# Focus Groups

- *A large group of authors from around the world*
- *Mental satisfaction and love of community is what the authors get (no money)*
- *Collaboration is sometimes needed among authors*

Wikipedia is a collaboratively edited, multilingual, free Internet encyclopedia supported by the non-profit Wikimedia Foundation. Wikipedia's 30 million articles in 287 languages, including over 4.3 million in the English Wikipedia, are written collaboratively by volunteers around the world. Almost all of its articles can be edited by anyone having access to the site.

- *A large group of workers from around the world*
- *Financial incentives for tasks they complete successfully is what workers get*
- *Workers are generally anonymous and solitary*

Amazon MTurk is a crowdsourcing Internet marketplace that enables individuals or businesses (known as Requesters) to co-ordinate the use of human intelligence to perform tasks. The Requesters are able to post tasks known as HITs (Human Intelligence Tasks), such as writing product descriptions, or identifying performers on music CDs. Workers (or, Turkers) can then browse among existing tasks and complete them for a monetary payment.
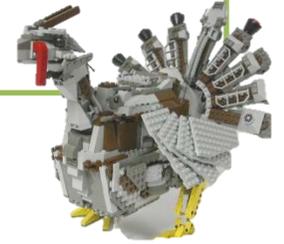
One of the biggest crowdsourcing campaigns was a public design contest in 2010 hosted by the Indian Government's finance ministry to create a symbol for the Indian rupee. Thousands of people sent in entries before the government zeroed in on the final symbol based on the Devanagari script using the letter Ra.

ResearchPad

or

My BU ?

- *A large group of people from India*
- *Financial incentives for the best design was proposed*
- *No special knowledge was needed*

myBU

Focus Group Questions

1- How working online can influence the quality of the requirements a user would provide?

2- How can working offline (i.e. in a real environment) influence the quality of the requirements a user would provide?

3- When a large group of people are providing information, how do you think the quality of the requirements is influenced?

4- When a diverse group of people (in age, gender, expertise, or space) are providing information, how do you think the quality of the requirements is influenced?

5- Would users prefer to know other participants in the crowdsourcing process, or work anonymously? How does that affect the quality of the requirements a user would provide?

6- Would users prefer to be visible to the crowdsourcer, and how does that affect the quality of the requirements a user would provide?

7- Competence and expertise in the field a user is providing requirements for can affect the quality of the requirements provided. How do you see that?

8- How collaboration can affect the quality of the requirements provided by the users?

9- How important is volunteering for requirements provision? And how does it affect the quality of the requirements a user would provide?

10- Does being intrinsically motivated affect the quality of the requirements provided?

11- Does providing extrinsic incentives affect the quality of the requirements provided? What would be a user's desired incentives for doing a high quality job?

12- If a user knows that he/she is given a chance to opt out of their work, whether with or without consequences, does this influence the quality of the requirements provided?

13- If a user knows he/she is will be given feedback about what he/she did and how the information he/she provided was used, does that affect the quality of the requirements provided?

ACTIVITY	AFFECTS NOTABLY	HOW	COMMENTS
Working online to provide information	□Correct	□POS □NEG □NONE	
	□Understandable	□POS □NEG □NONE	
	□Complete	□POS □NEG □NONE	
	□Consistent	□POS □NEG □NONE	
	□Relevant	□POS □NEG □NONE	
	□Objective	□POS □NEG □NONE	
	□Reputable	□POS □NEG □NONE	
Working offline to provide information	□Correct	□POS □NEG □NONE	
	□Understandable	□POS □NEG □NONE	
	□Complete	□POS □NEG □NONE	
	□Consistent	□POS □NEG □NONE	
	□Relevant	□POS □NEG □NONE	
	□Objective	□POS □NEG □NONE	
	□Reputable	□POS □NEG □NONE	

