

# Akirachix UX research

June 2020

## Introduction to UX Research

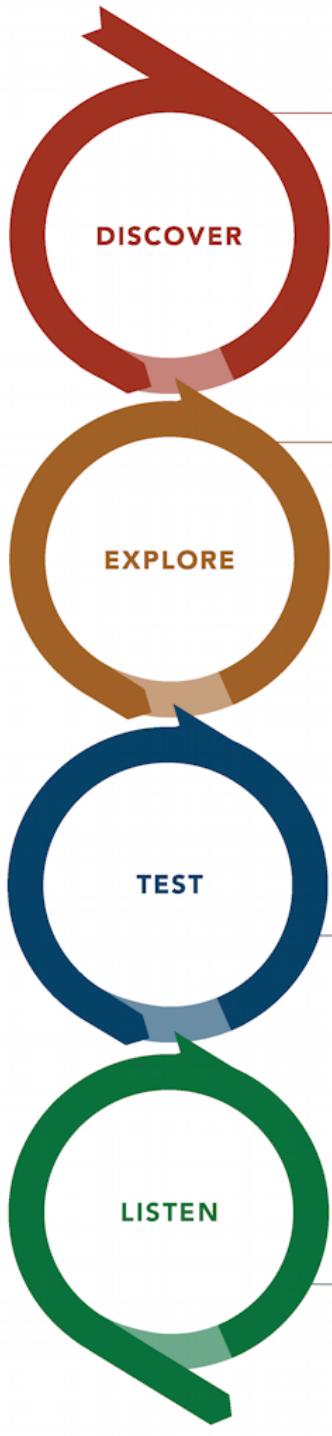
User research focuses on understanding user behaviors, needs, and motivations through observation techniques, task analysis, and other feedback methodologies. This field of research aims at improving the usability of products, services, or processes by incorporating experimental and observational research methods to guide the design, development, and refinement of a product.

User-experience research methods are great at producing data and insights, while ongoing activities help get the right things done. Alongside R&D (research and development), ongoing UX activities can make everyone's efforts more effective and valuable. At every stage in the design process, different UX methods can keep product-development efforts on the right track, in agreement with true user needs and not imaginary ones.

### **When should I do user research on my project?**

- Do user research at whatever stage you're in **right now**. The earlier the research, the more impact the findings will have on your product, and by definition, the earliest you can do something on your current project (absent a time machine) is today.
- Do user research at **all the stages**. As we show below, there's something useful to learn in every single stage of any reasonable project plan, and each research step will increase the value of your product by more than the cost of the research.
- Do most user research **early in the project** (when it'll have the most impact), but conserve some budget for a smaller amount of supplementary research later in the project. This advice applies in the common case that you can't get budget for all the research steps that would be useful.

## UX ACTIVITIES IN THE PRODUCT & SERVICE DESIGN CYCLE



METHODS	ACTIVITIES
<b>Field studies/user interviews</b> Diary studies <b>Stakeholder interviews</b> <b>Requirements &amp; constraints</b> Sales & support interviews Support call monitoring Competitive testing	Find allies Talk with experts Follow ethical guidelines Involve stakeholders Hunt for data sources Determine UX metrics
Competitive analysis <b>Design review</b> <b>Persona building</b> <b>Task analysis</b> Journey mapping Human-centered design Design diversity exploration Pluralistic walkthrough <b>Prototype feedback &amp; testing</b> <b>Write user stories</b> <b>Card sorting</b>	Follow Tog's principles of IxD Use evidence-based guidelines Design for universal access Give users control Prevent errors Improve error messages Provide helpful defaults Check for inconsistencies Map features to needs Make software updating easy Plan for repair and recycling Avoid waste Consider diverse contexts Look for perverse incentives Consider social implications
<b>Qualitative usability testing</b> Training research User group outreach Social media monitoring Forum post analysis <b>Benchmark testing</b> <b>Accessibility evaluation</b> Test instructions & help	Protect personal information Keep data safe Deliver both good and bad news Track usability over time Include diverse users Track usability bugs Make training information
Surveys Analytics review <b>Search-log analysis</b> <b>Usability bug review</b> <b>Feedback review</b> <b>FAQ review</b> Conference outreach Q&A at talks and demos	Pay attention to user sentiment Reduce the need for training Communicate future directions Recruit people for future research

**Bold methods** are some of the most commonly used.

## **Discover**

The discovery stage is when you try to illuminate what you don't know and better understand what people need. It's especially important to do discovery activities before making a new product or feature, so you can find out whether it makes sense to do the project at all.

