Focus Groups: Using customer feedback to improve your product

Presented by

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Human Factors Research & Design

Meet the team



Mary Burton

User Experience Director



Katy Mizuchi

Senior User Researcher



James Parker

Senior User Researcher



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User Researcher

Mary leads the user research practice for the Emergo by UL Human Factors Research & Design organization. She has designed user interfaces for cloud-based medical imaging applications, as well as user interfaces for systems administration and the Olympics. Her user research work includes field observations, contextual inquiry, persona creation, journey mapping, and usability testing.

Kathryn has a background working in new product development in both medical and consumer categories and leads early research efforts to identify user needs and to better understand context of use, as it relates to risk potential and overall user experience. She is also knowledgeable in human factors engineering, and is skilled in test administration and data analysis for both formative and summative testing.

James has a diverse range of experience from within the software, medical, and military industries, and is passionate about helping clients create best-in-class product solutions. James' user research experience includes field observations, contextual inquiry, card sorting, persona creation, task analysis, and conducting a variety of both remote and in-person usability studies.

Tess has planned and conducted early-stage research for several web and mobile therapeutic applications, utilizing a diverse array of methods to uncover user needs and guide product development decisions. She also conducts formative and summative usability testing of medical devices design for home use and clinical environments and contributes to product design.

Our role in product development

- By applying a user-centered research and design approach, we help companies meet the regulatory and commercial imperatives to make products safe, usable, and satisfying.
- This work is essential at a time when user experience quality matters more than ever before.





User-centered means...

- Focusing on users' needs, preferences, capabilities, and behaviors
- Enhancing user experiences by applying knowledge about human beings
- Addressing use-related risks early to create inherently safe designs
- Iteratively evaluating products to identify strengths and opportunities for improvement

Follows

FUNCTION

Follows

USER NEED



Our practice

- 65+ human factors specialists based in North America, Europe, and Asia
- Completed over 300 projects in 2018
- Conducted design research in over a dozen countries





Our global HFR&D team

Locations in Chicago, IL; Concord, MA; Utrecht, The Netherlands; Cambridge, England; Tokyo, Japan





The HFR&D Chicago Studio

- Collaborative research and design space
- Staffed with user researchers, human factors specialists, software designers and product designers
- Strategically located to partner with clients, startup incubators, and world class universities
- Energizing location attracting top talent
- Proximity to manufacturers based in the midwest







The discipline of user-centered research and design

- 1. Determine true user needs and preferences
- 2. Develop inspired design concepts
- 3. Engage users to help converge on the best design concept
- 4. Develop refined user interfaces that will distinguish the product
- 5. Mitigate use related risks
- 6. Create clear instructions and effective training resources
- 7. Verify and validate the product design



Todays agenda

- 1. About focus groups
- 2. Scoping focus group research
- 3. Explore your learning objectives
- 4. Creating research questions
- 5. Recruiting participants
- 6. Conducting focus groups
- 7. Analyzing results





About Focus Groups

Anatomy of a focus group

Moderator

Leads discussion and activities, manages group dynamic, engages participants

Analyst

Captures participant comments in a spreadsheet or possibly using sticky notes





Participants

Answer questions and discuss topics (ideally 8-10)





Space organized to facilitate engagement and set desired tone

Materials

E.g., prototypes, illustrations, samples, sticky notes, pens and paper, NDA, video equipment





Is a focus group the right choice?