A large group of people providing information	□Correct	□POS □NEG □NONE
	□Understandable	□POS □NEG □NONE
	□Complete	□POS □NEG □NONE
	□Consistent	□POS □NEG □NONE
	□Relevant	□POS □NEG □NONE
	□Objective	□POS □NEG □NONE
	□Reputable	□POS □NEG □NONE
A diverse group of people providing information	□Correct	□POS □NEG □NONE
	□Understandable	□POS □NEG □NONE
	□Complete	□POS □NEG □NONE
	□Consistent	□POS □NEG □NONE
	□Relevant	□POS □NEG □NONE
	□Objective	□POS □NEG □NONE
	□Reputable	□POS □NEG □NONE

Being unknown to other information providers	□Correct	□POS □NEG □NONE
	□Understandable	□POS □NEG □NONE
	□Complete	□POS □NEG □NONE
	□Consistent	□POS □NEG □NONE
	□Relevant	□POS □NEG □NONE
	□Objective	□POS □NEG □NONE
	□Reputable	□POS □NEG □NONE
Working anonymously for the information requester	□Correct	□POS □NEG □NONE
	□Understandable	□POS □NEG □NONE
	□Complete	□POS □NEG □NONE
	□Consistent	□POS □NEG □NONE
	□Relevant	□POS □NEG □NONE
	□Objective	□POS □NEG □NONE
	□Reputable	□POS □NEG □NONE

Competence in providing information	□Correct	□POS □NEG □NONE
	□Understandable	□POS □NEG □NONE
	□Complete	□POS □NEG □NONE
	□Consistent	□POS □NEG □NONE
	□Relevant	□POS □NEG □NONE
	□Objective	□POS □NEG □NONE
	□Reputable	□POS □NEG □NONE
Collaboration in providing information	□Correct	□POS □NEG □NONE
	□Understandable	□POS □NEG □NONE
	□Complete	□POS □NEG □NONE
	□Consistent	□POS □NEG □NONE
	□Relevant	□POS □NEG □NONE
	□Objective	□POS □NEG □NONE
	□Reputable	□POS □NEG □NONE

Volunteering in providing information	□Correct	□POS □NEG □NONE
	□Understandable	□POS □NEG □NONE
	□Complete	□POS □NEG □NONE
	□Consistent	□POS □NEG □NONE
	□Relevant	□POS □NEG □NONE
	□Objective	□POS □NEG □NONE
	□Reputable	□POS □NEG □NONE
Motivation in providing information	□Correct	□POS □NEG □NONE
	□Understandable	□POS □NEG □NONE
	□Complete	□POS □NEG □NONE
	□Consistent	□POS □NEG □NONE
	□Relevant	□POS □NEG □NONE
	□Objective	□POS □NEG □NONE
	□Reputable	□POS □NEG □NONE

Providing incentives for information providers	□Correct	□POS □NEG □NONE
	□Understandable	□POS □NEG □NONE
	□Complete	□POS □NEG □NONE
	□Consistent	□POS □NEG □NONE
	□Relevant	□POS □NEG □NONE
	□Objective	□POS □NEG □NONE
	□Reputable	□POS □NEG □NONE
Providing an opt-out opportunity for information providers	□Correct	□POS □NEG □NONE
	□Understandable	□POS □NEG □NONE
	□Complete	□POS □NEG □NONE
	□Consistent	□POS □NEG □NONE
	□Relevant	□POS □NEG □NONE
	□Objective	□POS □NEG □NONE
	□Reputable	□POS □NEG □NONE

Providing feedback to information providers	□Correct	□POS □NEG □NONE
	□Understandable	□POS □NEG □NONE
	□Complete	□POS □NEG □NONE
	□Consistent	□POS □NEG □NONE
	□Relevant	□POS □NEG □NONE
	□Objective	□POS □NEG □NONE
	□Reputable	□POS □NEG □NONE

INFORMATION QUALITIES WE NEED	MEANING
CORRECT	Information is correct and reliable.
UNDERSTANDABLE	Information has only one interpretation.
COMPLETE	Information is sufficient and not missing.
CONSISTENT	Information is presented in the same format, or is internally consistent.
RELEVANT	Information is applicable and helpful.
OBJECTIVE	Information is unbiased, unprejudiced and impartial.
REPUTABLE	Information source or content is highly regarded.

