User research

So who are your users?

You are not your user!

Your client is not your user!

Understanding your users

- Initial business analysis usually identifies the general types of users.
- In a business context, **marketing departments often have a good overview of users.**

- We need to find out more detail, though…

User research

- **Setting research objectives**
- **Techniques for research**
  - Lab Interviews
  - Surveys
  - Contextual Interviews & field research

- We will cover just three of many **…**
  http://www.usabilitynet.org/tools/methods.htm

What are some research objectives?

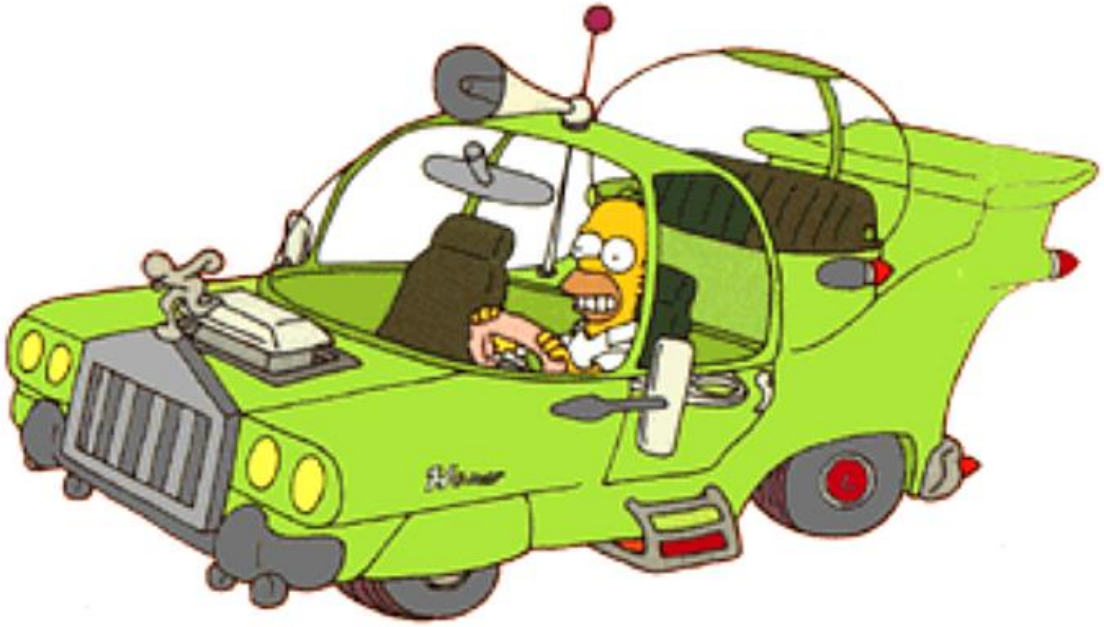
- **Skill** levels (expert or novice?)
- **Likes and dislikes**
- **Product usage** patterns & product-related desires
- **Vocabulary**/language
- **Environments** (connection speed/browser/hardware/shared or exclusive use?)
- **Social** and economic factors

More specific research objectives

- What do users ***want*?** (user preferences)
- What do users ***do*?** (user behaviours)
- What do users ***need*?** (gap between user desire and their current behaviour or tools)
- What do users ***feel*?** (emotional responses)

- Our aim is to develop an **understanding of our users** and the way they carry out their tasks.
- Focussing on **what users need and what they currently do** is more productive than asking users what they want.

The danger of asking users what they want…



The danger of asking users what they want…

- Often users **voice a perceived need**
- Users often **do not mention some requirements** assuming they are obvious
- Users also **will not appreciate technical possibilities** (or impossibilities) **nor your client's needs**

- You can ask users what they currently do, but it's your role as a designer to **create the future website that will meet unmet needs**

Technique 1: Interviews

- **You can also get users in a lab** (or any other place) and involve them in activity sessions
- Ask users to explore their habits and decision making processes by using **games, sketching, interviewing** and **web surfing** in the lab
- Helps users to **recreate their actual experiences** even though they are out of their everyday environment

Use this method as:

- **A more quick and cost-effective** approach to understand **goals, attitudes** and **behaviours** where you can reproduce what you need in a lab

Planning interviews

- Set your **goals for your research**
- Write a **discussion guide**
- **Don’t stick to the discussion guide!** It is a resource for an open conversation, not a survey
- Take a few notes but if you need a good record of the interview record it, don’t try to transcribe while you’re reading