- Qualitative feedback (e.g., understanding reasoning for user preferences, wants/needs)
- Quick and inexpensive feedback from representative users
- Observing user reactions to stimuli (in-person)
- Uncovering nuance, collecting detailed feedback

Statistically-relevant data (e.g., defining market parameters or user demographics, pricing)

Regional mindsets/culture will highly impact results



Value of focus groups

- Focus groups are a flexible yet powerful method for learning about customer product wants and needs
- Can be tailored for any product in any development phase
 - Early idea exploration
 - Design iteration
 - Packaging and market release
 - Post-release monitoring



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Challenges of focus groups

- Focus group dynamics may lead to "groupthink"
- Heavy reliance on strong facilitator
 - Must maintain participant engagement
 - Quiet participants may not be heard
 - Loud participants may derail conversation
- Cannot observe detailed interactions with products





Scoping your Research

Good results require good planning

- Defining learning objectives
- Structuring the conversation
- Recruiting the right people
- Setting the environment (physical and emotional)
- Selecting stimuli that will elicit discussion
- Selecting activities and allocating appropriate time





Choose the right level of effort

- Quick & dirty feedback
 - E.g., Solicit 5 users to help brainstorm ideas for new concept product features



- In-depth insight
 - E.g., Solicit 10 users to interact with and provide feedback on a product prototype





Exploring learning objectives

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What are your learning objectives?

- Learning objectives should reflect your knowledge gaps (i.e., what *internal* questions you need the research to answer to build a successful product)
- Good customer research (e.g., focus groups) should confirm knowns (i.e., assumptions) and investigate unknowns





Example learning objectives: Vegetable chopper

Pretend we are designing the next generation vegetable chopper, intended to revolutionize vegetable chopping...



Known known

We assume our target customer is the Gen Y mom. Can we confirm this?

Known unknown

Existing choppers end up in the back of the cabinet (hardly used). Why is the chopper not a primary kitchen tool?

Unknown unknown

Are customers experiencing dissatisfaction with this product for reasons we don't know?



Activity 1: Define your learning objectives

- Write down 3 knowledge gaps reflective of your product's challenges
 - Think "known unknowns"
 - E.g., "I know chopping vegetables more easily appeals to customers, but how should the design improve the chopping experience?"
- In a moment, we will ask a few of you to share and discuss some of your learning objectives
- Feel free to share whatever you are comfortable with!



Create Research Questions

Creating research questions

Well-crafted research questions will help you hit your learning objectives

- Research questions should:
 - Reflect target learning objectives
 - Be unbiased
 - Be open-ended
 - Be structured to elicit both broad and detailed feedback.





Crafting unbiased, open-ended questions

- Avoid making presumptions on behalf of your customers to prevent bias
- Staying neutral helps gather a more varied range of responses from participants and more authentic responses
- Ask questions that are open-ended to prevent constraining the feedback participants might offer
- Use "How" phrases to ensure your questions are open-ended (e.g. "How do you feel...," "Describe your experience...,")





Example research question: Vegetable chopper

To identify opportunities to improve the vegetable chopping experience, you might ask...



Biased What do you not like about using a chopping knife to cut vegetables?

Unbiased What do you like or dislike about your current method of chopping vegetables?



Example research question: Vegetable chopper

To understand the participant's current process for chopping vegetables, you might ask...



Open

Please describe your current process for chopping vegetables.





Example research question: Vegetable chopper

To understand the participant's interest in using a vegetable chopper, you might ask...





How would you ideally like to chop vegetables?



Specific

Would you consider using a vegetable chopper? Why or why not?



Activity 2: Create research questions

- Choose one of the knowledge gaps you identified in Activity 1
- As a group, create 4-5 research questions you would need to answer to address the knowledge gap
 - E.g., How frequently do people use alternative vegetable choppers?
 - E.g., What about a vegetable chopper is convenient for users?
- Organize these questions in a logical order, that flows the discussion from broad to specific lines of inquiry.
- In a moment, we will ask a few of you to share and discuss some of your research questions



Recruit Participants

Screening participants

- Who are your target customers?
 - Consider screening criteria that will allow for a variety of participants & feedback
 - E.g., age range, education, interests, behaviors, impairments
- Consider group dynamics
 - Is there an advantage to keeping the group similar? Different?
 - E.g., Chefs, homemakers, novice cooks



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Example participation criteria: Vegetable chopper

- 9 Participants who chop vegetables
 - 3 who chop 0-1 times per week
 - 3 who chop 2-5 times per week
 - 3 who chop 5+ times per week
- Ages 14 65
 - 2 to 3 adolescents who might cook at home
 - 2 to 3 seniors who might have visual or dexterity impairments





