

UX201 | User Research

Girl Develop It Boulder/Denver

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April 28, 2018





Good Morning!

Ground Rules

Take a break if you need to.
Participation makes this better.
There are no bad ideas.
All questions are welcome, don't be shy.
You are here because you matter.

Agenda

Times are subject to change

9:00 - 9:10 Introductions

9:10 - 9:20 Background

9:20 - 9:50 Research goals + objectives

 Activity 1 | Scenario

9:50 - 10:00 Types of research

10:00 - 10:50 Participants

 Activity 2 | Participants

 Activity 3 | Questions

10:50 - 11:00 Break

11:00 - 11:50 Conducting research

 Activity 4 | Interviews

11:50 - 12:25 Analyzing findings

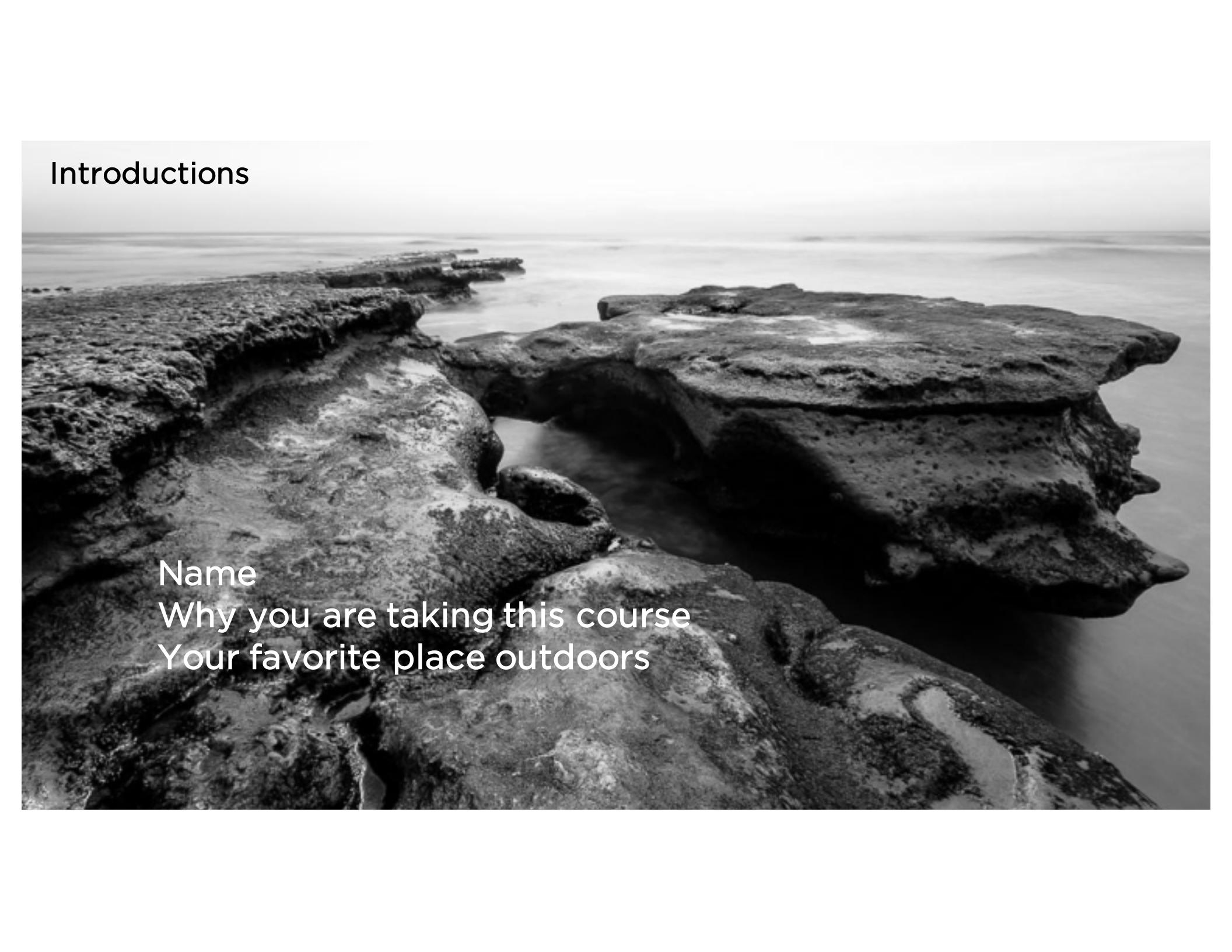
 Activity 5 | Synthesize

12:25 - 12:40 Outputs

12:40- 12:50 Additional Resources

12:50 - 1: 00 Q+A

Introductions

A black and white photograph of a rugged coastline. In the foreground, large, layered rock formations, possibly sandstone, rise from the water. The rocks have distinct horizontal sedimentary layers and some vertical weathering. The ocean is visible in the background, meeting a hazy sky.