Good things to do during discovery:

- Conduct field studies and interview users: Go where the users are, watch, ask, and listen. Observe people in context interacting with the system or solving the problems you're trying to provide solutions for.
- Run diary studies to understand your users' information needs and behaviors.
- Interview stakeholders to gather and understand business requirements and constraints.
- Interview sales, support, and training staff. What are the most frequent problems and questions they hear from users? What are the worst problems people have? What makes people angry?
- Listen to sales and support calls. What do people ask about? What do they have problems understanding? How do the sales and support staff explain and help? What is the vocabulary mismatch between users and staff?
- Do competitive testing. Find the strengths and weaknesses in your competitors' products. Discover what users like best.

## **Explore**

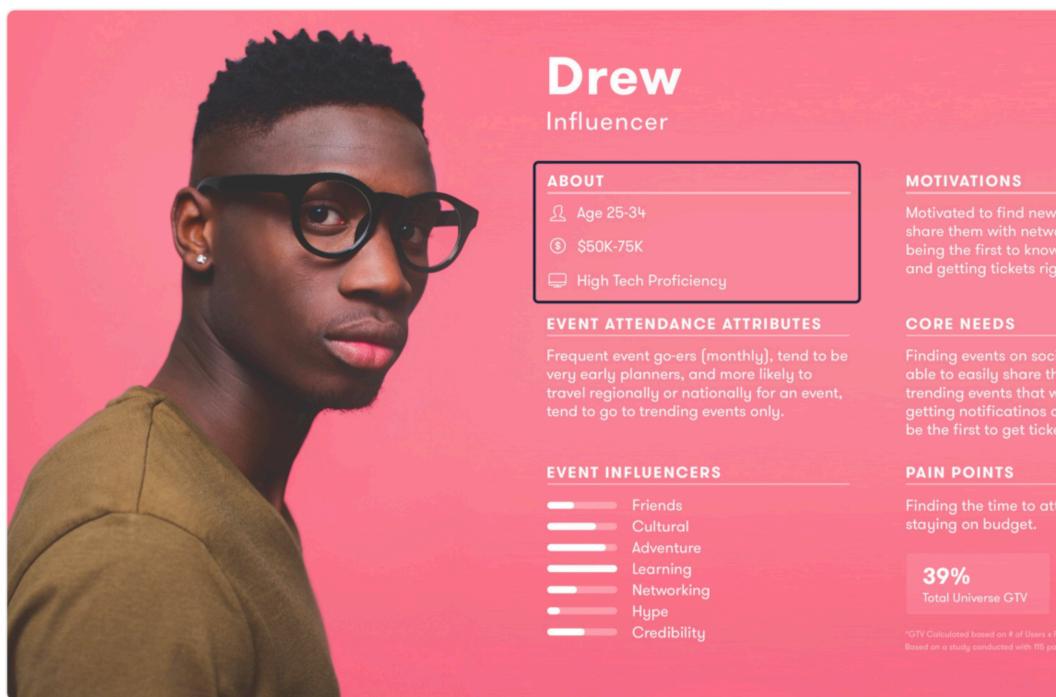
Exploration methods are for understanding the problem space and design scope and addressing user needs appropriately.

- Compare features against competitors.
- Do design reviews.
- Use research to build user personas and write user stories.
- Analyze user tasks to find ways to save people time and effort.
- Show stakeholders the user journey and where the risky areas are for losing customers along the way. Decide together what an ideal user journey would look like.
- Explore design possibilities by imagining many different approaches, brainstorming, and testing the best ideas in order to identify best-of-breed design components to retain.
- Obtain feedback on early-stage task flows by walking through designs with stakeholders and subject-matter experts. Ask for written reactions and questions (silent brainstorming), to avoid groupthink and to enable people who might not speak up in a group to tell you what concerns them.

- Iterate designs by testing paper prototypes with target users, and then test interactive prototypes by watching people use them. Don't gather opinions. Instead, note how well designs work to help people complete tasks and avoid errors. Let people show you where the problem areas are, then redesign and test again.
- Use card sorting to find out how people group your information, to help inform your navigation and information organization scheme.

