Formulation Formu

SYNTHESIZING YOUR OBSERVATIONS

Today we will do a series of exercises to start the move from needfinding towards creating a design. We realize you have had a short time for needfinding, and that this is only a preliminary round of synthesis. We encourage you to use it as the basis for going out and doing the next round of observations and interviews and then redoing this process on your own before we go to the next step.

You will be generating boards today with materials you develop. We will look at the boards again on Monday when we start the ideation phase, and you will have the chance to add and revise before then. We'll give you the d.school key code so you can come in any time to work on them.

1. Getting an overview (a "360" in SAP parlance)

To get started, we will use a technique called **space saturation**, using a visual shared display as a focus for collecting different observations you have made.

WHAT is it?

It is the point in the design process where you display all the treasures found during the needfinding part of the process. The idea is to get it all out in the open: write on postits, tell stories, share artifacts, whatever it takes. Get it out and get visual. Create a space where you are immersed in the observation, artifacts and stories.



There aren't any formal rules. Some guidelines are:

- Be visual pictures, sketches, etc. evoke understanding
- Be terse single words and phrases are good. Paragraphs aren't for this stage
- Be personal individual quotes, personalities, quirks, etc. are valuable for triggering insight. Don't be too abstract and general

WHY do we teach it?

It is often the case that during the needfinding/empathy-gaining phase of the process, the team members are split up into smaller groups. Space saturation is a good way to get the team back together so that they may share the stories and findings from the field as well as start to build a space where they immerse themselves in the user's world.

You probably do not need months and months of interviewing and observing to have enough data to process. Even after only 2-3 solid days (or 2-3 solid hours) worth of needfinding, there will probably be more than enough data to reflect on. Regularly taking that step of reflecting on all the data and searching for those needs and opportunity gaps will force design teams to take a good educated guess at defining their problem so that they may keep the design process moving and allow time for more iterations.

WHEN do we do it?

Today is a starting point for your shared display. We will be looking at it again next Monday when we proceed to use the material you have gathered as a basis for ideation – coming up with specific goals for potential projects.

2. Organizing what you have learned – sorting and grouping

The next step is looking for patterns in the materials. At this point you are moving up from the specifics to the more general directions and trends that you can exploit in design.

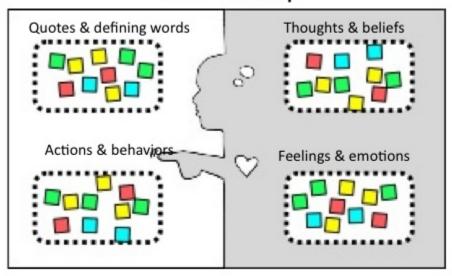
We use a technique related to the card sort method used in areas like web design.

- 1. Write posits with words or short phrases that capture key dimensions of the setting: roles (nurse, patient, family member,...); activities (turning off lights, responding to a friend request,....); issues (privacy, convenience,...).
- 2. Work together to group elements on the board (the original quotes, pictures, etc., plus these). There aren't fixed rules for what a group should be it might be oriented around time (the sequence of events in the hospital), or place, or themes (different quotes that connect to privacy issues), or some of all. Don't worry about what the final layout should be, think about what the grouping activity leads you to ask and to consider.

3. Developing empathy for a user – the empathy map



User Group



- 1. Populate each section of the map with the following mindsets in each quadrant. On the whole, go for vivid descriptors!:
 - Quotes & defining words--Capture specific quotes from the user, as well as any unusual phrases or words that 'struck' you as something that might contain a deeper meaning.
 - Actions & behaviors--Capture things you saw the user (or group of users) doing.
 Writing down specific details or even drawing out diagrams can be useful here.
 - Thoughts & beliefs--This quadrant should contain phrases that begin with "I think..." or "I believe..." that were specifically stated by the user. You might also capture other thoughts & beliefs that may not have been explicitly stated but can be inferred from what the user said.
 - Feelings & emotions--Capture feelings and emotions that the user displayed or talked about having. Capturing feelings and emotions that specific experiences elicited will also be useful here. You might also capture other feelings & emotions that you infer from actions & behaviors that you observed.
- 2. Reveal needs by using the left hand side of each empathy map to generate a list of use & usability needs. Use the right margin of the map to generate a list of "meaning" needs. Meaning needs relate to how they are feeling and what the experience means to the user as people.
- 3. Take a step back to examine the revealed needs. Watch for solutions posing as needs--they can be recognized as nouns. Aim for verbs! Reframe by asking "why do we need a [solution]?"