Name
Why you are taking this course
Your favorite place outdoors

Background

User Experience

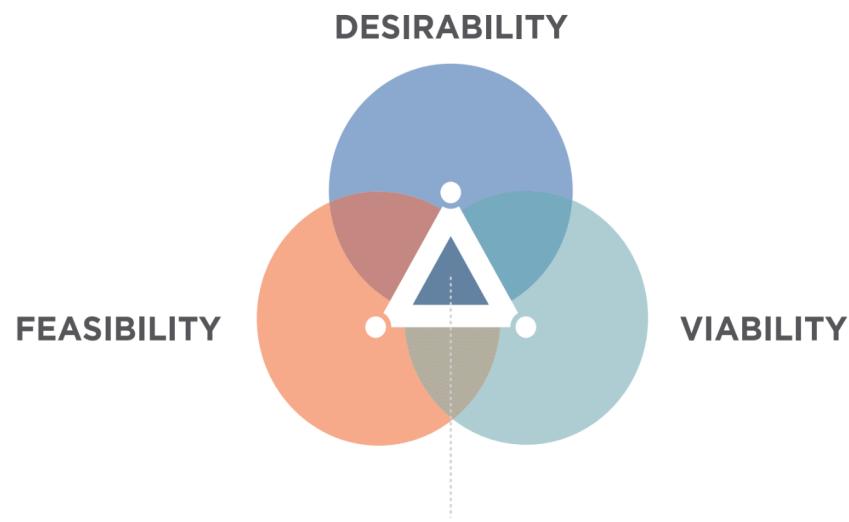
User experience is a set of activities and philosophies that ensure users' needs are understood, addressed, and – ideally – surpassed.

User experience encompasses several disciplines. The main contributors are **user research** and experience design.



Background

Design Thinking



Design thinking brings together what is desirable from a human point of view with what is technologically feasible and economically viable.

A human centered approach to **user research** ensures that you'll build things that people actually want.

Background

User Research

User research focuses on understanding the behaviors, needs, motivations, and emotions of those who will be using or interacting with your product.

It helps place people at the center of your design process and your products. It's used to inspire your design, to evaluate your solutions, and to measure your impact



Background

It is Not....

User research is NOT.....

Market Research

The goal of market research is to gather information to identify what markets a product could succeed in.



Usability Testing

The goal of usability testing is to evaluate the success of a product with users.



**“Empathy is at the heart of design.
Without the understanding of what
others see, feel, and experience,
design is a pointless task.”**

—Tim Brown, IDEO

Background Importance



Removes assumptions made about users

Gives you and your team data for decision making

Provides insight into how audiences think about your company or product offering

Can help identify new business opportunities

Understand user behaviors and how they make decisions



Today's Challenge:

Create a research study for
Colorado State Parks + Wildlife

“Supposing is good.
Finding out is better.”

—Mark Twain

Goals + Objectives

Stakeholders

Identify your Stakeholders

These are people or teams who would have a vested interest in the research you will be conducting.

Understand what your stakeholders want to know. It's important to know what your stakeholders want to learn and why they feel like research is the way to get answers.

Align with them on the problem and conduct stakeholder interviews to better understand their position.

Example Questions:

Why do our customers like doing business with us?

What is their perception of us?

What could we do better? What is the customer's biggest pain point?

What product and services do competitors offer that we don't but you wished we could?

What area do you see the most opportunity?

How will this benefit the company?

Goals + Objectives

Focus

Establish a focus

Goals & objectives outline what type information the research activity will be capturing.

First and foremost, you can get detailed objectives by collaborating with the product's stakeholders.

Once you've figured out the broad topics that the study will cover, it's important to drill down.

Examples:

Explore general decision-making process.

Capture a "day in the life" /current behaviors

Explore relationship with the company.

Explore future business needs.

Assess companies considered/used in the past.

Benefits, including products and services offered, and issues with each.

Understand general drivers or motivations.

Interactions with a specific flow or function.



Activity 1 | Scenario

Colorado State Parks + Wildlife wants to know how they can get more residents and visitors into the outdoors.

Time | 20 minutes

Create goals and objectives for what the study will accomplish.

