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The Interpretation Session

"I just talked to a potential customer at COMDEX, and he said he wanted that feature we talked about—"

"But I just went along on a service call and that guy hated it. We should do this other thing—"

"No, I talked to one of our really big clients and they said—"

These are the voices of people who have talked to their customers. Each one learned something valid from one customer. Now they are faced with the difficulty of communicating what they learned, reconciling the different messages from different people, and coming to agreement on what the customers really need. They have feedback (of a sort) from customers; they do not have a shared understanding of what it means or what they should do about it.

It's not enough for the members of a design team to understand the customers they visited and talked to individually. If a team is to agree on what to deliver, all members of the team need to understand every customer as though they had been there. They need to build an understanding of all their customers and how they work that is shared by the whole team. A team develops this understanding through conversation and mutual inquiry into the meaning of the facts about their customers' work. In this way, the different members of the design team can learn each other's perspective, the unique focus each person brings to the problem. They can probe each other's understanding, learning from and teaching each other what to see. When one thinks another is wrong, they can look at concrete

Interpretation sessions let every team member experience all interviews instances to see how their different perspectives reveal different issues in customer data.

BUILDING A SHARED UNDERSTANDING

We allow for this mutual discovery through the *interpretation session*. In an interpretation session, an interviewer walks through a single interview for the benefit of the team. The rest of the team listens, asks questions, draws work models, and records issues, interpretations, and design ideas based on this interview. In their discussions of what to model and what to record, the team wrestles with the data and what it means, learns how each team member views the data, and develops a shared understanding of that customer. The interpretation session is an efficient way to achieve several desirable benefits:

Better data: Because everyone asks questions of the interviewer, the interviewer remembers more than he would on his own. The questioning prompts him to recall details he didn't know he remembered.

Written record of customer insights: The interpretation session records the conversation while it occurs, in the appropriate form to drive design. By the end of the interpretation session, the work of this customer has been characterized in work models, and the team's insights, design ideas, and questions have been captured online. No one needs to take additional time to write up or analyze this customer interview. People who weren't present can read the models and the notes to catch up on what was learned.

Effective cross-functional cooperation: The interpretation session is a forum in which diverse job functions can cooperate, whether they be customers, marketing, engineering, documentation, UI, test, or any other group relevant to delivering the system. The interpretation session provides a clear task and a clear set of roles for everyone in the meeting to perform. It focuses the meeting not on the participants and their differences but on the data and on extracting meaning from the data. Instead of arguing with each other, participants argue over whether a model accurately reflects the customer's work. Instead of arguing about people's opinions, the only topic for discussion is whether an interpretation can be justified based on the data. This makes a safe environment for a new team to learn to work together. Each person and each job function makes a contribution to understanding the customer. Learning to recognize and value the unique contribution of each person as an individual and each group in the organization happens almost by accident.

Multiple perspectives on the problem: Each team member brings their own focus to the problem, which is derived from their personal history, their current job function, and their understanding of the project focus. A cross-functional design team will always see more in an interview than any one person would alone. For this reason, the interviewer does not filter the information at all; something she dismissed as irrelevant will be picked up by someone else to reveal an insight of great importance. Any kind of predigested presentation of the interview—a report or presentation, for example—would limit the information that would be extracted from an interview to the point of view of one person.

Development of a shared perspective: The open discussion between team members enables them to learn and take on each other's perspective. By hearing everyone's questions and insights on the data, every team member expands their own focus to include the concerns of others. The questions that people raise suggest new lines of inquiry and new directions to take the inquiry. The team moves toward a common focus on the problem, which accounts for the aspects of work that matter for the problem and all the particular issues of the team. Team members learn the new focus by participating in the session; there is no need for an elaborate process to redefine the focus.

True involvement in the data: It is hard to process data—to think through what it means and might imply for design—when it is just presented. A report or a talk delivers information to a passive reader or listener. It's easy for attention to wander; even dedicated listeners must do something to make the information their own, whether by taking notes, writing ideas, or asking questions. The interpretation session reveals the data interactively, through questioning and discussion. Team members immediately represent it in work models, so they must internalize it to write the models, and everyone else must internalize it to check them. And since everyone has a job, it's hard for attention to wander.

Better use of time: Without an interpretation session, all the team members would still have to talk to the interviewer to ask questions about the interview and understand the implications. They would still have to talk to each other to learn what others on the team saw in the data. The insights into the work would still have to be written down. Without the interpretation session, all this would happen in informal, one-on-one discussions in hallways and offices. With the interpretation session, it can happen once, with the whole team together.

