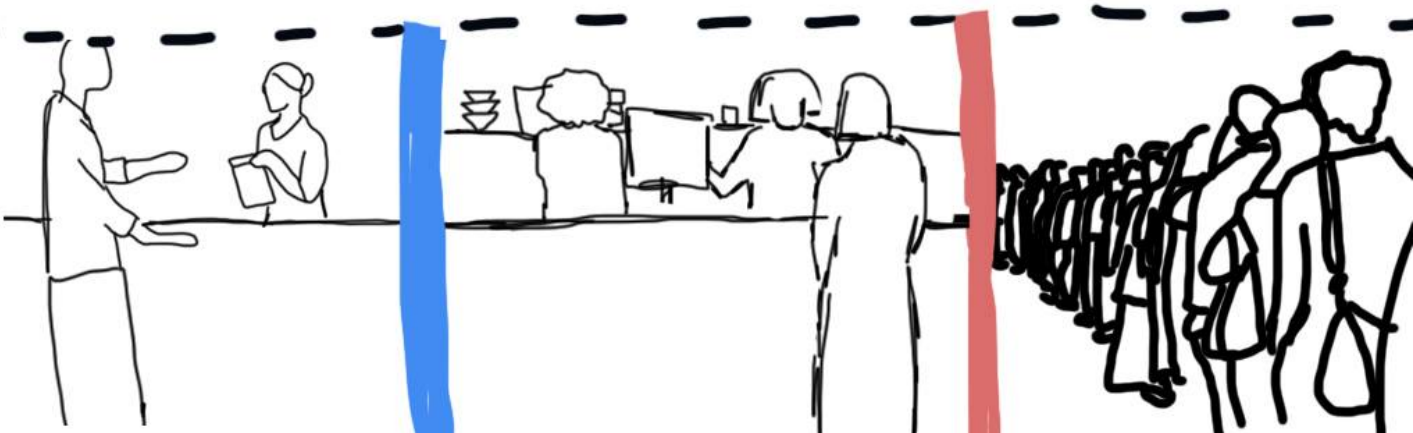
Ordering Process.
Attentive looking.
Transition spaces.
Data collection.
Ethnographic studies.
Miscommunication?
Tired staff? Stress?
Human Dignity
Stressful busy hours
Task analysis
Scheduling
Journey Mapping
Waiting in the line
Difficulty ordering
Visually impaired

Reflection
Human
Experience
Empathy
User Needs
Exclusion
Disabilities
Criticism
Reflection
Artifacts
Policy & system
Influence change
Study spaces.
Stigmatize
Communities

Deconstructing the line

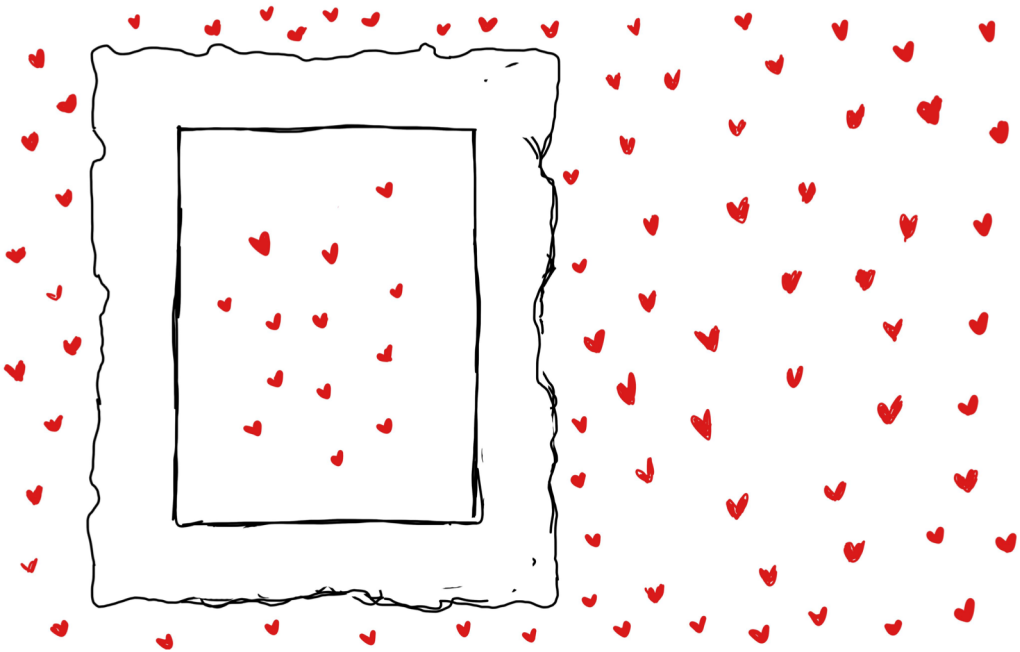
How did we approach this at Starbucks? We took the line and **deconstructed it into its micro interactions** with each step.

Our interviews weren't limited to just the customers. Inclusivity means asking everyone in the space including the staff behind the counters.



3.

Rethink your current framework.



Think outside the predefined framework. Change your point of view. See it differently. Who is visible? Who is invisible?