Small Groups

SH 1: How can we clearly show available trails?

SH 2: What kind of activities do people want to do?

SH 3: How do people look for information?

Types of Research

Research Methods

- Stakeholder interviews
- User interviews
- Contextual inquiries
- Competitive analysis
- Current state evaluation
- Ethnographic research
- Focus groups
- Analytic analysis
- + many more



Types of Research

Qualitative vs Quantitative Research

Qualitative Research

Provides underlying reasons for a problem and is directional in nature. The goal is to create a narrative that can give an idea as to why something is happening.

Qualitative methods can uncover needs, aspirations, identify trends, unveil opportunities and barriers, analyze dynamics, reveal interrelatedness and dependencies and underlying motivations

Examples: 1:1 interviews, focus group discussions, contextual inquiries, etc.

Quantitative Research

Helps quantify a problem. Statistics coming from quantitative research can demonstrate the size of a problem that users are experiencing.

Quantitative methods are used to quantify attitudes, opinions, behaviors, and other defined variables by generalizing results.

Examples: surveys, studies, polls, etc.

Types of Research

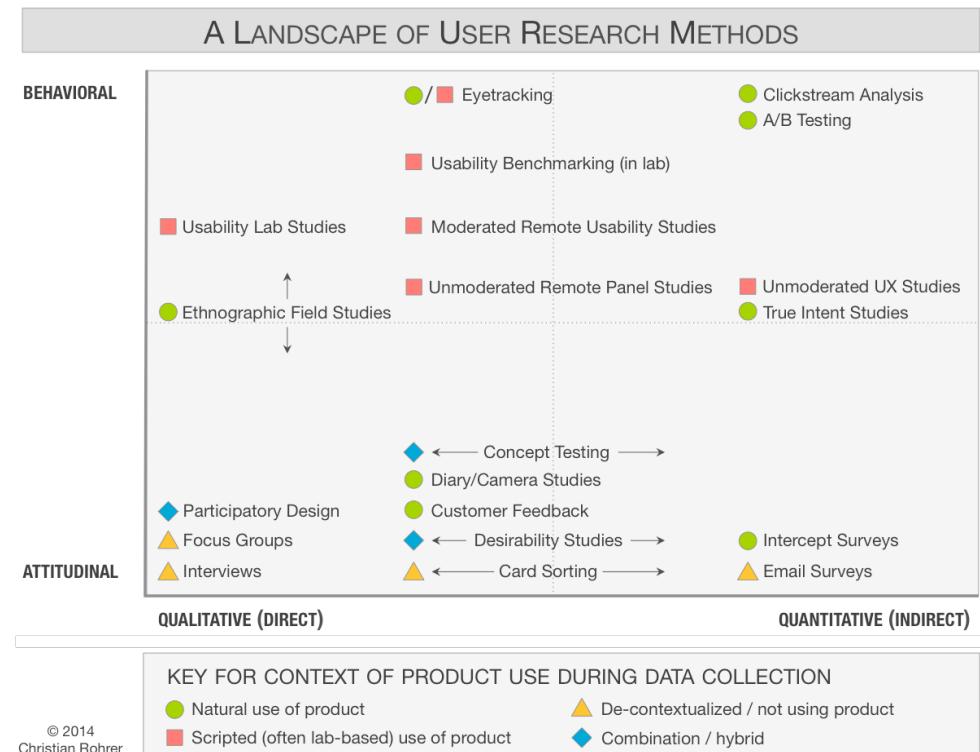
Attitudinal vs. Behavioral Research

Attitudinal Research

Captures what people believe their understanding is to be.

Behavioral Research

Captures the actions of what people actually do.



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Christian Rohrer

<https://www.nngroup.com/articles/which-ux-research-methods/>

Our Focus Today

User Interviews

User interviews are the easiest way to get research started. They put you directly in touch with who is using your product.