Activity 3: Create your participation criteria

- Create a set of "participation criteria" for prospective recruits for your focus
 group
 - Consider both your knowledge gaps from activity 1 and your research questions from activity 2
- Come up with three participation criteria (i.e., the characteristics/behaviors of people that you would like in your focus group)
- In a moment, we will ask a few of you to share and discuss your participation criteria



Recruiting participants

- Consider multiple recruitment channels for your recruitment effort
 - E.g., calling, e-mail, public flyer, online ads
- Some channels may be more applicable than others, depending on your effort
 - E.g., a public flyer may not be appropriate for a geographically dispersed population
- Third party recruiters often have panels of participants which are easily accessible



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Conduct the Focus Group

Organizing the room

- Ensure participants are positioned in a way that facilitates equal discussion amongst members
 - E.g., Seated at a roundtable
- Room organization should reflect which activities will occur during the focus group
 - E.g., Consider facilitator proximity to materials, visual aids
- Ensure room layout is conducive to observations, hearing and note-taking





Select the right focus group activities

- Brainstorming activities
 - Free listing
 - Group brainstorm



- Ranking activities
 - Feature rankings





- Storytelling activities
 - Shared experiences
 - Narrative simulation



- Organizing activities
 - Card sorting
 - Label generation




Gathering materials

- Prepare a focus group script (moderator guide) with the listed research questions and topics for discussion
- Post its/markers/flip charts/shared writing spaces
- Data collection sheet/note taking
- Video/audio recording equipment





Collecting data

- Data analysts (i.e., note takers) can be in the room, or outside of it
 - E.g., one way mirror research setup
- Best practice is to create a data collection sheet alongside research questions
 - Ensures data analysts can follow along and record responses as questions are asked
- Video and/or audio recording is useful to reference discussions during data analysis







Facilitating discussion

- Balance the natural discussion of participants
 with research objectives
- Set the stage with ground rules
- Use an icebreaker to welcome participants and ensure they feel able to express their opinions during discussion
- Ask neutral questions to elicit opinions and adjust questioning as needed to stay on track
- Participant discussion should feel "free flowing" but still follow a structure set by the moderator



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Preventing bias

- One or more participants might have strong opinions and bias others
 - Can result in "Groupthink"
- When asking questions, ensure all participants have a chance to be heard
 - Look around the room to those who have not yet spoken
 - Summarize answers and ask whether the group agrees or if someone has a differing opinion



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Activity 4: Focus group improv

- Select one person in each group to lead a focus group discussion on your groups product topic
 - Focus group leader should use the research questions created during activity 2
 - Select one person to take document discussion points and feedback using sticky notes during the discussion



Analyze Results

Analyzing results

- Focus groups generally produce large qualitative sets of data
 - Can be challenging to sort and delineate trends
 - Also challenging to communicate findings succinctly
- Primary objective is to identify major trends
- Choose analysis methods which align with project goals and timelines





Affinity diagramming

- Affinity diagramming is a simple method for categorizing and sorting qualitative data
- 3 step process
 - Capture findings on sticky notes
 - Group similar findings together
 - Label groups of findings which represent trends





Example affinity diagram



Activity 5: Results analysis

- Collect the sticky notes from your focus group
 - Organize the sticky notes into groups on a wall/whiteboard
 - Label major groups to represent themes in your findings

 In a moment, you will be asked to discuss the major themes of the feedback and overall learnings within your group



Activity 6: Improv learnings discussion

- What did you learn?
- What would you have changed?
- How do you feel you might use focus groups moving forward?





Conclusions

Focus group pros & cons

Pros

- Simple yet effective way to obtain customer feedback
- Can be flexible to meet different research needs for a variety of products
- Can be conducted without significant setup or resource investment

Cons

- Can be difficult to facilitate
- Require clear, concise understanding of research objectives
- Group feedback may not capture individual opinions



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