Accessible Kiosk Design for TD Bank: Case Study by Nour Mokdad

Note: This will eventually be published on my web portfolio. I wanted to use this time to focus more on the content over the design of the site, so a final portfolio will be presented as more of the project is completed.

Role: Team Lead, User Experience and Interface Designer, Visual Designer, Prototyping and Usability Testing.

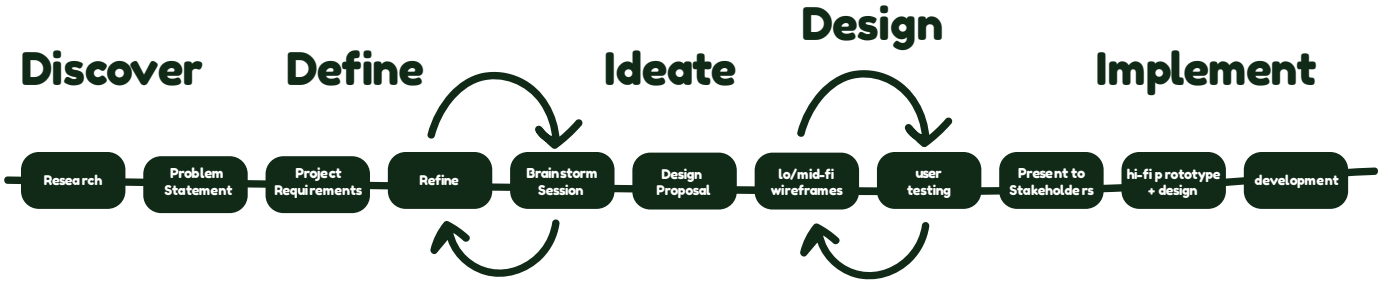
Timeline: Sept 2020 - Ongoing

Project Description: The client, TD Bank, is looking to understand and potentially develop a Triaging Interface for their customers, while keeping in mind the needs of PWD (persons with disabilities). This digital interface could be anything between a mobile app to a kiosk and would be used by customers when entering the branch to determine what to do next/where to go/who to see, based on their banking need.

Goal: Design and implement an *accessible* queueing system, to be used by TD Bank customers when entering a branch, focusing especially on making it accessible to PWD.

The Design Process:
This multidisciplinary team consisted of three User Experience Designers/Researchers and three Engineering students: industrial, computer, and software. Due part to the diversity of the team and our differing knowledge in the design process, the process used in this project is a mixture of traditionally engineering and UX design principles.

We divided the process into five main steps: discover, define, ideate, design, and implement, illustrated by the diagram below. The arrows demonstrate an iterative process.



Phase 1: Discover

In this stage, the team set out to understand the scope of the problem, previous solutions, and reasons why they may have failed. This was done through primary and secondary research, interviewing stakeholders, and a competitor analysis to investigate queueing systems that are currently in use and their accessibility gaps.

For some context, TD's initial inspiration behind a queueing system was to improve the customer experience at TD locations across North America. The client revealed that they had previously implemented a kiosk that queued incoming customers and directed them to the appropriate representative for their banking needs, but this system was later removed.