Participants

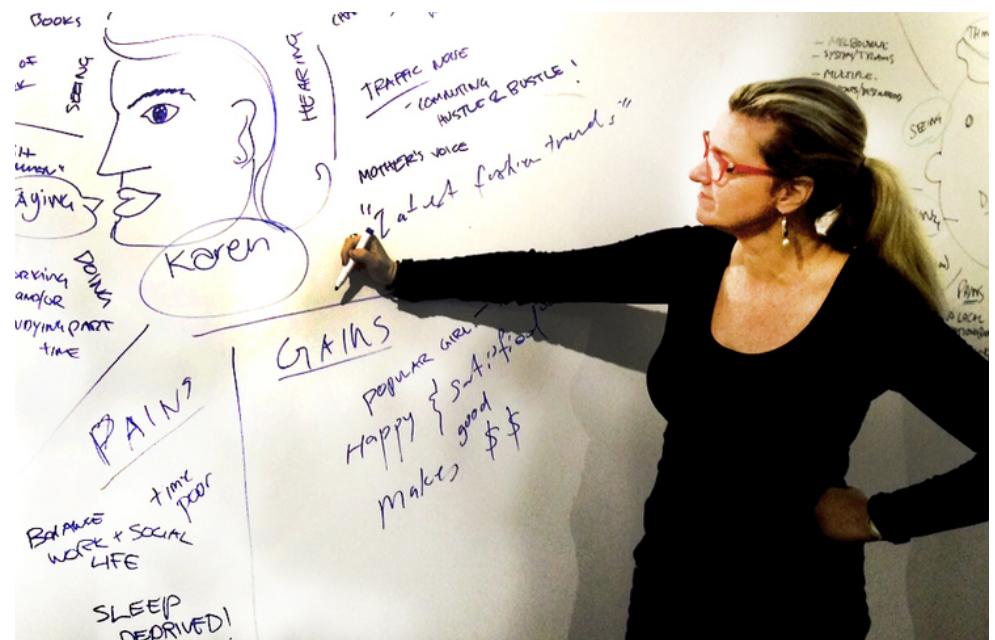
Identification

Identifying your participants

Who can provide insight into your product?

Ways in which you can narrow the population:

Business line
Demographic
Roles & Responsibilities



A black and white photograph of a mountain range reflected in a calm lake. The mountains are rugged with sharp peaks, and their reflections are clearly visible in the water. The sky is overcast.

Activity 2 | Participants

Who are our target audiences?

Time | 15 minutes

Based on the problem, identify the different audiences you would want to participate in a user interview

Large Group

Participants

Locating

Where to find participants

Directly through your company

- Website
- Email
- Data analytics
- Sales/Marketing team

Through your business partners

Outsourcing to a recruiting Company

- Fieldwork
- Measuring U
- Sounding Box
- InGather

Out in public

- On the street
- In a coffee shop
- In a store



Participants

Recruitment

Screener

A screener is a series of questions that help to narrow your participant pool to those you want to talk to during the actual research study.

Be clear about the purpose on why you're asking for their time and any incentive you are providing.

Questions asked should help to weed out any potential participants that do not fit the participant profile that you have determined

The screener is not the interview. Reiterate that the incentive will be paid out if they are selected to interview.

Questions should map back to the types of participants you have identified

No more than 10 questions

Always ask for consent to contact

Be cautious about asking for personal information

If a question is closed-ended, make sure the list of options provided is exhaustive

“What users say and do are different.”

—Nielsen Norman Group

Participants

Writing Questions

Writing Interview Questions

Formats

- Script
- Themes
- List
- Free-form

Remember

- Organize questions by topic
- Keep questions open ended
- Be specific about examples
- Ask about current behavior
- Don't ask users to predict behavior
- Avoid leading questions

DISCOVERY STRATEGY: CONTEXTUAL INQUIRIES OBSERVE + HEAR + INQUIRE FIELD GUIDE



INTRODUCTION

- Purpose: To better understand their needs, frustrations and motivations. Insights gathered will help inform advances in the CPS digital space, which ultimately are designed with them in mind. Enhance what we've started with FSR (MSR) - suite of tools.
- Our role: No bias. Bringing a clear mindset, not applying preconceived notions. Here to observe and discuss. Will be asking "why" a lot (5 Whys).
- Expectations: Speak freely. Encouraged to "think out loud." Opinions are personal and respected.



OBSERVE

- What is taking up a lot of time?
- What are they doing manually?
- What processes appear antiquated (i.e. paper process)?
- What processes appear efficient?
- What is visible during decision-making process? What are they leveraging or doing?
- What are they doing during their customer interactions? How are they communicating, sharing information and receiving input/feedback?
- When does a body language express frustration or confidence?
- What other digital/technological devices/processes are being used?
- Where are they accessing data/information?
- Who are they talking to or interacting with?
- What are they jotting down (what's in the red notebook)?
- How are they planning their day/sticking to a schedule?



HEAR

- What questions are they asking? What do they need, or are seeking?
- What are they asking others to do for them - assistance or directive?
- What questions are they being asked by others? What are others dependent on them to tell them/answer?
- What type of information is shared in the various environments throughout the day? Example: car, restaurant, office, farm, etc.