Interpretation sessions enable sharing that has to happen anyway

THE STRUCTURE OF AN INTERPRETATION SESSION

Doing creative work in ongoing, face-to-face sessions as a team is hard. As we've discussed, the industry does not generally provide good models for face-to-face cooperation on the same project; it's easier and more common to split projects up into parts small enough for individuals to do independently. But there's no way to leverage multiple perspectives if everyone works independently. It's hard to get the same sense of common direction. And there's no good way to build on different people's skills; everyone has to understand the work practice, the technology, the market, the user interface, and all the other influencers on system design in order to produce their part. Doing the design together provides multiple perspectives and leverages people's different skills, but then the team really has to learn to work together. The interpretation session provides an easy way for a team to get started.

TEAM MAKEUP

It's best for diverse job functions to share points of view and learn to work together during an interpretation session. For the widest amount of buy-in and cross-fertilization, the first sessions often include everyone on the design team. However, when the team is large, a single meeting is hard to manage just because there are so many people trying to be heard. (Never go above 12 under any circumstances.) After the initial sessions, it's more effective for large teams to interpret interviews in subteams of four to six

Plan meetings and participants to make the process work

people and share the results with the larger team afterwards. Each subteam should itself contain a mix of job functions, so that diverse perspectives are brought to bear on every interview. Four people on a subteam is comfortable. If necessary, on small projects where there simply aren't very many people involved, you can do subteams of two. Everyone on the subteam should think that this is their job; if they think they are on the team to help someone else out, it will not seem like real work to them. At least half of a team should have a design background (e.g., engineering, UI design). And it is important that the subteams be formed of different people each time, so that people are continually challenged with new points of view, so that small cliques do not form within the team, and so that the entire team stays a cohesive unit. (See Chapter 6 for more on forming a team.)

ROLES

Any effective meeting needs clear roles to drive it forward. The interpretation session is supported by defined roles, which give the meeting structure so everyone knows what to do and what is appropriate. The roles also give everyone in the meeting something concrete to do, which forces everyone to interact with and process the data. Everyone should have a defined role, and it's okay for people to have more than one role.

Give everyone a job to keep them involved

THE INTERVIEWER. The *interviewer* is the one who interviewed the customer. They are the team's informant, describing everything just as it happened, in the order that it happened. Just as we try to keep customers from giving summary information, the interviewer does not summarize. Just as interviewers extract retrospective accounts from customers, the team backs the interviewer up every time they think she skipped a step or missed a detail. In many ways, it's as though the team interviews the interviewer, to find out what she learned in her interaction with the customer. The interviewer draws the physical model, since it tends to be easiest for the one who was there to draw it. Being the interviewer takes patience because the interviewer is interrupted at every moment by team members sharing insights and demanding clarification.

Do a retrospective account with the interviewer

WORK MODELERS. *Work modelers* draw work models on flip charts as they hear them. It works well to have two work modelers—one person models flow and culture and another models sequences. Artifacts are put up, analyzed, and annotated as they come up in the interview. Modelers draw the work models at the same time as everything else is happening. They do not stop the meeting to get agreement at each point; it's up to the rest of the team to raise an issue if they think the modeler got it wrong. Work modelers have to be comfortable putting up one or two elements of a model as they hear them without waiting for the whole story to be complete. They can't get the whole story, then stop the meeting and repeat it so they can draw the model. They have to draw it as it comes out. Work modelers do ask questions driven by their models. If the flow modeler can't show where a communication flows to because the interviewer never said, he won't be able to draw the model and will ask.

Write while you listen—don't slow down the meeting to capture data

The work models keep the team from filtering too early—from deciding that aspects of work aren't relevant before the design has been decided. The interviewer already filtered what they saw based on their focus. Work models capture in coherent form everything the interviewer discovered. The team can decide how much to use later. It's faster to represent everything than to stop and ask whether each point is relevant. Drawing the models during the meeting not only keeps everyone involved, it ensures quality. The entire group watches and checks them as they are drawn. If they had been drawn by one person ahead of time, that person would miss more, reviewers of the models would not catch everything, and they would spend as much time reviewing the models independently as the whole group spends together. Some teams have drawn models in advance of the meeting; those models have been the least detailed of any we have dealt with.

