Wisdom of Crowds

Experts versus the crowd in usability research

While experts undoubtedly bring a valuable skillset to the table, the uncanny ability of large crowds to reach truth and precision through aggregation has important implications for your UX research strategies.
Experts or the crowd?

It’s a debate that vexes numerous and diverse areas of thought, from sociology and psychology to government (authoritarianism or democracy?), economics (central planning or free markets?), information dissemination (Encyclopedia Britannica or Wikipedia?) and more.

So when it comes to UX, who can tell you more – the experts, or the crowd?

The wisdom of crowds

In 2004, James Surowiecki gave a name to the truth and accuracy of the aggregated many: “the wisdom of crowds.” It’s the idea, basically, that the collected knowledge or judgments of a large number of people tends to be remarkably correct.

The apple of this particular strain of thought fell on the head of a British scientist named Francis Galton, a stuffy elitist certain that proper breeding and the concentration of power in the hands of a suitable few were the keys to a successful society. Observing a contest to guess the weight of a well-fattened ox at a country fair, Galton was inspired to run statistical tests on the participants’ responses, and discovered, to his surprise, that the average of all 787 responses deviated from the ox’s true weight by a single pound.

The wisdom of crowds lies in the great diversity of independent opinion: as over

from The Wisdom of Crowds, p. xii-xiii:

“Galton was interested in figuring out what the ‘average voter’ was capable of because he wanted to prove that the average voter was capable of very little. So he turned the competition into an impromptu experiment...He added all the contestants’ estimates, and calculated the mean of the group’s guesses. That number represented, you could say, the collective wisdom of the Plymouth crowd. If the crowd were a single person, that was how much it would have guessed the ox weighed.

Galton undoubtedly thought that the average guess of the group would be way off the mark. After all, mix a few very smart people with some mediocre people and a lot of dumb people, and it seems like you’d end up with a dumb answer. But Galton was wrong.”

- James Surowiecki
diversity of independent opinion: as overestimation, underestimation, opposition, endorsement, half-truths, and whole truths are averaged together, the voice of the crowd converges on correctness.

**Experts versus the crowd in action**

Take Wikipedia, for example. The free-to-read, free-to-edit online encyclopedia has built a massive catalog of articles contributed piecemeal by millions of users. While the site has its share of detractors, studies by Nature, the Journal of Clinical Oncology, and others have found the resource to have a level of reliability on par with Encyclopedia Britannica.

In other words, vast, anonymous crowds have compiled a thorough and reliable encyclopedia just about as well as a certified group of experts. And when it comes to breadth of topics covered, the free encyclopedia far outstrips its less agile rivals.

**How does the wisdom of crowds apply to UX?**

Remote usability testing is not so different from a guess-the-weight-of-the-cow contest. The participants may not be competing against each other, but each of them, with their varying knowledge, experience, and skill levels, contributes a new point of view that leads us closer to an accurate and precise evaluation of the subject at hand.

But are they better than experts? At some things, they certainly can be (after all, none of the livestock experts guessed within a pound of the prize ox’s real weight).

“*Why are experts not that smart? Because experts tend to be and think alike, and thus do not reflect maximum diversity of opinions.*”  
– Aldo Matteucci
That’s not to say that experts don’t have anything to offer; on the contrary, the wealth of deeper understanding, informed analytical thinking, and problem resolution skills that a UX expert brings to the table are great tools.

But they, too, are human, subject to their own personal biases and the biases of their field, caught in the bubble of their own minds. No individual, no matter their expertise, can compete with the crowd for completeness and all-encompassingness. There are too many angles for one person’s opinion to be 100% accurate; aggregation will always be able to achieve a more perfect picture.

The next step

How can we maximize what we learn from the crowd? TryMyUI will soon be introducing a brand new feature called UXCrowd, a system aimed at identifying and prioritizing usability stress points by harnessing the wisdom of crowds, and even using the crowd as a reservoir of innovative usability solutions.

How it works:

At the end of the test, each tester will be asked for 3 things they liked and didn’t like about the website as well as other suggestions they would offer.

Then, they will be shown a compiled list of responses from everyone who has taken the same test, and have the ability to vote up or down on these responses according to whether they agree or disagree. They will also be able to comment on other responses if they desire.

Vote counts will not be visible to the testers, so as to avoid social influencing like group-think or bandwagoning that undermines the wisdom of crowds. Test owners, of course, will see the complete list of answers ranked by total votes, getting essentially a pre-prioritized to-do list for improving their website’s UX.
That’s what listening to the crowd can achieve, and we’re excited to put it into action. So next time you decide to weigh your ‘ox’ and trim the fat, remember where wisdom lies.

For more information
The Wisdom of Crowds, James Surowiecki:
http://books.google.com/books?id=hHUsHOHqVzEC&lpg=PP1&pg=PR11#v=onepage&q&f=false

“The Wisdom of the crowd: The myths and realities,” Philip Ball:

“How accurate is Wikipedia?” Natalie Wolchover:
http://www.livescience.com/32950-how-accurate-is-wikipedia.html

“The Wisdom of crowds: Why the many are smarter than the few,” Aldo Matteucci:
http://www.diplomacy.edu/resources/books/reviews/wisdom-crowds-why-many-are-smarter-few

Images from
Cover: http://www.artieannie.co.uk/thetintrunk/fair.html
Page 2: http://upload.wikimedia.org/wikipedia/commons/d/de/Wikipedia_Logo_1.0.png
Page 4: http://www.internationalstyles.net/recipes/meat-cutting/cow-meat.htm