INQUIRE

SUCCESS/POWER

- What does success mean to you? When do you feel most successful? (Ask for an example)
- How do you set goals for yourself? What are some examples? How do you know how you are doing/tracking?
- What would you identify as your biggest hurdle (pain point) in doing your job successfully?
- What types of activities/approaches do you do that you think help make your grower successful?
- How do you stay on top of industry news? Maintain being an expert?

Demand

- What are you most often asked about/for from growers? How do you go about providing that to them? (Ask them to walk through the process)
- What tasks take up most of your time? Which have the most laborious, or frustrating, process?
- Which tasks do you feel are streamlined?
- Do you feel like any of your tasks are redundant?

VISIBILITY

- What areas of CPS would you like more visibility into? Examples: tracking, inventory, rebates, etc. How would this help you? (Ask for an example)
- What areas of your Grower Customer would you like more visibility into? Examples: account, trends, orders, history, etc. How would this help you? (Ask for an example)
- Transparency ...

ACCESS

- Where do you get most of your industry related information (agronomy, products, etc?) How often are you accessing that information? And from where? Example: radio word of mouth, university studies, etc.
- How do you like to collect information to refer to later? What type of information are you collecting/refering?

OTHER

- How do you decide the schedule for your day?
- How do you keep track of all the different requests from your grower?
- How do you embrace technology in general? What's something you have adopted in the past few years that's been a positive experience, and why? Example: Kindle, Echo, Facebook. What have you attempted to adopt that has been a frustrating experience, and why?
- What entices your appetite for a self-service tool? What is your hesitation?
- What's your favorite way to celebrate after a good year?
- If you were the CEO of CPS and could change one thing, what would that be?

ROLE QUESTIONS

- Crop Consultant
- Branch Manager
- Branch Administrator



Day - In- The - Life

Activity 3 | Writing Questions

What do you plan on asking participants
to gather insights?

Time | 25 minutes

Using the research goals & objectives + knowing your participants, write 3-5 questions that you would ask a participant in a user interview (10min)

In small groups, share the questions you wrote. Combine questions into a single list of questions. (15 min)

Individual

Break

Conducting Research

Avenues

How to conduct user research will greatly depend type of research.

In- Person

- Interviews
- Observation/Field Studies
- Contextual Inquiries



Remotely

- Interviews
- Surveys
- Diary Studies



Conducting Research

In-Person

Benefits

Observe body language and facial expressions

Easier to build rapport with your participant

Ability to put a name to a face

Gain context for the person's environment

Read the situation and make necessary adjustments

Command more focus

Disadvantages

Logistics to get commitments is tougher

Can be expensive if you have to travel

Time delays due to traveling

Higher incentives if the participant is coming to you

Risk of no-shows

Be cautious of how many people attend

Conducting Research

Remotely

Benefits

Neither party has to travel

No geographic limitations

Can be performed in the comfort of one's home/office

Lower risk of no-shows

Easier to reschedule

Easier to read from a script

More economical to have observers and note-takers

Disadvantages

Subject to technical difficulties

Participant has to understand how to use the technology

May have challenges building rapport

Much more difficult to read the situation

Harder to keep a participant's focus

Conducting Research

Remote Tools

Commonly used tools:

Google Hangouts

WebEx

Join Me

Conference Line

Simple Phone Call



Conducting Research

Interaction

Things to remember when interacting with participants during an interview

Build rapport with your participants, you want them to trust you

Keep their stories are at the center of the interview

Let your participant lead the conversation

Master the awkward pause

Do not correct your participants, ask them to clarify



Conducting Research

Note-taking

Use whatever method you are most comfortable with.

You'll want an easy way to consolidate notes for when you analyze the interviews.

Templates can be helpful if there are multiple interviewers

Examples of tools:

Mural.ly
Realtime board
Evernote

The image displays three distinct digital tools used for research and note-taking:

