Needfinding

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* some slides based on those of Julie Stanford, Sliced Bread Design

Outline
- Needfinding
- Exercise
- Team Share Outs
- Unpacking

Design Thinking Process

Empathy: Feel what they feel

Facts
Inferences
Assumptions

Principles
1) Immerse
2) Observe
3) Engage

Technique: Active Observation

“You Can Observe a Lot Just by Watching”
—Yogi Berra

Observe & interview without knowing what you are looking for

Needs

gaps within a system

Needfinding,
discovering opportunities by recognizing those gaps

Figure out the story of what and why...

Desire line

And tell a new one

Pay attention to all the artifacts

Look for workarounds & hacks

“Errors” are a goldmine

Getting to Why

Needfinding starts with basic questions of everyday experiences

But moves from
- closed ended questions to open ended questions
- “whats” to “whys”
- actions to feelings

Engage people in their environment

Remember that people make sense
A needfinding interview is….

One in which the interviewee speaks 90% of the time.

More than data gathering. Be ready to hear something new and be changed by it.

Defer your agenda & unlock their world

Step into the interviewee’s shoes

Be curious

Have a "beginners mindset"

Good interviews require a broad set of questions – but be prepared to veer.

Interview Questions – Background

- Background — “Tell me about what you do here.”
- Sequence — “Walk me through your day yesterday…then what do you do next?”
- Physical tour — “Take me on a tour of how you build the panels…”
- Virtual tour — “Walk me through your sales process from the beginning…”
- Participation — “Can you show me exactly how you prepare a customer bid?”
- Exhaustive List — “What are all the different municipalities where you sell?”

Interviews typically share the same basic structure as a story.

Background

Introduction

Rise in Action

Climax

Explore emotions

Denouement

Reflection

Wrap Up

I’m here to learn about…
Interview Questions – Build Rapport

- Naive Outsider Perspective — “I’m not from Southern California, tell me how the housing market works here.”
- Quantity — “How many of your competitors fall into that category?”
- Changes Over Time — “How are things different than they were last year?”
- Tasks and organizational structures — “Can you draw me a diagram of the organizational chart of your company?”
- Native Language — “Why do you call your office the command post?”
- Reflecting Back — “So, what I hear you saying is…. is that right?”

Interview Questions – Stories & Emotions

- Peer Comparison — “Do your colleagues share your sales techniques?”
- Other Viewpoint Comparison — “What would other solar owners think about that?”
- Clarification — “…and when you say I’m a closer, what do you mean exactly?”
- Characterization and Comparison — “Could you characterize your sales style and compare it to Mike’s?”
- Success and Failure — “Describe your most successful sales call. Now tell me about a sales call that was an absolute disaster.”

Follow up and pull that thread

- Adjust your questions to their previous answers
- Ask questions in language they use / understand
- Pick up on / ask for examples
- Be flexible
Background
Intro
Build Rapport
Reflection
Evoke stories

Interview

You mentioned you were focused on a calm year, but I hear you say you have no time to plan a vacation.

Climax
Explore emotions
Denouement

Interview Questions – Reflection

• Point to Their Reaction – “Why do you roll your eyes when you say that?”
• Suggestive Opinion – “Some people have very negative feelings about emotional sales pitches. What are your feelings about it?”
• Contradictions – “You tell me you can sell ice cubes to Eskimos but you also tell me you have a deep concern for your customers, how do these two work together?”

Keep recording – the last five minutes of an interview are often the best.

A few last tips

• Remember that people make sense (to themselves)
• Your job is to be able to explain how they make sense – get to the bottom of things & understand the what & why
• Create a discussion guide with lots of questions, but be ready to veer to pull threads

Choosing Participants

• Representative of target users
• May be current users of a similar system
• Might be the non-users – but could be in future
• Interview people on both sides of an interaction
• Experts are good for background but are not a substitute for users
• Consider interviewing extreme users
• Typically interview 6-12 people individually for 30-90 min
• Note: interviewing minors/children may require signed permission with the school – find similar users in that age group (i.e., RF kids?)

Where to Recruit

• Depends on target audience...
• Nextdoor.com
• Facebook
• Craig’s List
• Local email lists (e.g., parents, etc.)
• Snowball sampling – when you recruit someone ask them to pass it on to others that they think would be good...
• What’s worked for you???
Common Pitfalls – Suggesting Answers

“How was that decision reached? Was there a big meeting? Did your boss decide without you…?”

- Let the informant paint his or her own categories of meaning
- Technique: Avoid suggested answers
- Trust the question – ask it and stop talking;

*Let there be silence*

Common Pitfalls – Hypothetical Situations

“What if I designed something that wasn’t as round and soft and annoying as your current thing and instead bounced up and down. Would that work for you?”

“What about your friends? What would they do?”

- Ask about events & things that actually happened/exist
- Focus on getting the user’s point of view, not what they think someone else might do

There is More Than One Way to Ask “Why?”

- Tell me more about that
- Tell me what you mean you say XXX
- … [last phrase the person said]?

Good Questions

(a little bit of)

Silence is Golden

What are the gems?

- You’ve uncovered a surprise/found what is missing
- You can explain why people do unusual things
- You want to tell others about what you learned
Share with your team

- Stories
- Photos
- Sketches
- Quotes

Getting Started on Unpacking

debrief after each interview on stickies
one color per participant, take notes with a sharpie

Using the Data Collected in the Field

- Figure out what is important
- Affinity diagramming
  - group info & find relations between groups
  - Post-its on large surfaces
    - haptic UI
    - brainstorming
    - immersive
    - persistent

Users: Unique or One of Many?

“Take the attitude that nothing any person does is done for no reason: if you think it’s for no reason, you don’t yet understand the point of view from which it makes sense.

Take the attitude that nothing any person does is unique to them, it always represents an important class of customers whose needs will not be met if you don’t figure out what’s going on.”

(p. 63, Contextual Design)

Ethical Considerations in Needfinding

Testing/fieldwork can be coercive if there is a power imbalance (e.g., in under resourced communities)

People may feel no option but to speak to you or give you their time even though they may not get anything of value in return.

Summary

- User-Centered Design:
  Know thy user & involve them in design

- Needfinding
  - build empathy with customers
  - listen to them to discover interesting insights
Next Time

- **Lecture**
  - 1) Define: define the problem/domain of interest
  - 2) Ideate: How might we solve the problem?

- **Readings**
  - d.school's [Empathy Fieldguide](#)

- **Watch**
  - [Unpacking/Journey Mapping](#) (17 min.)