

User Research Handbook

Use this Guide to review the NCredible Framework, complete an exercise with your team, strategize your research needs, and decide about an appropriate research method.

Prepared by the User Research team in the USCM UX Department.

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Introducing the NCredible Framework

The NCredible Framework is a research framework designed to enable cross-functional teams to create a strategy for their customer research needs.

The NCredible Framework offers teams a transparent way to communicate and align their research questions as well as identify the right research types and purposes. The framework helps ensure your proposed research study provides value and aligns with business goals.

Teams can use the NCredible Framework to launch collaborative exercises.

There are two axes that comprise the framework:

Inspire - Inform

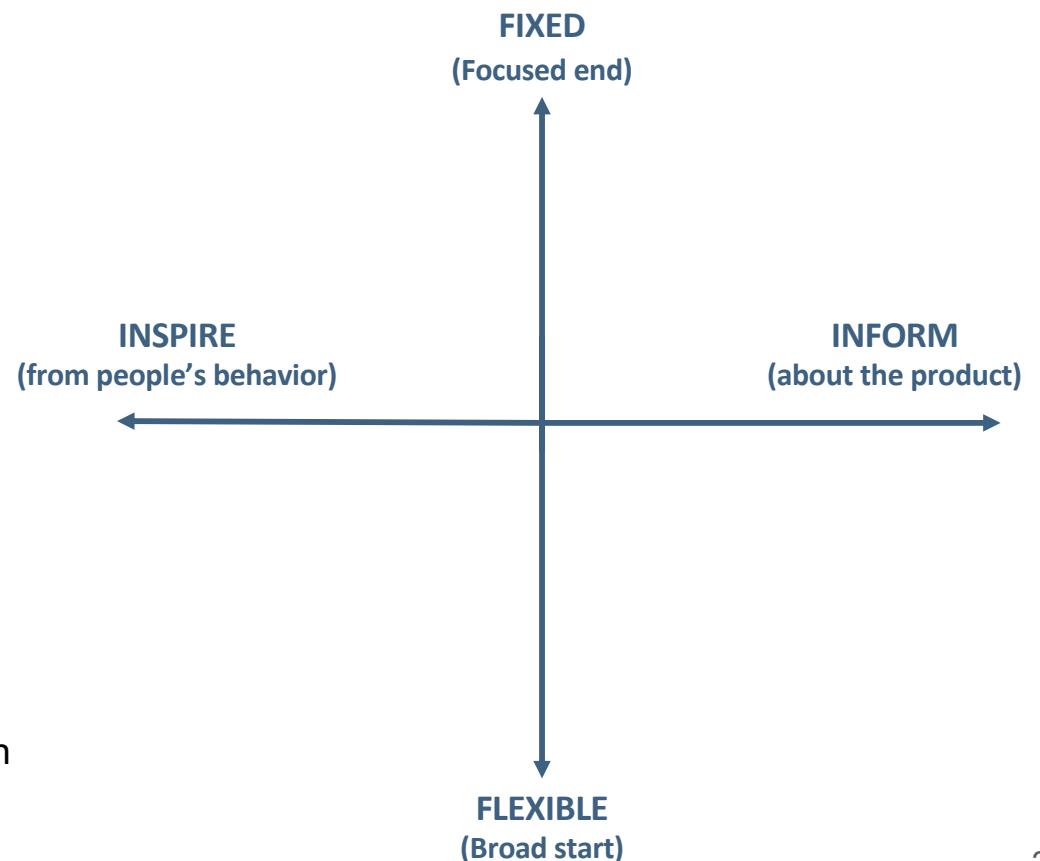
Inspire: Your questions lean toward “Inspire” if you’re looking to learn from people’s behaviors and mindset.

Inform: Your research questions lean toward the “Inform” side if you want to find out more about products than people.