Discussion guide: a common structure

- **Set expectations** for the session – time, recording, payment
- Get some background information and have a chat to **build a rapport** – this is one place where it's OK to reveal your own opinions
- Ask about **current internet and computer usage**
- Understand their real life by talking about **relevant behaviour offline –** remember to identify needs through current behaviour
- Start with general topics and then move naturally into more detailed ones
- Close the interview by asking for any last comments or questions

For a travel booking website…

• When was the last time you went overseas?	➢ Set the scene
• Where did you go? Why?	➢ Motivation
• Why did you choose the place you went to?	➢ Motivation
• What kind of holidays do you like?	➢ Preferences
• Tell me how you went about finding the holiday …	➢ Research
• How many sites did you visit? When did you know when to book? …	➢ Booking
• Tell me about the day you took the flight…	➢ After-sales

Exercise: Write a discussion guide

- Your client wants to launch a new food retail site that helps users find new recipes and order the ingredients delivered to their home:
  - How do people find inspiration for cooking and order food ingredients?
  - How would a new service fit into their lives?
  - What expectations would users have from such a service?
  - What features should the website include?

- Remember to start by setting the scene and building rapport

Technique 2: Surveys

- Surveys are a great idea if the website already exists and has an audience
- Many web-based tools have made surveys a very practical and cost-effective method

Survey questions: some terminology

- **Closed-end questions have a limited number of choices in response**

I am very satisfied with my current insurance company:				
Strongly Disagree	*Disagree*	*Neither agree nor disagree*	*Agree*	*Strongly Agree*

- **Open-ended questions require the user to write a response in their own words**

What is your relationship with your current insurance company like?

Differences in question types

- Closed-ended questions are **much quicker to analyse** and provide a snapshot response of what is important to the users

- Open-ended questions **can gather a lot richer information from users**, but they need a lot more time in analysis

- Always used closed-ended questions wherever possible (eg for gender or age questions)

Types of Survey Questions

- All surveys should collect **basic background information**
  - Demographics (age, gender, etc)
  - Experience with technology (how many years have they used the internet, how confident are they)
- Questions can also ask about **current patterns of use**
  - Descriptive: How often users visit, how often they stay for
  - Intent: What they are looking for, whether it was found
- A final type of question to include is **attitudes or evaluations of the website**
  - Overall Satisfaction: Did the user's experience meet their expectations?
  - Drivers of satisfaction: What are the individual parts of the website that did or didn't meet their expectations?

General rules on writing survey questions

- Each question must have a single idea and be clearly worded. Avoid jargon or technical terms.
- Give clear instructions about how users are meant to respond to the questions. (eg ‘check one’
- Where you are measuring opinions, include an ‘N/A’ rating to avoid forcing people to rate experiences they didn’t have
- Order questions to move from general topics to specific ones

Two most important aspects of writing Surveys

- **Keep the survey as short as possible**
  - Any survey more than 10 minutes will begin to bore your users and affect data quality.
  - Never ask a question that isn't required
  - How can you tell if a question is required?

- **Always pilot your surveys with representative users**
  - This will help make sure that your question wording is clear and unambiguous

What's wrong with these survey questions?

- State your age in years: ☐
- How long have you used the internet?
  ☐ > 1 year ☐ 1-3 years ☐ 3-5 years ☐ 5+years
- How useful is the internet to you?

  _____

  _____

What's wrong with these survey questions?

- State your age in years: ☐

Asking users to select from a a range of ages (eg 15-19; 20-25 etc) means less analysis work and greater likelihood of users giving this personal information

- How long have you used the internet?

☐ > 1 year ☐ 1-3 years ☐ 3-5 s

What if I've used the internet for 3 years? Don't use overlapping ranges

- How useful is the internet to you?

_____

_____

Good opportunity for a closed-ended question. Or use different wording like "How is the internet most useful to you?"

Survey wrap-up:

- This section covers only the basics of survey design and analysis. This is a detailed topic that will reward a lot of attention

- **Surveys and interviews can are complementary methodologies**, where possible you should use both.
  - Use surveys before interviews to identify who is using your website at the moment
  - Use surveys after interviews to follow up interview results and check the relative size of your findings

What’s missing?