### **Personas :**

A user persona is a fictional representation of your ideal customer. As a UX designer, you'll start the design process by conducting user research—building empathy with your target users and identifying exactly what they need from the product you're designing. A persona is generally based on this user research and incorporates the needs, goals, and observed behavior patterns of your target audience. Check out the example:



### **User stories :**

A short, simple descriptions of a feature told from the perspective of the person

*who desires the new capability, usually a user or customer of the system. They typically follow a simple template: eg:*

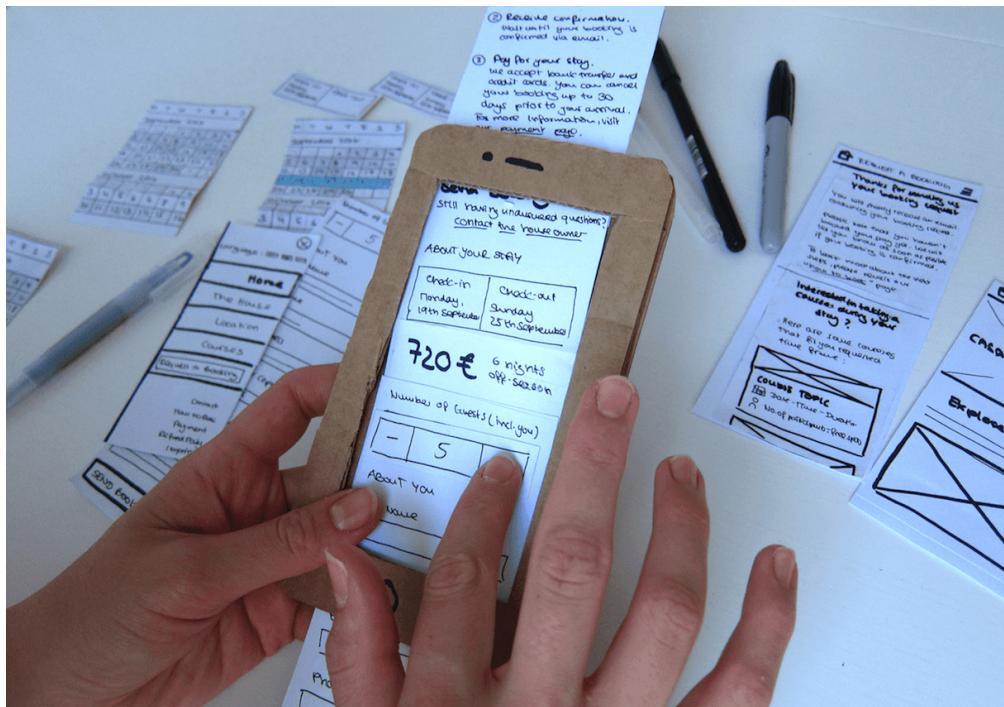
"As a < type of user >, I want < some goal > so that < some reason >."

### **User journey :**

*A user journey is the experiences a person has when interacting with something, typically software.*