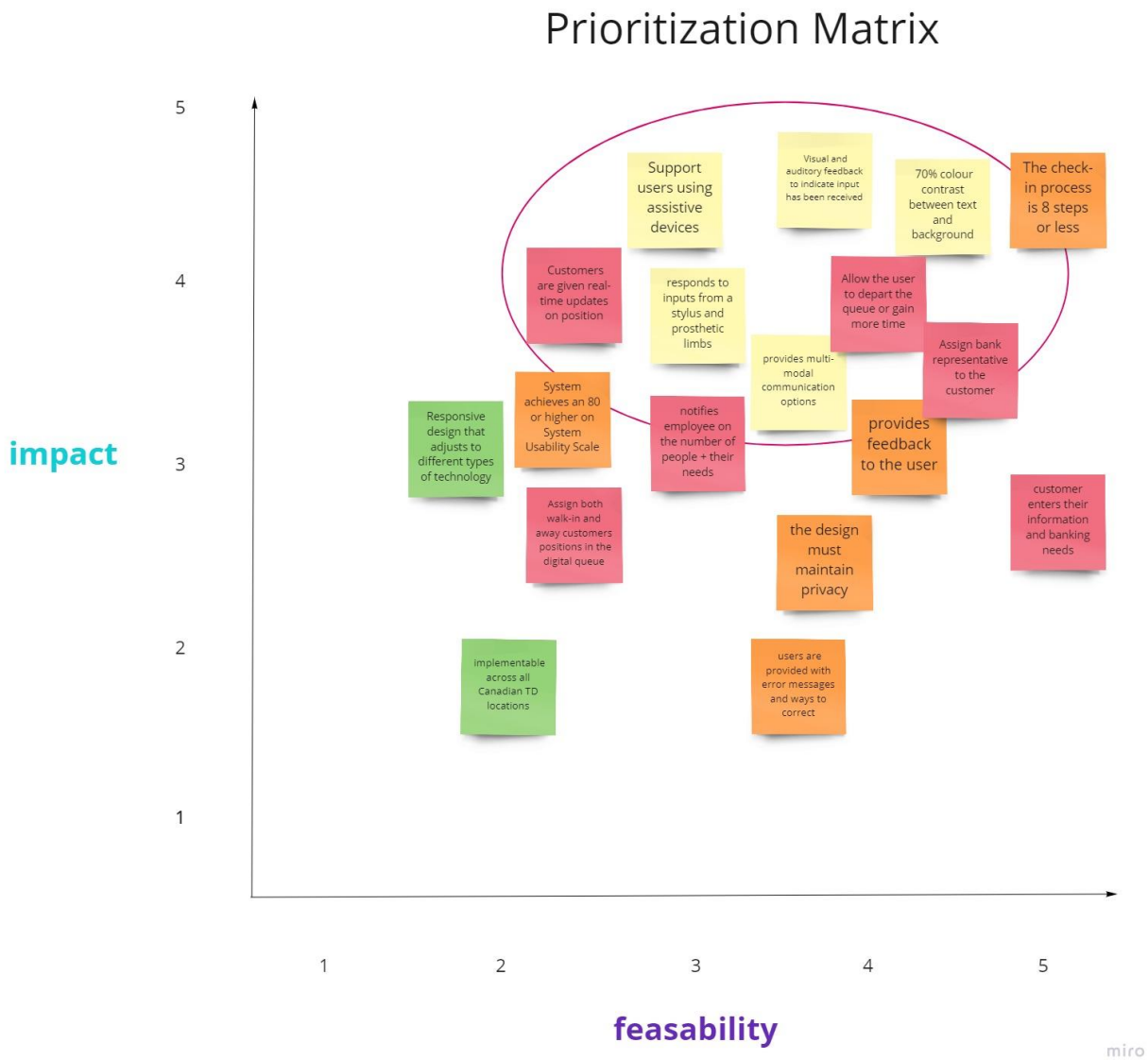
Why? The design neglected persons with disabilities.

The oversight for persons with disabilities made it clear that this user group should and will be the focal point of our design.

Phase 2: Define

Post research, we defined the problem as the lack of accessibility accommodations in digital interfaces and physical self-service kiosks for persons with disabilities, and this stands true for systems beyond TD's attempts. Most kiosk services currently in use treat accessibility as more of an afterthought, so we committed to approach this project differently.

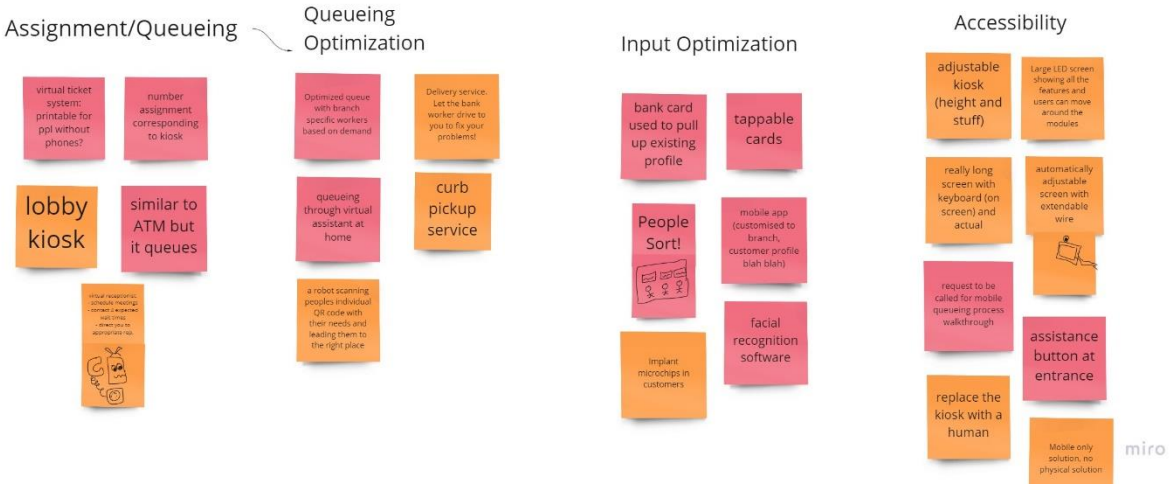
With this information, we defined the functions and objectives that this design will abide by, and I created a prioritization matrix to determine which will be at the forefront of our design. The team used each of their individual expertise to rank the feasibility and impact of each objective.