OTHER THOUGHTS AND COMMENTS

Online Expert Survey

Towards Crowdsourcing for Requirements Engineering

This questionnaire helps to explore how crowdsourcing can be utilized to elicit requirements in requirements engineering processes.

Crowdsourcing is an emerging paradigm for harnessing the power of the crowd for problem solving.

The questionaire contains 20 questions and should take around 8 minutes to answer. It may take more time if you like to add your valuable comments.

This survey will be used for research purpose only. You name will not appear in any published work.

There will be a prize draw with a random selection of responders, each receiving **one of three £30 Amazon vouchers**.

Please provide your **name and email address** if you would like to enter the draw and also if you would like to be sent the results.

If you would like to know more about crowdsourcing before starting this survey, you may refer to the following links:

http://www.merriam-webster.com/dictionary/crowdsourcing (Dictionary definition, shorter)
http://en.wikipedia.org/wiki/Crowdsourcing (Wikipedia definition, longer)

Alternatively, you may watch the video below to know more about crowdsourcing:

The survey is prepared by:

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* 1.

How do you classify your expertise in Requirements Engineering?

○ **Academic expertise**

○ **Industrial expertise**

○ **Both**

* 2.

What is your area(s) of expertise in Requirement Engineering?

[   ]

* 3.

How long have you had this experience (in years)?

[   ]

* 4.

How much are you familiar with crowdsourcing?

○ **No familiarity**

○ **Low familiarity**

○ **Good familiarity**

○ **High familiarity**

* 5.

Are you aware of any study or product which utilizes crowdsourcing for Requirements Engineering?

○ **No**

○ **Yes (please give us some hints below if you remember)**

[   ]

* 6.

How do you see the potential of Crowdsourcing in aiding Requirements Elicitation?

○ **Low**

○ **Medium**

○ **High**

○ **I do not know**

[   ]

7.

How does the LARGENESS of the crowd engaged in requirement elicitation affect the quality of elicited requirements?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Typically, a large crowd supports getting more accurate requirements	○	○	○	○	○
Typically, a large crowd supports having objective and non-biased requirements	○	○	○	○	○
Typically, a large crowd supports reaching a saturation	○	○	○	○	○
Typically, it is difficult to organize and coordinate a large crowd for eliciting requirements	○	○	○	○	○

Please add any comment you may have.

8.

How does the DIVERSITY of the crowd (in expertise, age, gender, locality, etc.) affect the quality of elicited requirements?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Typically, diversity makes it hard to reach a consensus/agreement on requirements	○	○	○	○	○
Typically, diversity increases the relevance and meaningfulness of requirements	○	○	○	○	○
Typically, diversity supports creativity in requirements	○	○	○	○	○
Typically, diversity causes inconsistency problems in elicited requirements	○	○	○	○	○

Please add any comment you may have.
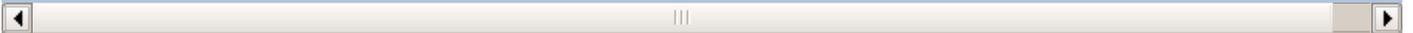
9.
When the crowd participates ANONYMOUSLY, how would this affect the quality of elicited requirements?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Typically, the crowd will give their honest opinion when they are anonymous	○	○	○	○	○
Typically, the credibility of the elicited information cannot be guaranteed	○	○	○	○	○

Please add any comment you may have.

10.

How does the crowd COMPETENCE in the problem domain affect the quality of elicited requirements?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Typically, the crowd competence supports getting the right requirements	○	○	○	○	○
Typically, the crowd competence supports getting creative requirements	○	○	○	○	○
Typically, the crowd competence supports getting more relevant requirements	○	○	○	○	○
Typically, a competent crowd is more willing to see positive changes and, hence, willing to provide their requirements	○	○	○	○	○

Please add any comment you may have.