Flexible - Fixed

Flexible: This approach relies on research questions with a broad interest, adjustable with potential findings

Fixed: This approach relies on research questions with a specific area of interest, a fixed end or focus

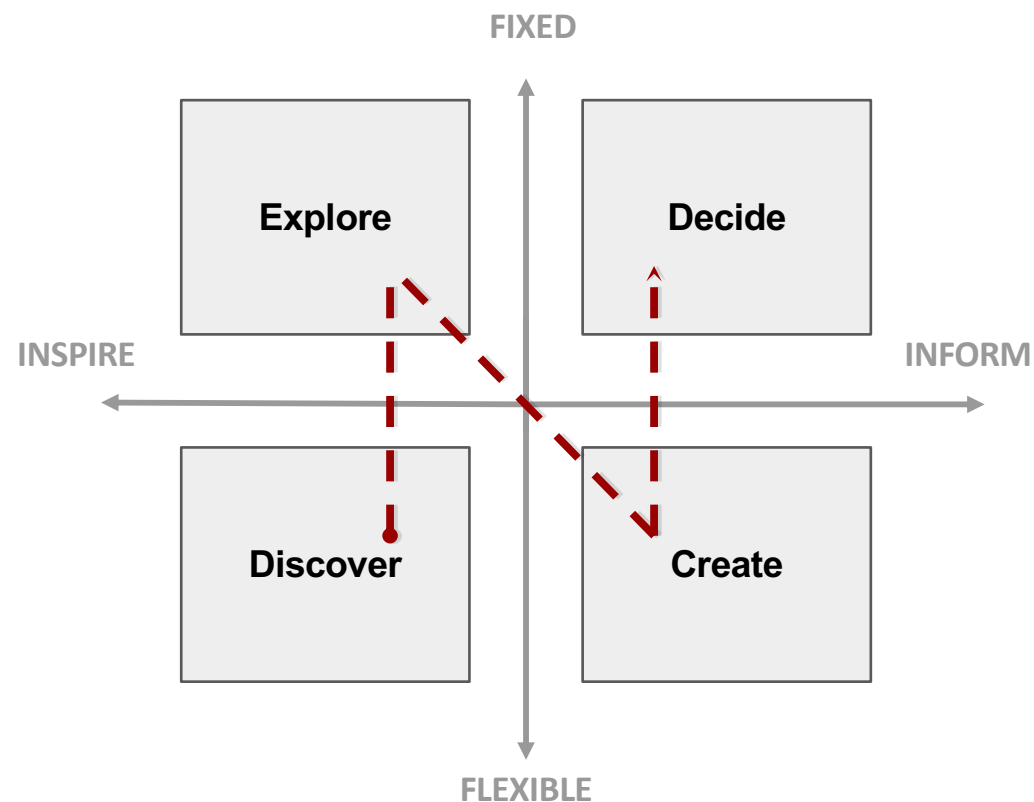


Introducing the NCredible Framework

The two axes create four quadrants. Each quadrant represents a specific research category. After mapping your research questions onto the framework, you can identify the appropriate type of research for your team's research needs. This will help you determine the right research method later.

The **N** in the NCredible Framework represents the order of quadrants from a more foundational type of research that inspires you, based on people's behavior, to research that informs you about details within your product.

- Discover:**
Uncover opportunities, topics, problems. You can examine broad questions that people look at from different viewpoints.
- Explore:**
Unpack experiences and understand a chosen opportunity, topic, or problem.
- Create:**
Generate ideas for how to solve an opportunity.
- Decide:**
Validate to move forward with a solution.



Discovery Research

You want to uncover opportunities, topics, problems. You can examine broad questions that people look at from different viewpoints. Discovery Research is about describing experiences and gathering stories.

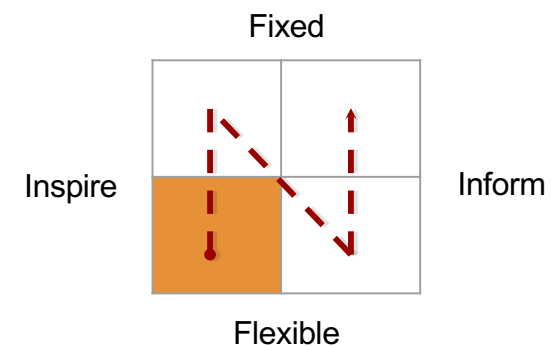
The most appropriate time for conducting Discovery Research is at the **beginning of a product development cycle**, when teams want to find the right path to focus on.