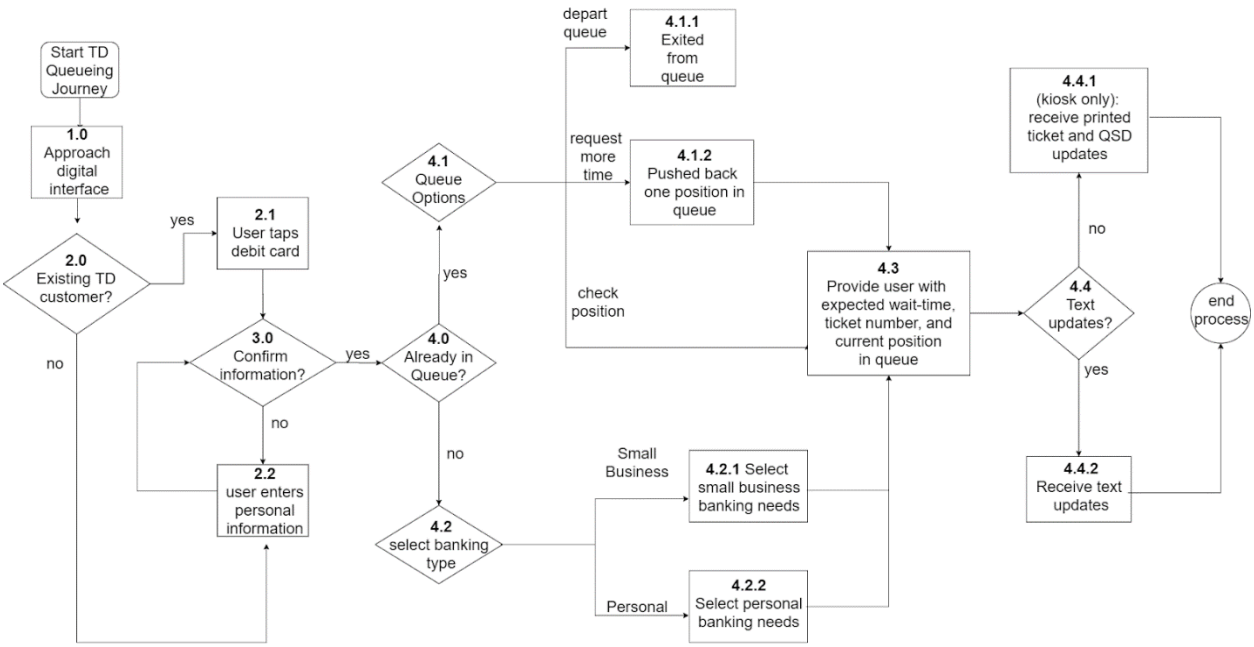
Phase 3: Ideate

This stage in the process was especially exciting as every member on our diverse team was given the chance to exercise their individual creativity and expertise. The team diverged and we assigned each member with the task of generating four random design solutions, to be completed prior to our next meeting. These ideas were produced based off all the research we did up to that point, and the functions/objectives previously defined. Ridiculous, infeasible ideas were encouraged as even the most impossible suggestion may reveal significant themes.

The next day, the team converged and organized all our ideas into common themes that formed the basis of our design.



The Solution: After eliminating the most infeasible ideas, iterating on potential design solutions and alternatives, weighing these designs against each other on how well they each meet the functions and objectives, and ongoing discussion with our client and supervisor, the team decided on the following design solution. The following diagram demonstrates the flow of the central design:



What sets this design apart from pre-existing designs is its tapping capability! There are a lot of assumptions that we *cannot* making about TD Bank customers, but the one assumption that we can make is that existing users own a debit/credit card! We wanted to create the simplest process possible that would not add a burden to a customer's banking experience, and so, we designed a system that requires as little input possible from the user and works simply by a tap of their card.

Phase 4: Implementation

TO BE CONTINUED