Chapter 8 (Interviews & Focus Groups) :

APPLICATIONS OF INTERVIEWS IN HCI RESEARCH

Interviews are subjective and more open-ended, often providing deeper insights similar to those associated with ethnographies and case studies. HCI researchers can use interviews in almost any phase of a project, from initial exploration to requirements gathering, evaluation of prototypes, and summative evaluation of completed products.

- INITIAL EXPLORATION
- REQUIREMENTS GATHERING
- EVALUATION AND SUBJECTIVE REACTIONS

INTERVIEW STRATEGIES

INTERVIEW STRUCTURE:

- Fully Structured

Fully structured interviews use a rigid script to present questions in a well- defined order. Although some questions may be skipped, based on answers to previous questions, there is no room for asking questions out of order or for adding questions not found in the predefined interview script.

- Semi-Structured

In a semi-structured interview, you can feel free to let the conversation go where it may.

- Unstructured

An unstructured interview may simply be based on a list of topics or questions known as an interview guide.

As they are controlled largely by the interviewer, fully structured and semi-structured interviews are often described as *respondent* interviews. In unstructured interviews, the interviewee's comments direct the course of the interview, with the interviewer following along and responding as necessary. As the interviewee is in control, these interviews are also described as *informant* or *nondirective* interviews.

FOCUSED AND CONTEXTUAL INTERVIEWS

Interviews in HCI research often revolve around the specific context of a problem or technology. We might be interested in how people use an existing system or how they solve a problem that might be addressed by software that has not yet been built. In circumstances such as these, an interview might go beyond simply asking questions; it might ask for demonstrations and more in-depth explorations.

Interviews aimed at understanding how technologies are currently used might include technology tours, observation, and technology probes(prototype).

Interviews aimed at evaluating proposed designs for software tools often go one step further, asking users to comment on proposed interface designs, either on paper or as more-or-less functional prototypes.

INTERVIEWS VS FOCUS GROUPS

Interviewing is a powerful, but labor-intensive, data collection technique. To gather input from 20 individuals, an interviewer must meet with each person individually, perhaps for an hour or more.

An attractive alternative might be to meet with several participants in *focus groups*. These group discussions provide a reasonably effective and inexpensive tool for easily gathering a broad range of opinions.

One needs to manage personality conflicts, encourage participation from all participants, keep the conversation going, monitor the clock, and work through your list of questions, all the while collecting the data that is at the heart of your effort

TYPES OF QUESTIONS

Knowing how you will analyze answers may help you determine which kind of question to ask.

If you're not quite sure how you're going to use the data, you might be better off starting with the least restrictive approach. Interview questions should be as simple as possible, without any technical terms or jargon.

Another possibility involves *conceptual mapping*: asking participants to draw pictures or graphical layouts that describe their understanding of a situation. For a study of perceptions of websites, you might provide a list of 20 sites, asking interviewees to organize the list into groups of similar sites. In one study of user perceptions of web security, interviewees were asked to draw diagrams depicting their understanding of how to secure web connections work.

Instead of asking “What were the strengths and weaknesses of the menu layout and the toolbar?,” ask separate questions: “What did you think of the menu layout? What did you think of the toolbar? Which did you prefer?” prefer questions that ask “what do you think of...?” rather than “did you like...?” (bias issue)

Structured, closed questions, and easy to analyze limit users to a small number of predefined choices. Examples include yes-no questions, multiple choice, true-false, and Likert-scale questions, asking for ratings on a scale of 3, 5, 7, or more possibilities.

CONDUCTING AN INTERVIEW

- Preparation: Pilot testing, backups
- Record responses: Written notes,audio,video recorder,screen capture
- During the interview: rapport, intro, getting down to business, promoting discussion, debriefing

ELECTRONICALLY MEDIATED INTERVIEWS AND FOCUS GROUPS

- Telephone
- Online

ANALYZING INTERVIEW DATA

- What to analyze

The analysis is essentially a tabulation problem. You can tabulate the frequency of each answer and use straightforward statistical tests to determine when differences in response rates are meaningful Quantitative results can also be used to group characteristics

- How to analyze

After you decide whether to work from a recording (either directly or via a transcript) or interview notes, the next step is to decide how to approach the analysis. Interview analyses usually rely heavily on qualitative methods for coding data, either through emergent or a priori codes . These methods attempt to find common structures and themes from qualitative data. In the case of interviews, your goal is to identify the important ideas that repeatedly arise during an interview.

One technique that is commonly used for analyzing interview data involves an examination of the text of the interview for patterns of usage, including frequency of terms, cooccurrences, and other structural markers that may provide indications of the importance of various concepts and the relationships between them. This approach known as *content analysis*—builds on the assumption that the structure of an interviewee's comments provides meaningful hints as to what he finds important and why.

- Validity

Analyses based on the interpretation of texts often face questions of validity.

Validity may not be a particular concern if your interviews are aimed at understanding user requirements. If you are working closely with users and customers, you will probably present your findings to them once your analysis is complete. If you have a good working relationship, they will let you know when your analysis has gone wrong. This feedback is very useful for refining your understanding.

- Reporting results

Tabulations of frequencies of responses can be used to give specific reports.

You can use the respondent's words to make your reporting more concrete. Instead of paraphrasing or summarizing, use direct quotes. A small number of direct quotes illustrating interviewee sentiment can make your arguments much more concrete. This strategy can be particularly effective when coupled with frequency counts indicating widespread agreement with the quoted views.