- Mural.ly:** A collaborative real-time board titled "Positive Emotions Brainstorm" by [andrewowong](#). The board features a grid of emotion words such as Joy, Surprise, Anger, Excitement, Sadness, Surprise, Confused, Happiness, Assurance, Trust, Predicted, Confidence, Risk, Aware, Alert, Engaged, Praise, Faith, Resent, Doubt, Predictive, Hope, Satisfied, Relief, Knowledge, Grateful, In Control, Powerful, Outgoing, Empowered, Content, Enthusiastic, Contented, Engagement, Gain.
- CPS Employee Portal Dashboard:** A screenshot of the CPS Employee Portal dashboard. It includes a chart titled "By The Shelf" showing 285.2M and 537, and a section titled "Daily Snapshots" with various data points. The dashboard also features sections for "Check things!", "Notes", "Crisis Landscape", "Stay Connected", and "External links".
- Evernote Notebook:** A screenshot of an Evernote notebook titled "cafe". The notebook contains handwritten notes and a list of tasks:
 - how is this different than
 - reg - COST? RAIL STIPPO? 100% rating
 - TSD - MIXED WARS Six weeks first four weeks second
 - SA, Gangsta? Serial treatment for now!
 - But likely to change
 - only big patient boards
 - DATA files
 - POC TO START
 - Discharge status?
 - work w/ JET for training?
 - not disturbance → self own for SA
 - Define combat? IN THEATRE - SHOT AT or CIB CAR helps
 - CORE belief: Replaced by NEW NEGATIVE BELIEF DURING TRAUMA
 - Program looks to INCREASE OPTIMISM of PTSD SUFFERERS
 - Program core stance is PTSD IS BASED ON FEAR → ANXIETY
 - White City VS Rosedale Hostile SUCCESSION
 - GREG ANDERSON - started working w/ Vietnam vets

Conducting Research

Structuring an Interview

1 Opening

Introductions

Thank them for taking the time

Ask to record (or video) the session

Signing of any legal paperwork

Restate the purpose of the interview

Opening questions about the participant

2 Core Interview

Time to ask the questions you created (time block if necessary)

Use your list of questions as a guide

Let the participant lead, follow-through on organic conversation

Know when to table a topic, or help a participant wrap up a rambling thought

3 Closing

Thank the participant for their time

Ask if they have any questions

State how they will receive their incentive, if there is one

If necessary, communicate next steps

Conducting Research

Roles + Responsibility

Participant
Tells the story

Interviewer*
Asks the questions

Notetaker
Captures the story

Observer
Listens to the story

* Be clear that only the interviewer is the one to ask questions, unless other color commentary is discussed ahead of time



Conducting Research

Post Research

Debrief

What was learned (i.e. themes)?
What went well?
What could be improved?

Share notes

Consolidate Notes





Activity 4 | Conduct Interviews

Establish roles and walk through a mock interview

Time | 30 minutes

Using the questions you created (plus additional questions you think of), facilitate a user interview

Three interviews, 7 min/each

Groups

Roles

Participant | Tells the story
Interviewer | Asks the questions
Notetaker | Captures the story
Observer | Listens to the story

Analyze Findings

Post Research

What to do with all of this data?

The goal of this research is to identify trends amongst the stories gathered from participants.

Things to look for

Common words used
Similar sentiment regarding a topic

Tools

Google Docs
Evernote
Realtime Board
Excel
Post-it's
Whiteboard





Activity 5 | Synthesize findings

What do all of these insights tell me?

Time | 20 minutes

Using the notes that were taken for each interview, organize them by common themes & give the groups a title.

Large Group

Research Output

Research Readout

Research Readout

Typically some type of presentation deck that highlights research findings.

IBS (10) IBL (13)

IBS and IBL interviews held in-person and over the phone.

Key Takeaways

- Leverage FLASH for daily engagement
- Need on-going alerts (based on set-up)
- Short-term planning is an accelerator for Long-term planning
 - Initial onboarding is critical
- Data integration opportunities
- Make metrics valuable
- Need to have the ability to work offline
- Multi-tier permissioning

Day in the Life

- Planning in the short-term
- Leverage current routine
- Want to delegate to fully focus on clients

Staff & Talent Acquisition

- Planning in the short-term
- Leverage current routine
- Want to delegate to fully focus on clients



Once a quarter, we will take our ARS inventory reports, and as a team, head out to the warehouse to physically count and reconcile inventory based on those ARS inventory reports. It typically takes an entire day, and then the warehouse manager spends another week or so making sure we have an accurate inventory record.

- Crop Consultant

Research Output

Persona

Personas

A tool that humanizes a user by capturing their goals and needs

Lauren Jules



"I need an app that is fast, simple, and easy. I need to record an idea before I forget it."

Personal Description

Lauren is an undergrad engineering student in Chicago, IL. She has never used Evernote, but does use her phone to keep notes, usually in a part-time job she has. Note-taking app. She finds it to be fast, easy, and simple, which are the main things she looks for in an app. She believes that pen and paper can never be replaced. She often finds herself using post-it notes for quick notes.