The work models are kept true to the data that the interviewer saw. Because it is so easy for people to create abstractions that are not well grounded in real events, we do not record the customer's general statements of "how we do things" on the models. Only if the interviewer actually saw it, or found out about it through a retrospective account of a specific event, does the data go on the model. Sometimes a customer is on the design team,

Work models keep the team true to what really happened


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U4 18  Copies of sample cards kept in shoeboxes; has to keep
       them two years (regulation)
U4 19  Home office lost sample cards she had sent in; she had
       to make photocopies of her copies and send them again
U4 20  Keeps last 6 months of sample cards in her home
       office; then puts them in shoebox and moves them to
       garage
U4 21  Q: Is there any defined procedure for storing and
       disposing of sample cards?
U4 22  Has a video screen to do presentations that she has
       never used; was given it automatically
U4 23  Has to rent a slide projector; wasn't given that
U4 24  DI: give sales reps a budget they can use to buy the
       things they really need
U4 25  Insight: Home office thinks they know the equipment
       the sales reps need, but it doesn't match their needs
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FIGURE 7.1 Extract from the online notes typed during an interpretation meeting. Each note is preceded by the user code and a sequence number. This section of the notes shows the development of an idea from a problem identified in the work to a design idea (DI) and an insight about the work situation. These notes are displayed during the meeting so all can see and correct them. They are a permanent record of the design conversation, capturing the discussion, and used to build the affinity diagram later.

and they may be insistent on what the formal process is. In this case, we do record the formal process but in green, a color we use to mean that this is the formal policy, or that we heard about this part of the work but didn't actually see it.

THE RECORDER. The *recorder* keeps notes of the meeting online, displayed so everyone can see them using a monitor or LCD projection panel. Every key observation, insight, influence from the cultural model, question, design idea, and breakdown in the work is captured as a separate note (Figure 7.1). These notes provide a sequential record of the conversation and are used later to build the affinity. We usually keep the notes in a word processing document, one line per note, preceded by a sequence number and the user code. More elaborate tools are possible,

Write the thoughts of the meeting before they are expressed

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U4:     Field sales rep; works near home office; been with
sales for three years; in home office doing market research
before that. Very large territory.
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FIGURE 7.2 Customer profile.

but this simple approach works well. This is the only technology we use in the room in this session. Except for breakdowns and influences, elements of work captured by the work models—steps of a sequence, communication between people, a description of the physical environment—do *not* go into the notes. Demographic information (the customer's age, length of time on the job, skill level) does not go into the notes either, because these are not aspects of work practice. Demographics goes in a separate profile for that customer (Figure 7.2).

The recorder will often have to rephrase an idea that has only been expressed indirectly to capture it in clear, succinct language. A team will get stuck at a particular point in the interview, talking around it. A good recorder states clearly what the insight or issue is and moves the meeting on. Anyone else who hears what the underlying issue is can do the same: they state the issue; someone says, "Capture that!"; the recorder writes it; and the meeting moves on.

PARTICIPANTS. The rest of the team are *participants*. They listen to the story of the interview, ask questions to understand, and develop their own insight into the work. They propose interpretations for the team, make observations, and suggest design ideas. The design ideas are not for discussion, but so that they can be captured in the context of the data they respond to. Recording them unloads the participant's mind so it can get back to thinking about the customer's work. This is a generally useful technique for keeping a meeting moving forward: any time someone gets stuck on a point, write it down in a form that won't be forgotten and will be used at the appropriate point in the process. Then the person can go on. Participants watch the models to make sure they are complete and watch the online notes to make sure they agree with the way they are written.

Capture design ideas to avoid discussing them now

THE MODERATOR. The *moderator* is the stage manager for the whole meeting. Any meeting has a *mainline conversation*—the discussion

that is the primary purpose of the meeting. The job of the moderator is to keep the meeting on this conversation. In the interpretation session, the mainline conversation is: What happened on this interview and what do we need to capture from it? The moderator keeps the pace of the meeting brisk. The moderator keeps track of where the interviewer is in her story and reorients her when she has been interrupted and lost her place. The moderator ensures that all the data from the interview is recorded in an online note or in a work model. The moderator makes sure everyone is involved and participating by encouraging the quiet people who don't know how to be heard to jump in, toning down the people who dominate the conversation, and ensuring that people can share insights and design ideas without being ridiculed. The moderator has to stand outside the process enough so that they can see what is going on. Moderators who get too involved have to hand moderation over to someone else.

No meeting works without someone taking the role of moderator

Keep everyone busy and on topic

THE RAT HOLE WATCHER. The *rat hole watcher* keeps the meeting on track. A rat hole is any distraction from the mainline conversation. A rat hole is an innocent-looking hole in the ground that, if you dive down it, branches and turns until you are totally lost in the dark. In a meeting, a rat hole entices the entire meeting into a long discussion that is not relevant to the purpose of the meeting. In the interpretation session, when all the engineers get caught up in talking about whether a design idea is technically feasible, they are in a rat hole. Later, this will be the mainline conversation, but not now. Evaluation of any idea, sharing your own personal experience with a product, or introducing data from another user ("My guy did that too!") are all rat holes. It is the responsibility of the rat hole watcher to call "Rat hole!" and get the meeting back on track.

