Project Deliverable # B: Need Identification

Introduction to Product Development and Management for Engineers

GNG 2101C

 Faculty of Engineering

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**Group :** C03 Cafeteria Access

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For people with temporary and permanent physical disabilities, accessibility is a growing issue that our society is continuously attempting to resolve. From a closer to home perspective, although the University of Ottawa does have an accessible campus there are still multiple issues surrounding accessibility and creating a truly barrier free campus. For our cafeteria access project, we had the opportunity to meet, and interview our client, the head of accessibility for the university of Ottawa campus; Marie-Claude.

Previous to interviewing our client we had created a well designed list of questions and possible topics to discuss. Although we were all a bit nervous, we were all also very eager to gain information, and hear the opinions and emotions of someone with mobility issues in the cafeteria, or with someone that works hand in hand with them. Our client was extremely knowledgable on the problems with accessibility within the cafeteria. She was also able to act as a medium between us and the many patrons of the cafeteria that have permanent and temporary physical disabilities, as she has spoken to many of them and heard their complaints and concerns.

The first issue she spoke to us about was about people not being able to carry plates and cups if they had a physical disability. Even with the addition of new trays, an issue still exists for people who; are using crutches, are on wheelchair, and in a more general sense are unable to use their hands to carry food. She explained that out of all the issues and problems resulting from limited accessibility in the cafeteria this was the one that affected the most amount of people. Another problem that the 24/7 cafeteria has is the fact that there aren’t any low enough outlets for people with electrical chairs to use. Although this may seem like such a simple affair, people with electrical chairs may need some place to recharge their chairs while they are in the middle of their school day, and if they haven’t charged their chair overnight there is a possibility of their chair running out of power midway through the day.

Next our client discussed the problems of the overall layout of the cafeteria having many machines and food products too high up for people who are in wheelchairs or too short to reach. A few examples Marie-Claude gave us were; the espresso machine, the cream/milk machine, and the condiments, all being too high for people in wheelchairs or people of limited height to reach. Although the issues of the condiments were solved by creating another lower table for the condiments to be placed, the machines are currently still too high. This problem could be address through two ways. Either it be through addressing the height of the tables (lowering and lifting of tables), or a way for patrons of the cafeteria to use the machinery from their lowered height.

Our client also spoke to us about the issues surrounding people who have problems being able to feed themselves. Although there are staff within the cafeteria who are able to feed them, this can still be very embarrassing (to be feed by someone else in public). Ultimately,

there is a need for to create some sort of privacy between the cafeteria and the person being fed. Below is the list of needs statement concluded from our client meeting:

## Customer Needs

|  |  |  |  |
| --- | --- | --- | --- |
| ***#*** | ***Component*** | ***Description of Needs*** | ***Imp.*** |
| 1 | The user | Is able to access the coffee machine without difficulty (ex. Push the buttons easily) | 3 |
| 2 | The user | Is able to carry food when using strollers | 5 |
| 3 | The user | Is able to carry food when using crutches | 5 |
| 4 | The user on a wheelchair | Is able to carry food while using a wheelchair | 5 |
| 5 | The user  | Is able to feed himself/herself without difficulty | 4 |
| 6 | The user | Is able to charge the motorized wheelchair easily | 4 |
| 7 | The user | Is able to eat in a comfortable position (ex. Standing or sitting) | 4 |
| 8 | The user | Is able to eat food without feeling embarrassed (happens when others are helping with feeding) | 4 |
| 9 | The user | Is able to commute to the cafeteria easily | 5 |
| 10 | The staff | Number for accessible people need to be re-administered | 5 |
| 11 | The user | Is able to eat food in private | 3 |
| 12 | The user | Is able to afford any helping device | 4 |
| 13 | The user in a wheelchair | Is able to interact with devices that are out of their hands reach | 4 |