Compared to other research types, Discovery Research requires the **highest amount of budget and time**. The best approach is to recruit a mix of typical users and **extreme users**. Determining who is an extreme user starts with considering what aspect of your business goal or your user population you want to explore to an extreme. For example, an “extreme” car insurance customer might be someone who has 5 cars and 7 drivers in the household. An extreme user represents an edge case or outlier, or a person who has a good amount of knowledge about the subject matter you are researching.

→ [Click to watch the video](#)

Watch this video, in which Bob Thomas (Director of User Research) talks to Fallon Parker (User Researcher who acts as a participant). They simulate an interview session with a participant. In this interview they focus on discovery questions, such as:

- What does insurance mean to you?



Exploratory Research

You want to unpack experiences and understand a chosen opportunity, topic, or problem. As with Discovery Research, Exploratory Research is about people's behaviors, attitudes, and beliefs. But it is more focused and detailed than Discovery Research, in that it zeroes in on an area to bring further clarity to the experience.

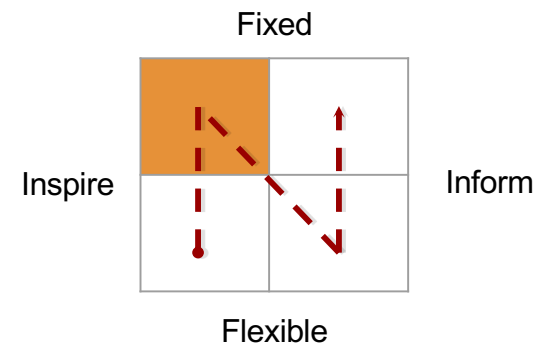
The most appropriate time for conducting Exploratory Research is near the **beginning of a product development cycle** when teams want to understand more details around a topic that they want to focus on, or at any point when teams want to understand a specific use case or use cases.

Compared to the research types on the right side of the quadrant, Exploratory Research requires a **large amount of budget and time**. The best approach is to recruit a mix of typical users and **extreme users**, but with more typical than extreme users.

→ [Click to watch the video](#)

Watch this video, in which Bob Thomas (Director of User Research) talks to Fallon Parker (User Researcher who acts as a participant). They simulate an interview session with a participant. In this interview they focus on exploratory questions, such as:

- What do you think about your insurance provider?



Creative Research

You want to generate ideas for how to solve an opportunity. With Creative Research, you are expanding on experiences to reveal themes, concepts, or ideas. “How might we” statements serve as a good starting point for Creative Research, as in, for example, “how might we organize our products in a way that makes sense to you?”

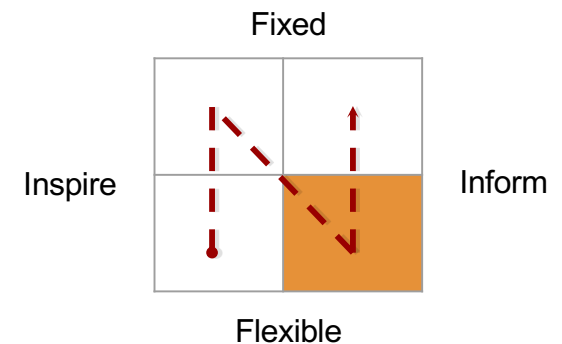
The most appropriate time for conducting Creative Research is when your team is **ready to create solutions** for uncovered opportunities or you have **some basic ideas or prototypes** that you want to get feedback on.

Compared to other research types, Creative Research requires a **medium amount of budget and time**. The best approach is to recruit **prospects or current customers / users** of similar products.