4

■ Identify the mismatch between the current services and needs

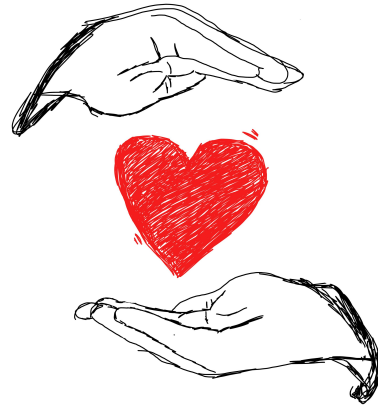
1. Understand the inner workings of the context



2. Understand people's behaviors, thoughts, emotions and feelings while they are in the context.

5. Rethink your current framework.

Investigate problems and empathize with their needs



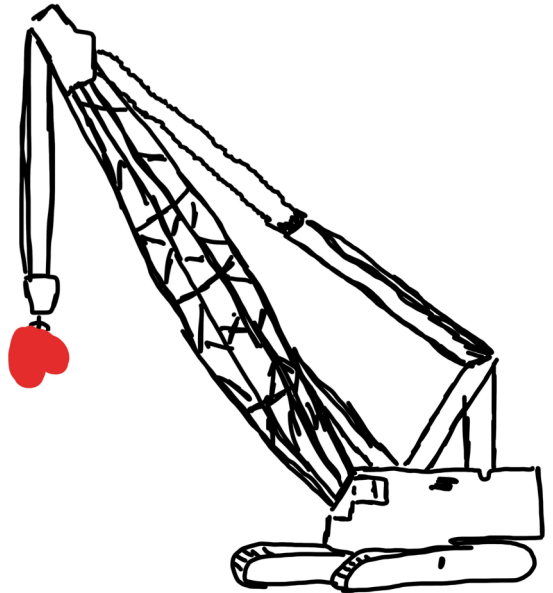
“Experience at its core is concerned with human life and living, and design's participation in its honoring, cultivation, shaping and reshaping.” (Hargraves)

Only once we placed ourselves in the shoes of participants, rather than merely observing from a distance, we were able to truly understand their frustrations.

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■ Reconstruct based on findings

Develop a new framework for those users you want to welcome into the space again based on those gaps



Stay considerate in your reconstruction

Think about how many people you want your product to benefit. Consider how designing for someone with a permanent disability can also benefit someone with a situational limitation.

At Starbucks, we walked through the line with our friend Ryan. His wheelchair couldn't fit in the space, staff had a hard time hearing him, and he wasn't about to hold the hot Starbucks cup. If we can solve for those problems, could we benefit everyone else too?



One arm



Permanent **26K**



Arm injury



Temporary **13M**



New parent



Situational **8M**

Total: **21M+**

7.

Stay considerate in your reconstruction

From our observations, we classified the problems faced by customers at Starbucks into these 4 categories. They overlap with the four classes of inaccessibility outlined by Apple Accessibility experts. If you want to be inclusive, within these categories, consider individuals all have abilities and limits to those abilities



Speech



Motor



Vision















Hearing

Looking closer

When we zoom into those 4 categories of disability, we can identify user segments that face problems on a situational, temporary or permanent level.

Microsoft Inclusive Design Toolkit

	Permanent	Temporary	Situational
Touch	 One arm	 Arm injury	 New parent
See	 Blind	 Cataract	 Distracted driver
Hear	 Deaf	 Ear infection	 Bartender
Speak	 Non-verbal	 Laryngitis	 Heavy accent

By studying the range in extremity within these classes within the Starbucks environment, we found several insights. Our goal was then to design a solution that considers these various barriers to scale a solution to a broader audience. By deconstructing the scenarios and reconstructing them within these frameworks

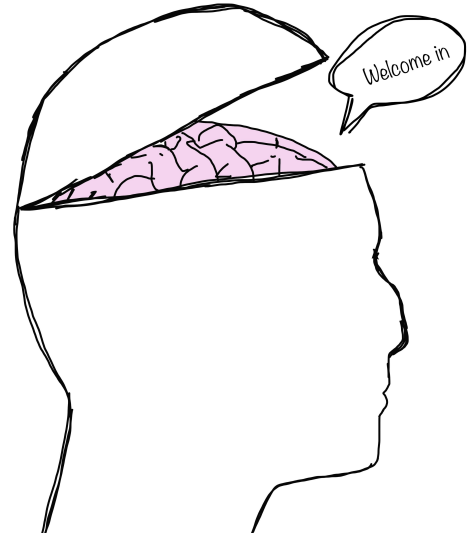
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■ Design with care & respect.

Find a balance between providing care and stigmatizing. Consider those who don't have a voice. Help them despite the fact that they don't ask.



9 ■ Stay open minded.



Take into consideration diverse perspectives and varying perceptions

While our approach aims to broaden the lens through which conducted research, we realize that there are several factors beyond our scope of perception that we didn't account for. We want to stay open minded to new perspectives and incorporate criticism into our design.

One of these excluded factors were that our disability studies failed "to engage issues of race and ethnicity in a substantive capacity, thereby entrenching whiteness as its constitutive underpinning". Aimi Hamraee.



As designers, it's our responsibility to understand the power of the interactions we design for people. We design to embrace the things that make us human. It's what drives us to create a world that makes lives better. The result is technology that's inclusive.

- Microsoft Inclusive Design