11.

The crowd could collaborate to come up with their collective requirements. How does such COLLABORATION affect the quality of elicited requirements?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Typically, the crowd collaboration means an extra overhead from the management perspective	○	○	○	○	○
Typically, collaboration leads to clusters of users with different and sometimes conflicted views	○	○	○	○	○
Typically, collaboration leads to dominance of certain opinions and missing that of less powerful users	○	○	○	○	○
Typically, collaboration helps requirements engineers to understand the rationale of elicited requirements	○	○	○	○	○

Please add any comment you may have.

12.

How would INTRINSIC MOTIVATIONS (e.g. self-esteem, love of community, personal skills development) in the recruited crowd affect the quality of elicited requirements?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Typically, the crowd motivation supports getting the right requirements	○	○	○	○	○
Typically, the crowd motivation supports getting more relevant requirements	◉	◉	◉	◉	◉
Typically, the crowd motivation means that the crowd will give a more complete and detailed answer	○	○	○	○	○

Please add any comment you may have.

13.

The crowd could be recruited on a voluntary basis through an open call. How does this VOLUNTEERING in an OPEN-CALL settings affect the the quality of elicited requirements?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Typically, a volunteering crowd is more likely to state their true and genuine requirements	○	○	○	○	○
Typically, open calls provide a chance for malicious users to enter the elicitation process and affect the overall quality of elicited requirements.	○	○	○	○	○

Please add any comment you may have.

14.

How does PROVIDING EXTRINSIC INCENTIVES (e.g. providing financial incentives) to the crowd affect the quality of elicited requirements?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Typically, incentives motivate the crowd to be more active during requirement elicitation	○	○	○	○	○
Typically, incentives increase the number of participants	◉	◉	◉	◉	◉
Typically, incentives mislead the crowd from acting truly on requirement elicitation	○	○	○	○	○

Please add any comment you may have.

15.

If participants who are committed to the requirement elicitation are given THE OPPORTUNITY TO OPT OUT at any time they wish, either with or without any consequences (like being banned or reputation damage), does it affect the quality of the elicited requirements, and how?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Typically, providing such an opt-out opportunity motivates the participants for active involvenment	○	○	○	○	○
Typically, providing such an opt-out opportunity attracts more participants	◉	◉	◉	◉	◉
Typically, providing such an opt-out opportunity allows only motivated participants to carry on to the end, which means an improved quality of the elicited requirements	○	○	○	○	○

Please add any comment you may have.

16.

During the requirements elcitiation, how does providing the crowd with feedback, on the intermediate or final results of what has been collected from them, affect the elicitation process?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Typically, feedback motivates the participants to engage	○	○	○	○	○
Typically, feedback disturbs participants' comfort	○	○	○	○	○
Typically, feedback could influence their opinion for the next stages	○	○	○	○	○
Typically, feedback gives participants the feeling that their ideas are important	○	○	○	○	○
Typically, feedback increases the willingness of participants to participate in future studies	○	○	○	○	○

Please add any comment you may have.

17.

Finally, would you please add comments and/or elaborate on the challenges for utilizing crowdsourcing in Requirements Engineering in general and in Requirements Elicitation in particular?

* 18.
Would you like to receive the results of this survey, once it is done and analysed?
○ **Yes**
○ **No**

19.
Please write your name and your email address if you would like to enter the draw on the 3 * £30 Amazon Vouchers and/or receive the results of this survey. Furthermore, if you decide to withdraw your data at any later stage, you will need to provide us with your email address.

Powered by Faculty of Science and Technology, Bournemouth University
Designed by Mahmood Hosseini

Thank you very much for your participation!

Your responses and your effort mean much to us.
If you have further enquiries, do not hesitate to contact us at mhosseini@bournemouth.ac.uk.
Do not forget that you may withdraw your data even after submission. To do so, please proivde us with the email you typed in the online survey.