→ [Click to watch the video](#)

Watch this video, in which Bob Thomas (Director of User Research) talks to Fallon Parker (User Researcher who acts as a participant). They simulate an interview session with a participant. In this interview they focus on creative questions, such as:

- How might we organize the content on this page in a way that makes sense to you?



Decisive Research

You want information and validation to move forward with a solution. At this point in the research process, you are vetting themes, concepts, or ideas to make improvements and measure changes. A/B testing is a good example of Decisive Research.

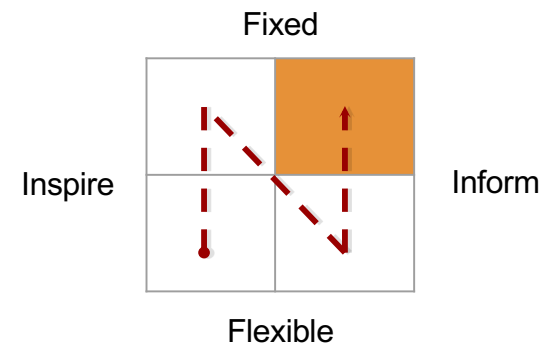
The most appropriate time for conducting Decisive Research is when you have **questions about details** within the design of your product.

Compared to other research types, Decisive Research requires the **minimum amount of budget and time**. The best approach is to recruit **prospects or current customers / users of your product**.

→ [Click to watch the video](#)

Watch this video, in which Bob Thomas (Director of Use Research) talks to Fallon Parker (User Researcher who acts as a participant). They simulate an interview session with a participant. In this interview they focus on decisive questions, such as:

- Which of these designs do you like the best? Why?



NCredible Framework Exercise:

Plan:

- Set up a meeting for your team. 1-2 hours.
- Draw a big version of the NCredible Framework on a whiteboard or on large sticky white pads.

Review the goals:

- During the meeting, review the NCredible Framework and the purpose of doing the exercise (10-15 minutes).
- Identify the goals for your project and write them on a board so everyone can see them. Think about the problems your team is trying to solve, as well as the business KPIs and user objectives (5-10 minutes).
- Keeping in mind the goals, ask everyone on the team to think about the questions they believe your team needs to ask in order to understand different aspects of the problems at hand. Everyone should write as many questions as they can think of on stickies (5-10 minutes).

