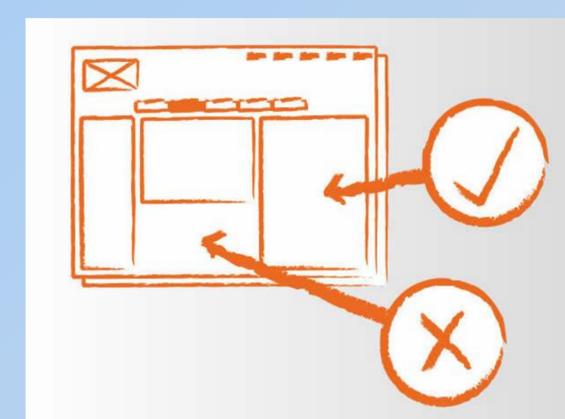


Crowdsourcing for Usability: A Usability Test of the iSchool Website

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Abstract:

Usability plays an important roll in the designing and maintaining process of a website. But performing usability tests can be very expensive and time consuming. Crowdsourcing platforms such as Amazon Mechanical Turk provide a large number of workers for low time and monetary costs. Here we did a usability test on the iSchool website in both lab settings and on crowdsourcing platform. From comparing the results from both parts, we did find crowdsourcing can be a good tool for usability testing. But we also found that there are several limitations with crowdsourced usability tests.

Introduction:

Usability tests of websites or products are often done in lab settings. But that is both expensive and time consuming. So here want to find an alternative way to do usability test.

My focuses here are:

- Can crowd workers perform usability tests?
- What kinds of tasks would be best for crowdsourcing usability tests?
- Will workers be willing to give substantial feedbacks?
- How good are the results comparing to lab usability tests?

Methodology:

A Two-Part Usability Test

Part One - Lab Usability Test:

Participants in part one were 5 current students.

They all had experience with the iSchool website.

They were asked to do 5 tasks on the website.

Their interaction with the website was monitored and recorded. And they were asked to think out loud when they do the tasks.

They were asked a set of open-ended questions after they done the tasks.

And no compensation was offered to them.

Part Two – Crowdsourcing Usability Test:

Participants in part two were 55 crowd workers recruited from Amazon Mechanical Turk through CrowdFlower.

14 of them were identified as spammers and their results were screened out.

None of them had any previous experience with the iSchool website.

They were asked to do 4 tasks on the website.

Their interaction with the website was not in anyway monitored or recorded. But they were asked to record and report the time they used on each task.

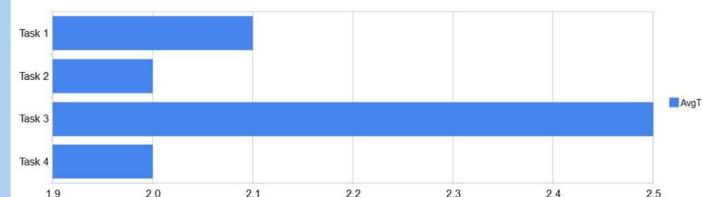
They were asked the same set of questions after they done the tasks.

They were each offered \$0.40 for completing the test.

Results:

Accuracy: Surprisingly, crowd workers did a pretty good job performing the information seeking tasks. Among 41 participants, the overall accurate rate was 97%. Most of them were able to find the information or the webpage we asked.

Time on Task: We also asked workers to report the time they spent on each task.



One interesting thing to note is that some of the time on task reported by workers are not accurate. One worker reported that he/she spent 5, 8, 5, 15minutes on each of the four tasks, while he/she finished the whole survey in 23 minutes.

Open-ended Questions: Crowdsourcing workers are paid by task rather than time they worked. So most crowd workers tend to get a task done as soon as they can and move on to the next task in order to make the most money. As a result, most of them would not give much feed back for the open-ended questions. Answers less than three words such as “none”, “great website”, “nothing in particular” accounted for about one third of the total open-ended questions’ responses. But some participants gave very detailed and substantial feedback.

Conclusion:

From analyzing the data we collected from crowdsourcing usability tests and comparing them to lab usability results, we found that usability test can be done on crowdsourcing platforms. There are both advantages and disadvantages for doing them this way:

Advantages:

- More data: Recruiting crowdsourcing participants is much easier than asking participants to come to the lab.
- High speed: A usability test involving 50 participants can be done in hours.
- Low cost: Average hourly rate for crowd workers is only about 2 dollars.
- Variety of backgrounds: Crowd workers are from all over the world.

Disadvantages:

- Low quality: Crowd workers are much less engaged in to the test than lab participants.
- Less interaction: Tester can not interact with workers when they do the test.
- Less feed back: Crowd workers
- Spammers: There are always spammers who want to cheat the system in order to get paid without doing the tasks.

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