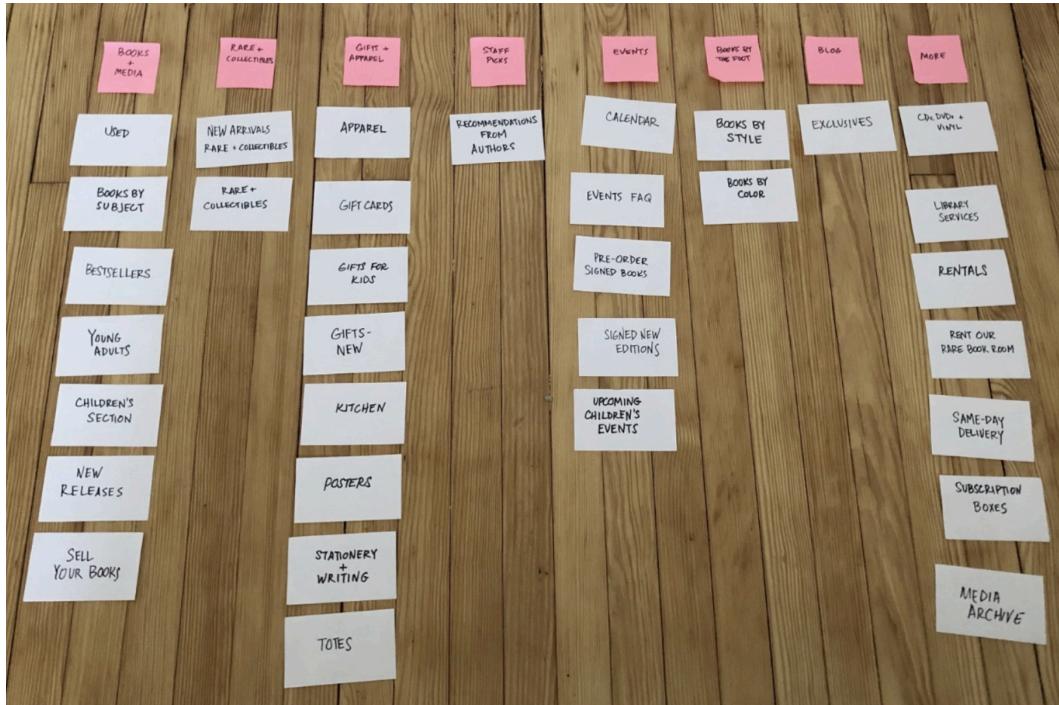
### **Paper prototypes :**

*They are a technique that consists of creating hand drawings of user interfaces in order to enable them to be rapidly designed, simulated and tested. eg :*



### **Card sorting :**

*A technique in user experience design in which a person tests a group of subject experts or users to generate a dendrogram (category tree) eg :*



## Test

Testing and validation methods are for checking designs during development and beyond, to make sure systems work well for the people who use them.

- Do qualitative usability testing. Test early and often with a diverse range of people, alone and in groups. Conduct an accessibility evaluation to ensure universal access.
- Ask people to self-report their interactions and any interesting incidents while using the system over time, for example with diary studies.
- Audit training classes and note the topics, questions people ask, and answers given. Test instructions and help systems.
- Talk with user groups.
- Staff social-media accounts and talk with users online. Monitor social media for kudos and complaints.
- Analyze user-forum posts. User forums are sources for important questions to address and answers that solve problems. Bring that learning back to the design and development team.

- Do benchmark testing: If you're planning a major redesign or measuring improvement, test to determine time on task, task completion, and error rates of your current system, so you can gauge progress over time.

**Qualitative usability testing :**

*Aims to learn more about users' opinions and observe challenging or interesting points in their experience with a design.*

## Listen

Listen throughout the research and design cycle to help understand existing problems and to look for new issues. Analyze gathered data and monitor incoming information for patterns and trends.

- Survey customers and prospective users.
- Monitor analytics and metrics to discover trends and anomalies and to gauge your progress.
- Analyze search queries: What do people look for and what do they call it? Search logs are often overlooked, but they contain important information.
- Make it easy to send in comments, bug reports, and questions. Analyze incoming feedback channels periodically for top usability issues and trouble areas. Look for clues about what people can't find, their misunderstandings, and any unintended effects.
- Collect frequently asked questions and try to solve the problems they represent.
- Run booths at conferences that your customers and users attend so that they can volunteer information and talk with you directly.
- Give talks and demos: capture questions and concerns.

**Note :** *It's not necessary to do everything on every project, but it's often helpful to use a mix of methods and tend to some ongoing needs during each iteration.*

## Top UX Research methods

### Top UX Research Methods

<b>Discover</b>	<ul style="list-style-type: none"> <li>• Field study</li> <li>• Diary study</li> <li>• User interview</li> <li>• Stakeholder interview</li> <li>• Requirements &amp; constraints gathering</li> </ul>
<b>Explore</b>	<ul style="list-style-type: none"> <li>• Competitive analysis</li> <li>• Design review</li> <li>• Persona building</li> <li>• Task analysis</li> <li>• Journey mapping</li> <li>• Prototype feedback &amp; testing (clickable or paper prototypes)</li> <li>• Write user stories</li> <li>• Card sorting</li> </ul>
<b>Test</b>	<ul style="list-style-type: none"> <li>• Qualitative usability testing (in-person or remote)</li> <li>• Benchmark testing</li> <li>• Accessibility evaluation</li> </ul>
<b>Listen</b>	<ul style="list-style-type: none"> <li>• Survey</li> <li>• Analytics review</li> <li>• Search-log analysis</li> <li>• Usability-bug review</li> <li>• Frequently-asked-questions (FAQ) review</li> </ul>