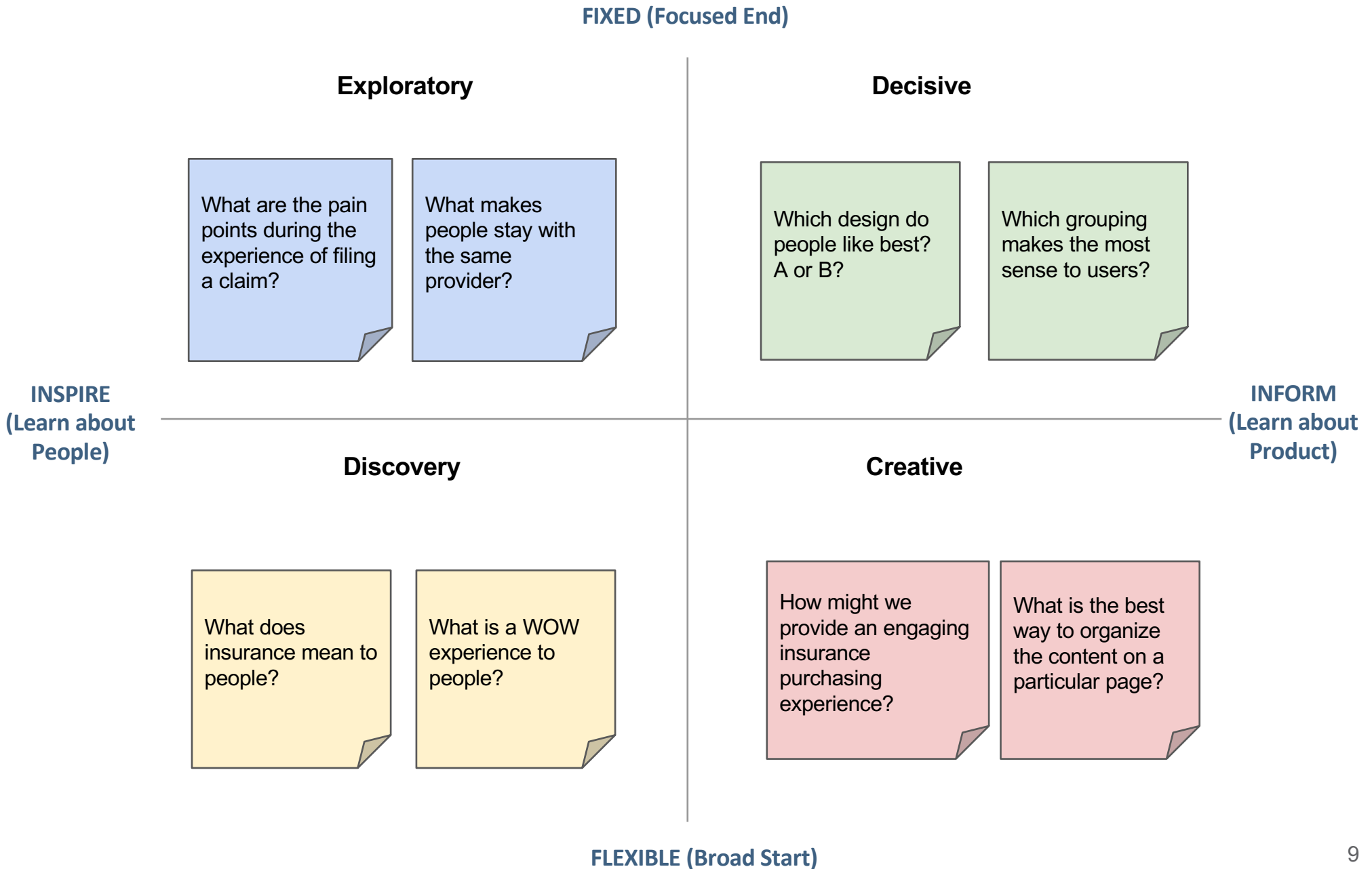
Individual exercise:

- Ask everyone to pick their top 3 questions (2 minutes).
- Ask everyone to map their questions to the NCredible Framework and put their stickies on the appropriate quadrant. See the next page for reference (5 minutes).

Team Share out:

- Review the stickies one by one and adjust their location on the framework if needed. If a question is unclear, rewrite it. (Time needed to complete this phase depends on the discussion and the number of stickies.)
- If stuck at any point of the conversation, it is helpful to ask, “Why are you asking this question?”.
- At the end, clusters of stickies show where your team needs to put their research focus.
- If you have lots of stickies, you can use a dot-voting exercise to decide on the prioritization.
 - It is recommended to start the research from more foundational questions.
- Consider all the factors that might affect your research plans (time, budget, team involvement, etc.).
- Use the research methods section of this UXR Handbook or collaborate with the User Research team to decide on the research methods and your next actions.

Example of mapping questions to the framework:



Next: Most Common Research Methods

Review each method carefully. Pick the one that fits best with the:

- **Goals** of the study and appropriate research type
(Discovery, Exploratory, Creative, Decisive)
- Stage of the project (integration)
- Timeline of the project
- Level of engagement from the team
- Budget of the project
- Desired analysis output

Customer Interview

Best for: Discovery and Exploratory

Customer interviews involve conducting 1:1 moderated conversations with customers to better understand their behaviors, goals, motivations, and more. Running a customer interview involves developing an interview guide with questions for customers and an optional activity to engage the participants.

Pros:

This method is great for identifying themes and patterns and can be used to produce personas that can be referenced throughout the development process. Oftentimes, the conversations can lead to insights that may not have come up or been identified in other types of studies. Outputs from customer interviews can help guide future design decisions.

