**User Interview**

Interviewing may be conducted to collect in-depth information about the people’s technology needs, experiences, and perspectives on work.

Interviewing is a useful way of gathering informed perspectives from people. Interviews often serve as the only unit of analysis for some studies – for example, certain task analysis efforts. They can also be used to inform the development of other methods within a study, such as informing observation  priorities or survey style questionnaires . All of these approaches may be used in concert with other methods to triangulate data toward an analytical goal.   
In the context of Human-Centered Design (HCD), interviewing may inform understanding of the nature of individuals’ work within systems and in cooperation with others. Such interviews can yield requirements and desirements (Hoffman and McCloskey, 2013) for new systems and operations, and often suffice for data gathering. Interviews may also inform about the perspectives people have on emergent systems as ideas about their designs are offered. For this goal, interviews may be most useful alongside structured tasks.

**Method and Skills**

Method-based interviewing can be contrasted both with ‘unstructured’ interviewing, which may simply be a conversation with an informant, and highly regimented question sets that gather straightforward responses with no deviation or follow up (‘structured’). Many interviewing methods exist – for example, the Critical Decision Method of Cognitive Task Analysis (Crandal, Klein and Hoffman, 2006). Most interviewing methods share the basic components of an overarching structure and probing questions. The structure provides a guide for managing the conversation, while probes help an interviewee reflect on their thoughts to provide insightful answers. The level and type of structure, and the specific probing questions, are dependent on the study needs. Where people’s experience in performing work could inform system design, a structured storytelling method with probing questions about system use can be used. If a study seeks to understand the potential effects of the introduction of a new technology, structure may be provided by the envisioned future scenario, and questions that probe hypothetical stressors may be introduced. With some interviewing methods, diagrams provide a structure, and questions are framed to enable the development of the diagram (Moon et al., 2011). As this point suggests, different methods yield different representations of findings. These can include descriptions of work and associated challenges, stories about experiences, models of processes and timelines, and responses to specific questions.

Skilled interviewers should develop a familiarity with a range of interviewing methods applicable in many contexts. Perhaps even more important to develop are a set of skills around managing interview processes and interviewees. Managing the process involves managing to time constraints, properly introducing the process, recording responses to ensure sufficient detail, and sometimes working as a team with other interviewers. Interview guides and practice runs can help to ensure that the basics are covered, but skilled interviewers must also remain flexible to account for the unexpected events that might derail best laid plans. Managing interviewees entails developing and maintaining rapport, conveying expectations, and controlling the pace of conversation. Flexibility here is also necessary, as interviewees present in many varieties, and strategies for managing must be understood for their tradeoff benefits. Interviewing is a formalized interpersonal activity that demands such skills for success, regardless of the method employed.

**Benefits and Limitations**

Interviewing offers some logistical benefits over other data gathering approaches. Interviews can be conducted in-person or remotely, using telephones and/or videoconferencing, the latter of which can also offer on-screen interactions that augment the interview. The direct interactions helps to ensure that interviewers are engaged in the process. With the skilled use of some methods, interviews can be conducted without significant preparation. Unlike other information gathering approaches, interviewing presents opportunities for researchers to explore topics of interest to varying degrees of depth – lines of inquiry can be continued or halted based on the interviewer’s desires. Interviews across multiple participants can be combined to create amalgamated views. With such flexibility, interviewing can yield substantial data, in terms of both volume and insight.

Interviewing also brings some limitations. One-on-one interviewing is the desired format, but coordinating interviewees and their schedules, conducting multiple one-on-one interviews, and managing and analyzing the significant volumes of data can amount to a labor-intensive effort. Even when such an effort is divided across a team, additional concerns about skill differences of the interviewers and consistency of approaches can be raised. To ensure success, study execution should include the following milestones:

**Study Execution**

|  |  |
| --- | --- |
| **​Milestone** | **​Owner** |
| ​Initiate kick-off call | ​HFE |
| ​Provide an experienced interviewer | ​                       HFE |
| ​Select criteria for recruiting participants and draft interview protocol, including questions and probes to use for follow-up | ​             Business Office |
| ​Recruit participants | ​             Business Office |
| ​Prepare a screening questionnaire and draft an interview plan for each interviewee | HFE |
| ​Develop a data analysis plan | ​                       HFE |
| ​Conduct the individual interviews | ​                       HFE |
| ​Analyze and summarize results | ​                       HFE |

**Outcomes**

The outcomes and deliverables from a set of interviews include:

* a timeline-ordered listing of the interviews,
* relevant demographic information from interviewees,
* artifacts that provide detail sufficient for the study purpose, including but not limited to notes, recordings (for use in transcribing and/or backup for notes), diagrams, descriptions of observations, materials shared by the interviewees, and any results from additional methods – e.g., ratings, rankings, answers to closed-response questions.

Care must be taken in compiling all such outcomes, which may be organized by interviewee, topic, and/or objectives. Capturing sets of important findings – for example high-interest responses, emergent patterns and variations thereof – immediately after an interview may aid in data organization and analysis later.

These outcomes can be analyzed for patterns and trends, frequencies and one-off insights, and high-value insights and exemplary stories, to report on participants’ technology needs, experiences, and perspectives on work.

**References**

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Moon, B., Hoffman, R., Novak, J. & Cañas, A. (2011). Applied Concept Mapping: Capturing, Analyzing, and Organizing Knowledge. New York: CRC Press.

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| **Phase of Development​** | |
| ​​**✔** | **​Planning, Scoping & Definition** |
| **✔** | **​Requirements Gathering** |
| **​✔** | ​**Early Design** |
| **✔** | **​Detailed Design & Development** |
| **​✔** | **​Field Testing** |
| **​✔** | **​Deployment** |
| **✔​​** | **​Post-Deployment** |

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| **​Study Characteristics ​** | |
| ​**Timeframe** | 2 days to 2 weeks |
| **​Level of Effort** | Medium |
| ​**Data Collection** | Attitudinal |
| ​**Data Reporting** | ​Qualitative |

|  |  |
| --- | --- |
| **​Related Methods ​** | |
| Derived from | ​none |
| ​Complimentary Methods | ​Observations, [**Survey**](https://vaww.portal2.va.gov/sites/humanfactors/BoKSitePages/Methods/User%20Survey%20-%20Questionnaire.aspx) |
| ​Similar Methods | [**Focus Group**](https://vaww.portal2.va.gov/sites/humanfactors/BoKSitePages/Methods/Focus%20Group.aspx) [**Online User Survey**](https://vaww.portal2.va.gov/sites/humanfactors/HFBoK/SitePages/User%20Survey.aspx) |
| ​Follow-Up | ​TBD |

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