Demographics

Age: 22
Education: Undergrad in Engineering
Location: Chicago, IL
Gender: Female

Technological

Lauren has a laptop that she uses all the time while in class. She also has a tablet but right now it is inconvenient to use while in class because she can't type fast enough out to keep up with the instructor. Lauren has a smartphone as well, but she only uses it for phone calls and for checking her email.

Roles

Lauren is a student in Engineering at a university in Chicago. She also has a part-time retail job so her schedule is very tight.

Desires

Lauren doesn't believe that an app can ever replace taking notes on pen and paper. She finds that typing on a virtual keyboard is too slow. She desires an app that will allow her to take short notes quickly and easily. She finds herself constantly searching for a specific page of notes or post-it so an app that would help keep her better organized is desired.

Behaviors

Computer Usage
Once a week — 5-10 hrs/day

Note Taking Devices
None — Many

Devices Owned
None — Many

Note Taking
A little — A lot

Note Taking App Usage
None — A lot

Drew
Influencer

ABOUT

- Age: 25-34
- SDOK: 75K
- High Tech Proficiency

MOTIVATIONS

Motivated to find new things to do and share them with network, having influence, being the first to know about something, and getting tickets right away.

CORE NEEDS

Finding events on social media and being able to easily share them. Being able to see trending events that will up their kool. Also getting notifications of on-sale so they can be the first to get tickets.

PAIN POINTS

Finding the time to attend events and staying on budget.

EVENT ATTENDANCE ATTRIBUTES

Frequent event go-ers (monthly), tend to be very early planners, and more likely to travel regionally or nationally for an event. tend to go to trending events only.

EVENT INFLUENCERS

- Friends
- Cultural
- Adventure
- Learning
- Networking
- Hype
- Credibility

STATISTICS

- 39% Total Universe CITY
- 12 Events per month

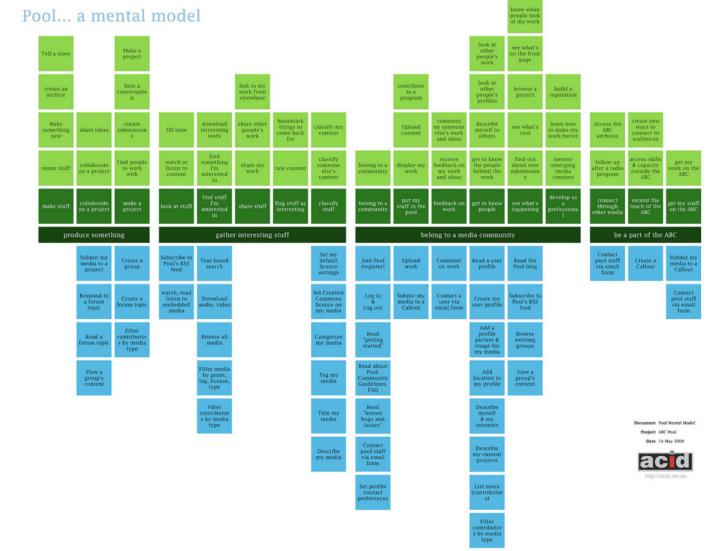
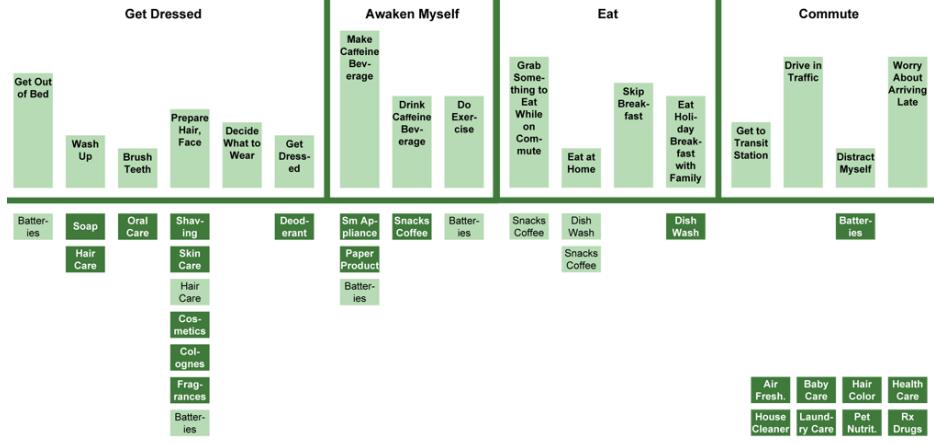
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Research Output

Mental Model Diagram

Mental Model Diagram

Capture your team's understanding of how a user thinks about an experience within a narrowly defined scope.