Cons:

This method requires dedicating a significant amount of time to moderating the sessions as well as synthesizing the results. Requires sessions with around 15-18 participants so that you are able to capture diverse perspectives, which requires a higher recruiting cost and longer prep time.

Example scenario:

The I Buy Motorcycle team decided to interview customers to understand what it is like to be a motorcycle rider, and what their overall experience has been with insurance. They conducted 1 hour interviews with 15 participants and used the findings as a foundation for subsequent design thinking activities.



Time:

3-6 weeks from Kickoff to Results



Team Engagement:

High: plan, facilitate, observe and analyze sessions



Analysis Output:

Affinity Diagram, Personas, Journey Maps, Collages



Recruit:

15-18 participants
May need to work with an external recruiter



Success Measure:

1. Sufficient information to guide primary/secondary persona creation
2. Novel insights/perspectives the team was not previously aware of



Costs:

High
Recruiting costs
Participant payment

Moderated Usability Study

Best for: Creative and Decisive

A usability test is a method of testing a design / product with representative users. This method unpacks user behavior and actions.

Pros:

You can test prototypes at all fidelity levels: paper, wireframes, coded, or in-market applications. This method is also good for comparing designs or process flows.

Cons:

The laboratory is an artificial environment and there is a small sample size of users. If high-fidelity prototypes are tested, participants may be reluctant to criticize the prototype. This method requires high team engagement and can be more time-consuming and expensive than other research methods.

Example scenario:

The DSS team wanted to examine how to deliver features that users want in a mobile app, especially in comparison to Geico mobile apps. Their focus was the home screen, but they also wanted feedback on specific features: dashboard, mobile ID cards, registration, reporting a claim, etc. A recruiter was used to find 9 participants for 60-minute usability tests. Participants were given 8 tasks in which pass/fail measures and difficulty ratings were recorded. During the test, participants also chose emotional reaction words to describe their experience with the app. The test uncovered significant issues with finding policy information, confusion over recording an accident vs a claim, and difficulty engaging with (flipping) ID cards.



Time:

3-6 weeks from Kickoff to Results



Team Engagement:

High: plan, facilitate, observe, and analyze sessions



Analysis Output:

Affinity Diagram, Usability Scorecards



Recruit:

8-12 participants
May need to contact a recruiter



Success Measure:

Having a clear understanding of positive and negative findings and prioritization of findings to move forward



Costs:

High
Recruiting costs
Participant payment

Hallway Study

Best for: Creative and Decisive

A hallway study is a “quick and dirty” way of testing a prototype. It involves setting up a table and stopping numerous passersby to gather feedback or participate in a few short tasks.

Pros:

This is a low-cost option that does not require extensive prep time dedicated to recruiting, while providing a high number of study responses. Hallway studies are great for testing prototypes of varying fidelity levels, and especially helpful for validation and testing of early stage designs.

Cons:

You will need multiple moderators available at the same time to run the table so that you can collect as many responses as possible. While you avoid the time/cost of recruiting participants, you have less control over the types of participants you encounter and are not testing with real users. Relying on internal employees may result in biased feedback. Additionally, this is not an effective method for testing detailed, long, or complex user experiences.

Example scenario:

The Auto team wanted to determine how best to group and present different coverage options for customers. The team came up with a few ideas for groupings, and then drew four different low-fidelity options onto big portable white boards. During the study, they asked participants a few standard questions and then asked their feedback on the different mockups on the portable white boards. All participants were offered free cookies and they received 92 responses!



Time:

1 week from Kickoff to Results



Team Engagement:

Medium: develop and run the test sessions, as well as review the results



Analysis Output:

Major themes from basic quantitative and qualitative data



Recruit:

20-150 participants
No need for a recruiter



Success Measure:

1. Quantitative results that are easy to compare and analyze
2. Results that indicate a direction to move forward



Costs:

Low

Cost of materials and food / small rewards for participants

Validately - Remote Unmoderated Study

Best for: Creative and Decisive

A Remote Unmoderated Study uses a platform such as Validately to present remote participants with a prototype and have the system record the participants as they run through tasks and answer questions. Validately is good for a 5-10 minute quick test, similar to a Hallway Study.