“What people say,
what people do,
and what people say they do
are entirely different things”

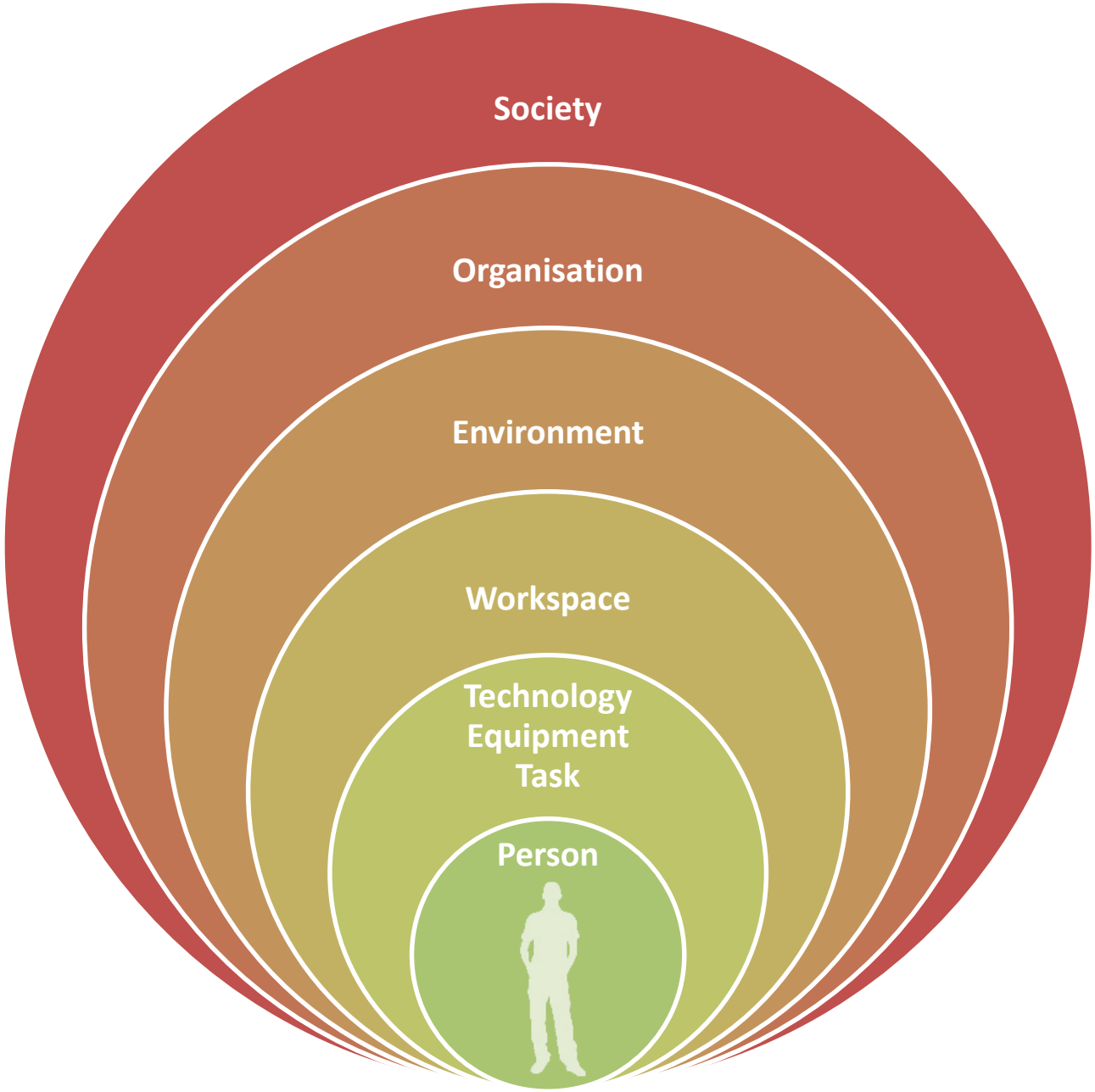
Margaret Mead

…there's more to it!

- Context: the **human, physical, organisational, historical and social environment** in which a product is used
- These variables can determine **how technology is used** & how **work is carried out** that appears to be similar
- Degree of fit between context-of-use and product design **influences uptake**

- Understanding the context of use is therefore **vital for effective user-centred design**

- **Traditional HCI was often more concerned with the interaction between humans and machines. Why do you think that is?**


Society
Organisation
Environment
Workspace
Technology
Equipment
Task
Person

Question: *So how are you going to find out about the context your product or service will be used in?*

Hang out with the people you're designing for…

Contextual Inquiry

- **Observe and interview** users in context of their work to see **what users do, not what they say they do**
- *"go where the user works, observe the user as he or she works and talk to the user about the work."*

Use this method to get:

- Deeper insight into **motivations and behaviours**
- An understanding of user goals and needs, in particular the **unsatisfied or unarticulated**
- Identify **problems and work-arounds**
- Understand **organisational and environmental factors**

Contextual Inquiry

Master - Apprentice model:

Avoid interview/interviewee or novice/expert situation

Based on four core principles:

1. **Context** – all work is observed in its context
2. **Partnership** – no “interviewer” situation
3. **Interpretation** – the researcher interprets the observations and shares them with the user to validate
4. **Focus** – on concrete data & tasks

What does this mean for my project?