Neutralize people problems by making them legitimate topics of conversation

In practice, everyone acts as a rat hole watcher. Identifying the role isn't so much to give it to one person, but to give the concept to the whole team. By naming the role, the team accepts that rat holes exist and waste time. Without realizing it, each person on the team has given everyone else permission to point out when he or she is off topic. Then, instead of getting defensive and angry when someone calls "Rat hole," everyone laughs sheepishly and gets back to the subject of the meeting.

RUNNING THE SESSION

Interpretation sessions fit into an ongoing cycle of interviewing and interpretation. The team interviews a few people representing a cross section of customers. Then there are choices for how the interviewer prepares for the interpretation session: If the session will happen the same day as the interview, they run the meeting from their handwritten notes. If it will happen the next day, they annotate their notes from the audiotape of their interview. If they delay longer than 48 hours, they transcribe their notes from the tape. This trades amount of detail off against the time it takes to prepare. If the interpretation meeting is held close enough to the interview, the interviewer can remember enough that the extra time for transcription isn't worth it.

Interpret interviews within 48 hours

Every user is assigned a user code. This code protects the user's anonymity and is used in the notes, on all models, and in all discussions. It's recorded in a list of interviewees that the team keeps private. The interviewer starts by giving a brief profile of the customer—their job function, the type of organization, and any demographic information. This profile is recorded in a separate file, so that later when someone asks, "Was U10 a secretary or a scientist?" the answer is easy to get. Then the interviewer draws a physical model of the customer's workplace and walks through the interview step-by-step. Everyone listens and probes to develop new insights into the work, calling "Capture that!" whenever there is a succinct insight, question, or design idea to capture.

Capture demographics in a profile

The tone of the meeting is active and involved, tending to slightly chaotic; the interviewer is trying to tell the story, everyone is asking him questions, two or three people are drawing models, the recorder is typing away, and the moderator is advising people all at the same time. The tone of the meeting is also open and trusting: everyone is expected to share insights and design ideas without stopping to think whether they are going to look stupid or whether the

Be nonjudgmental and keep a brisk pace

design idea is any good. No evaluation happens at this point; everyone is thinking out loud. The interpretation session usually lasts two hours, but the first in a new work domain will be longer, and later interviews on very focused tasks may be shorter.

At the end of the interview, everyone stops and looks back over what has been discovered. Then they list their top insights from this interview, capturing them online and also writing them on a flip chart to post on the wall. This reflection acts like the wrap-up phase of an interview, where the whole work practice can be brought together and implications for design drawn out. People see more, and see how work hangs together better, when they have a chance to reflect. The other reason for doing this is so that the team has an answer when a manager or skeptical peer walks in the room and says, "So what did you learn?" This is quite a serious concern. Many projects fail because they do not communicate what they were doing effectively to the rest of the organization. Making an insights list crystallizes what the team learned from each interview, helping them to talk about their new understanding. It starts the process of *communication out,* which is the topic of Chapter 10. And it makes it possible to take advantage of what was learned immediately, if related work is going on in parallel to the interpretation sessions.

Models, insights, and design ideas are the first deliverables

THE SHARING SESSION

When a team has broken into subteams for the interpretation session, they need a sharing session to learn what the other subteams have done. A sharing session has its own roles: a *speaker* for the subteam presents the models for a particular user, starting with the physical model, then the flow, then the cultural model, then sequences and artifacts. The speaker walks through the flow by first describing the interviewee's role and responsibilities, then walking to each outlying bubble, describing the nature of their interaction with the interviewee. When presenting the sequences, rather than read every step, the speaker summarizes the key strategies or breakdowns that the sequences reveal. As the speaker presents each model, a *helper* stands behind and updates the model because we find that the

Sharing is active—it's not a presentation spokesman always describes more than actually got written down. Everyone else on the large team listens, questions, and adds interpretations and insights. The *recorder* adds any new points to the online notes, and the *moderator* keeps the meeting moving and makes sure everyone is heard. When all the models for an interview are presented, the whole team reviews and adds to the insights. This brings the whole team back into one understanding and does a quality check on the models. It also allows people outside the team to learn what the team has done. A sharing session should take no more than half an hour.

There's a culture in our industry that says real work doesn't happen in meetings. "Another time-wasting meeting!" we say to each other. Yet it's through the stimulus of bouncing ideas off each other that people work most creatively. It's through the cross-check of several people looking at the same work that people work with the highest quality. The interpretation session is a working meeting that allows for creativity and quality. It brings together activities that might otherwise happen individually and sequentially and allows them to happen simultaneously in a team process. It's an efficient way of turning an interview into data useful to a project, recorded in a form that can be saved, communicated, and used to drive design. You'll know your interpretation sessions are working when people start clamoring to get in because they know that's where the creative design work starts.

Interpretation sessions foster cross-functional creativity and understanding

PART 3

Seeing across Customers