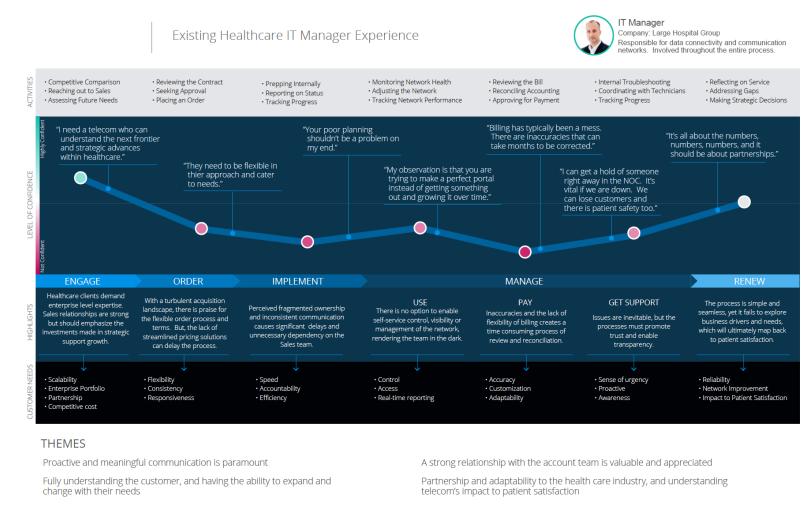
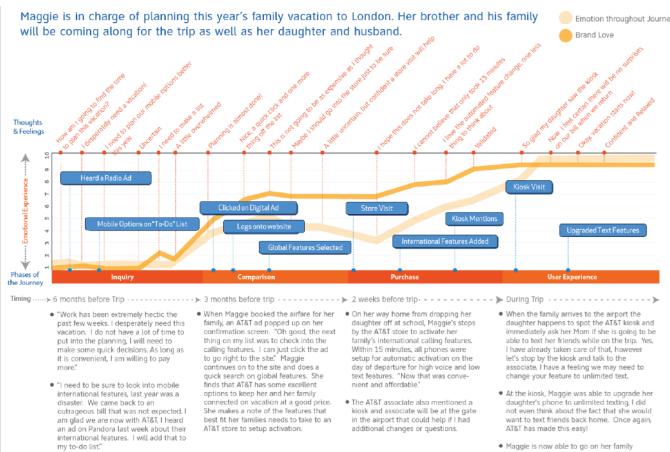


Research Output

Journey Map

Journey Map

Exposes how a client thinks about how they interact with a product or service over time.



Additional Resources

Web-links

Web-links

Medium: medium.com/design-research-methods

Nielsen Norman Group: nng.com

Smashing Magazine: smashingmagazine.com

A List Apart: alistapart.com

User Interface Engineering: uie.com

blog.prototyp.io/great-sites-for-ux-research-28bcc0d3ca

ideo.com/post/design-kit

Additional Resources

Books

Books

Universal Methods of Design, Bella Martin + Bruce Hanington

Remote Research, Nate Bolt + Tony Tulathimutte

Interviewing Users, Steve Portigal

Lean UX, Jeff Gothelf + Josh Seiden

A Project Guide to UX Design, Russ Unger + Carolyn Chandler

Just Enough Research, Erika Hall

The User Experience Team of One, Leah Buley

Interviewing Users, Steve Portigal

Validating Product Ideas, Tomer Sharon

Additional Resources

Places to go

Local Events

Creative Mornings Denver creativemornings.com/cities/den
Denver Start Up Week www.denverstartupweek.org/
Boulder Start Up Week <http://boulderstartupweek.com/>
Denver UXers Slack Team denveruxers.com

Local Meet Ups

Ladies that UX www.meetup.com/Ladies-that-UX-Denver/
Denver UX <https://www.meetup.com/DenverUX>
Boulder/Longmont UX Research <https://www.meetup.com/Boulder-Longmont-UX-Research-Meetup>
UX Book Club Denver

UX Conferences

Midwest UX October 2018 – Chicago, IL <https://www.2018.midwestuxconference.com/>
UX Strat September 2018 – Providence, RI <https://uxstrat.com/>
Mind the Product July 2018 – San Francisco, CA <http://mtpcon.com/sf/>
UX Week August 2018 – San Francisco, CA <http://uxweek.com/>
An Event Apart Conferences — Various U.S. Cities



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Thank You + Happy Trails