- **Who are your users?**

- If your users work in an office (or similar) then contextual inquiry will help you get more empathy with your users
- If there is a real-world parallel to your website, then observing this may help give inspiration
- If neither apply, concentrate on other methods

What does this mean for my project?

- Which of these websites might benefit from contextual inquiry?

Online dictionary

Wedding photographer

GP Booking system

Analysing user research data

Analysing data

Affinity sorting help identifying common themes in your research

Create a wall of data

- Go through your notes or recordings and write post-it notes for each and every meaningful consumer comment
  - Write in the users' voice - "I don't like package holidays because they're too expensive"
  - Write your own insights and questions in a different colour
- Writing all the relevant user comments by hand is the single best way to get an real empathy for your users
- After building the wall of data, start grouping the post-its so that similar post-its are together. Group by common goals, behaviours, attitudes, activities, etc.
- Involve other people in this analysis to check your assumptions

Analysing data from user research

1. **Analyse:**

- User outlook and perspective, their building blocks for a mental model
- Goals
- Behaviours
- Processes & tasks
- Social interactions
- Physical environment

….and distil into **personas, scenarios, lists of requirements etc.**

Presenting user research data

Personas

- **Personas** are a way to **sum up user research** into archetypical **user representatives,** describing **goals, attitudes and motivations**
- They **merge many sources of data** into a format that drives successful design
- **Build consensus** about who the target users are and **avoid self-referential design**
- Allow to quickly **explore or validate design decisions**

Personas – Goals, attitudes and motivations

Define the goals of your personas based on your users# research:

- **End goals:** What outcomes they want to achieve
- **Experience goals:** How users want to experience your product or service
- **Life goals:** What users want to achieve in their life
- **Attitudes,** what **motivates** and what **annoys** them
- How they **relate to the organisation**
- What makes them a **design challenge**
- **Their outlook in a single sentence or metaphor**

Scenarios

Scenarios are user stories that describe the steps users go through to satisfy their goals:

- **Task scenarios** describe what users are doing currently
- **Use scenarios** describe how users will perform the same task using your product or service

- Task scenarios should contain information about **the user, his goals, actions, objects used** and **information needed,** set in **context.**

- Task scenarios help you to define functional requirements and to find gaps in the current offering

Documenting scenarios

- Use scenarios are effective to describe system requirements in a way that keeps the user at the heart

- Choose the right way to document your stories. There are a number of options:
  - Narrative stories
  - Flow diagrams
  - Use Cases

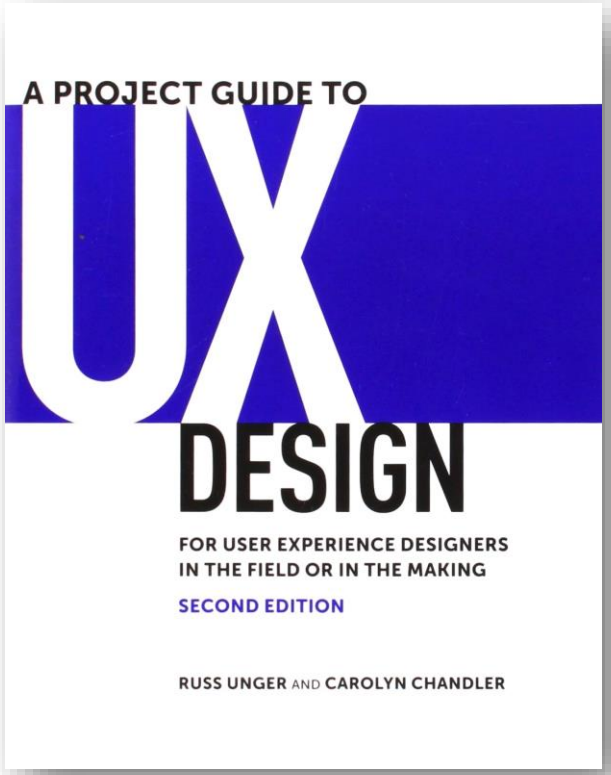
Further reading…

Chapter 4: Project objectives

Chapter 5: Business Requirements

Chapter 6: User Research

Chapter 7: Personas



Further reading…