

MU Kiosk – Usability Test Results

Methods

We recruited six test subjects from a pool of survey respondents who expressed an interest in participating in our test. The subjects were asked to perform three tasks using the kiosk within a hypothetical scenario. They were encouraged to use the entire kiosk, not just the touch-screen.

Task 1: Locate the Media Union building hours.

Task 2: Locate Michele Bejian’s phone number and simulate calling her using the kiosk phone.

Task 3: Locate the Technology Assessment Lab.

Task 3B: Walk to it’s actual location within the building.

Two team members conducted the tests. One operated the video camera and took notes while the other administered the test. The video was then transcribed and questionnaires were compiled.

Results

Subject		Task 1			Task 2			Task 3			Task 3B	
		screens	time	success	screens	time	success	screens	time	success	time	success
Staff	2	9	2m 13s	N	4	14s	Y	4	27s	Y	2m20s	N
	5	13	92s	Y	5	14s	Y	15	54s	Y	1m	Y
	6	3	34s	Y	7	58s	Y	1	37s	Y	1m	Y
Student	1	10	1m 48s	N	3	11s	Y	10	1m 8s	Y	2m	N
	3	4	18s	Y	3	28s	Y	4	51s	Y	2m	N
	4	3	45s	Y	3	33s	Y	18	2m 32s	Y	2m	Y
Average		7	1m 11s	4/6	4	26s	6/6	9	1m 4s	6/6	1m 43s	3/6
Bench		3	5s		4	26s		4	17s		1m 10s	

Average percentage of successful clicks: 69%

Used maps for Task 3: 5/6

Conclusions

We identified three major problem areas with the usability of the kiosk. Using Rubin’s Criticality measurement (Severity + Frequency), we prioritized the problems to assist us in developing recommendations.

Physical Interaction

The first issue is with the physical interaction with the touch-screen. The primary culprit is the uncalibrated touch-screen. The cursor is about half an inch northeast from the users finger, making it difficult for the users to align their finger with the intended target. The secondary culprit is the lack of

feedback from a clicked item. This resulted in an average 31% of clicks requiring two, three, or four tries before a successful page load.

$$\text{Criticality} = \text{Severity (3)} + \text{Frequency (2)} = \mathbf{5}$$

Information Architecture and Vocabulary

Only four of the six subjects could successfully locate the building hours. Of those successful, the average time of 47 seconds was well below the benchmark of 5 seconds. This task was of comparable difficulty to the second task of finding a phone number, which all six completed successfully with an average time equal to the benchmark of 26 seconds. An explanation lies in the vocabulary of the main menu headings. The phone directory is found under *People*, which users had no problem finding. Building Hours is found under *Things*, which eluded most of the subjects. Even for those who successfully completed Task 1, *Things* was chosen by process of elimination after two or three other tries.

$$\text{Criticality} = \text{Severity (3)} + \text{Frequency (3)} = \mathbf{6}$$

Readability and Accuracy of Content

Locating the Technology Assessment Lab proved difficult for half of the subjects. All of the subjects were able to find the Lab under *Places: Labs & Studios*. However, there is no link to the corresponding map location and the only room number given is 1321, the office of the Usability Specialist. Half of the subjects went to room 1321, thinking it was the Technology Assessment Lab. The other three subjects were able to successfully locate and walk to one of the Lab's three entrances. Two of the successful subjects went to the first door they found, which was locked. It should be noted, two of the successful subjects for Task 3b are Media Union staff who possess prior knowledge of the building.

$$\text{Criticality} = \text{Severity (3)} + \text{Frequency (4)} = \mathbf{7}$$