Pros:

This allows you to gather quick feedback from a large number of users, without requiring a live moderator. The system will compile responses from users on the same questions/ tasks, allowing for easy quantitative analysis. You can watch recordings to listen to qualitative data. The platform also allows you to recruit specific target demographics.

Cons:

The test must be designed with a lot of thought and expertise, as there is no way to add or adjust questions during the session. Responses from participants are limited to defined tasks and questions, and there is no live assistance if they are confused by a question. As well, participants may enter invalid or “fake” responses, so results must be manually reviewed before analysis. Lastly, you cannot recruit around very specific guidelines such as “filed a claim within the last 0-3 months.” Requires engagement from the team to watch recordings of the sessions.

Example scenario:

The I Manage My Policy team leveraged a remote unmoderated Validately study in order to understand users’ reactions toward three different prototypes of the same page. Using this method, they were able to query 10 participants and learn about the strengths and weaknesses of each prototype.



Time:

2-5 weeks from Kickoff to Results, with 1-3 weeks of prep time



Team Engagement:

Medium: Creating study in the system, observing and analyzing sessions



Analysis Output:

Basic quantitative data. Affinity diagramming of qualitative data



Recruit:

5-15 participants
Typically 5-40



Success Measure:

1. Valid data responses that align with goals of study
2. Results that indicate a direction to move forward



Costs:

Medium

Cost to pay participants/system

UserZoom - Remote Unmoderated Study

Best for: Creative and Decisive

A Remote Unmoderated Study uses a platform such as UserZoom to present remote participants with a set of questions and/or tasks about their experiences or a design. Unlike Validately, UserZoom is good for a 10-20 minute test, where we can usability test more detailed tasks and processes.

Pros:

This allows you to gather quick feedback from a large number of users, without requiring a live moderator. The system will compile responses from users on the same questions, allowing for easy quantitative analysis. The systems also allow you to recruit for specific target demographics.

Cons:

The test must be designed with a lot of thought and expertise, as there is no way to add or adjust questions during the session. Responses from participants are limited to defined tasks and questions, and there is no live assistance if they are confused by a question. As well, participants may enter invalid or “fake” responses, so results must be manually reviewed before analysis. Lastly, you cannot recruit around very specific guidelines such as “filed a claim within the last 0-3 months.”

Example scenario:

The I Buy Motorcycle team leveraged a remote unmoderated study in order to compare two different prototypes with differences in tone and language. Using this method, they were able to query 202 participants and ask them screen by screen which language/tone they preferred.



Time:

2-3 weeks from Kickoff to Results, with 1 week of prep time



Team Engagement:

Medium: Prepare questions, set up the study in the Userzoom, analyze and prepare report



Analysis Output:

Quantitative data, qualitative comments



Recruit:

50-500 participants



Success Measure:

1. Valid data responses that align with goals of study
2. Results that indicate a direction to move forward



Costs:

Medium

Cost to pay participants/system

Unmoderated Card Sort

Best for: Creative and Decisive

This research method uncovers how users understand and categorize information. It can be useful when designing a website or improving an existing website to prioritize and order specific information.

Pros:

Can be modified with rank-order or arranging tasks to provide information about user ordering behavior. Provides good quantitative output such as dendrograms and affinity charts. It is also useful for testing language and labelling.

Cons:

Online Card Sorts require technical ability for setup in UserZoom or Optimal Sort. Analysis of the results also requires significant time and effort. Labels must also be carefully chosen to prevent bias.

Example scenario:

The Direct Sales group completed an open card sort of the terms within an auto insurance quote. A list of 30 terms was tested in UserZoom with 60 participants. From this, the research team cleaned the data and analyzed the findings to examine the major groupings formed. A subsequent closed card sort followed this test to verify the new groupings and compare them against the current quote groupings.



Time:

4-8 weeks Kickoff to Results



Team Engagement:

Low: Prepare questions, set up study in the system, and conduct analysis



Analysis Output:

Grouping of contents, labels of groupings. Major themes out of qualitative data



Recruit:

Work with UserZoom or OptimalSort
15-30 participants for 40-60 labels



Success Measure:

Clear ways to organize the content as well as labels



Costs:

Moderate
Participants and software

Survey

Best for: Exploratory, Creative, and Decisive

Summary of the method:

A survey is used to ask a standard set of questions about a topic or product to a wide range of users for quantitative analysis.

Pros:

Surveys require fewer resources to run and can be distributed to a much larger number of participants than other methods. This can produce a very high number of responses which can be analyzed quantitatively.

Cons:

A survey will result in shallow results, as there is no ability to clarify or probe deeper on the responses. If participants are confused by the question, there is not a way to provide live assistance, so they may answer a question incorrectly. It is therefore critical to devote time and energy towards the effective design of each question in the survey.

Example scenario:

The User Research team conducted a survey among recruited participants (85 people) who chose to use their smartphone to get a car insurance quote (not necessarily with LM, but with any car insurance company) to determine what were the biggest obstacles to completing the quote on the phone and, if applicable, binding online. Quantitative results were documented and reported by the User Research team.



Time:

4-6 weeks from Kickoff to Results



Team Engagement:

Low: Create questions, set up and distribute survey



Analysis Output:

PowerPoint presentation, quantitative analysis



Recruit:

50-500 participants



Success Measure:

1. Valid data responses that align with goals of study
2. Results that indicate a direction to move forward



Costs:

Low

Cost to pay participants/system

Heuristic (Expert) Review

Best for: Creative and Decisive

Summary of the method:

In a heuristic evaluation, usability experts review the current design and compare it against accepted usability principles. Using these guidelines and drawing on their experience, the evaluator is able to locate some usability issues that users are likely to encounter.

Pros:

It can provide some quick and relatively inexpensive feedback to designers. You can obtain feedback early in the design process. You can use it together with other usability testing methodologies.

Cons:

It requires knowledge and experience to apply the heuristics effectively. The evaluation may identify more minor issues and fewer major (foundational) issues. It does not uncover user's behavior and mindset.

Example scenario:

MasterThis! was reviewed based on its web-based experience in November, 2016. By following the guidelines established by Jakob Nielsen PhD, web usability consultant, eService was evaluated on many different criteria, such as efficiency, aesthetics, error prevention, etc. The goal was to find out any barriers that prevent users from receiving information and content. Findings and recommendations were documented.



Time:

1-3 weeks from Kickoff to Results



Team Engagement:

Very low



Analysis Output:

Research Report



Recruit:

N/A



Success Measure:

Findings with severity rankings. Recommendations that indicate a direction to move forward



Costs:

Low

Methods Comparison

XL ← ----- M ----- → XS
 (Requires the highest amount) (Requires the lowest amount)

Name of the method	Best for	Number of Participants	Participants' location	Team engagement	Time	Cost	Analysis output
Customer Interview	Discovery Exploratory	15-18	In Person/ Remote	XL	XL	XL	Qualitative Data, Themes, Journey Maps, Personas
Moderated Usability Study	Creative Decisive	8-12	In Person/ Remote	L	L	L	Qualitative Data, Usability scorecards and issues
Hallway Study	Creative Decisive	20-150	In Person	M	S	XS	Quick Qualitative and/or Quantitative data
Validately- Remote Unmoderated Study	Creative Decisive	10-15	Remote	L	M	M	Basic Quantitative data, Themes
UserZoom- Remote Unmoderated Study	Creative Decisive	50-500	Remote	M	M	M	Quantitative data, Basic qualitative data
Unmoderated Card Sort	Creative Decisive	60+	In Person/ Remote	S	M	M	Grouping of contents, Labels for groups
Survey	Exploratory Creative Decisive	50-500	Remote	S	M	S	Quantitative analysis
Heuristic (Expert) Review	Creative Decisive	N/A	N/A	XS	M	N/A	Report, Potential usability issues