



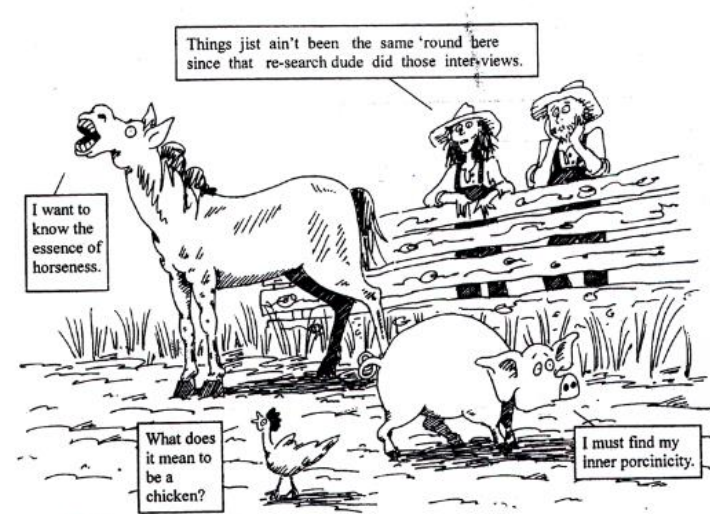
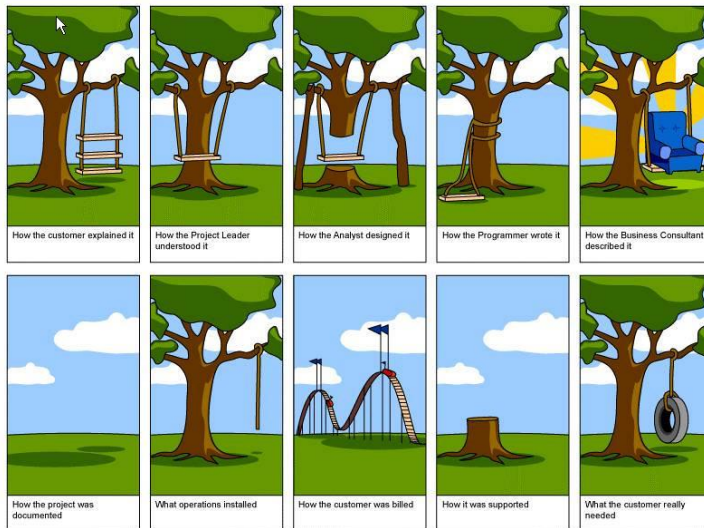
Interpretation of data and using it to direct the design process—
19.02.2016

Time	Subject
8.30	Agenda and recap from last week
8.50	Website # 1
9.05	Wicked Problems
09.30	Development methods and Design processes
09.45	Website # 2
10.00	Break
10.30	Personas
11.10	Scenarios
11.55	Recap of the day + Homework and preparation
12.00	Dismissed

Today's agenda

Qualitative User Research.

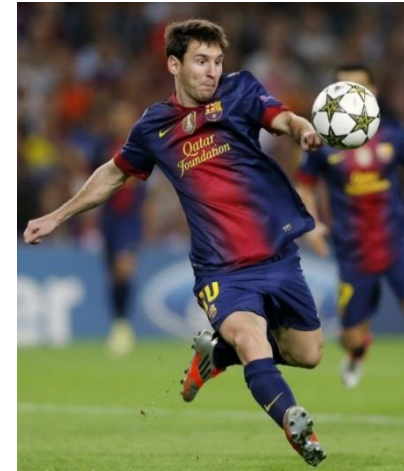
- Uncover hidden knowledge about attitudes and motivations.
- Find out **why** people behave a certain way.
- Combine different methods to gain a better insight.



What happened last time?

Interviews and more

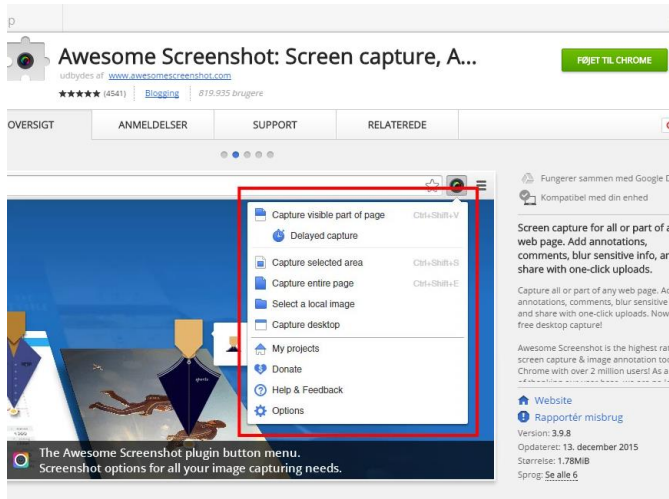
- Unstructured vs. structured.
- Rework you questions many times.
- Focus groups, observation and participation.



What happened last time?

Competitor analysis

- Gain understanding of competitors and their strengths and weaknesses.
- Understand communication on the market.
- Find inspiration and see what works.



What happened last time?

Mandatory assignment part 1:

Research report

Iteration 1. We will work on the first iteration to day. The first iteration must consist of two elements. We will start them both today.

- Look at the market and gather inspiration for the new brands online presence with a competitor analysis.
- Understand the users(buyers) by doing interviews of potentials in target group.



First Mandatory assignment



	Student groups from week 6 to week 9						
	Navn	Efternavn	Nr.		Navn	Efternavn	Nr.
1							
2	Jannie	Fabricius	1		Alice	Puricica	2
3	Malik Kamran	Hanif	1		David	Kelemen	2
4	Mohamad Walid	Meree	1		Mikkel	Ottesen	2
5	Adrián	Arlett	1		Vilius	Bivainis	2
6							
7							
8	Jakob	Bak	3		Martin Hjord	Nielsen	4
9	Neli Borislavova	Chakarova	3		Mihail	Rosca	4
10	Nikolay Rumenov	Mihaylov	3		Simeon Anatoli	Badev	4
11	Rostislav Veselinov	Dimitrov	3		Terkel Jungløw	Christensen	4
12							
13	Mikkel Halgaard	Kjær	5		Andreas Wendelbo	Knudsen	6
14	Mikkel Veldt Brøndum	Andersen	5		Elias Valdemar	Hansen	6
15	Nikolaj Vahr	Tjørnild	5		Mike	Jakobsen	6
16	Steffen	Pedersen	5		Thomas Leschley	Andersen	6
17							
18	Andreas	Bösig	7		Frederik	Gejl	8
19	Christian	Hartøft-Nielsen	7		Marc Mathias	Clausen	8
20	Steffen Bachmand	Pedersen	7		Martynas	Lobinas	8
21	Troels Stig	Rasmussen	7		Natalia	Valgepea	8
22	Kaloyan	Iliev	7		Michelle	Søholm	8
23							

Groups

Uncover hidden knowledge and make it operational.

12.02.16 - Last time you uncovered hidden knowledge.

19.02.16 - This time we will start making it operational.

26.02.16 - Next time we will “conduct the operation”. Use our interpretation of knowledge to make the right design choices.



Alternative heading for today

This time:

Topic: How to interpret data and use it to direct the design process.

Read:

[Cooper] p. 61 – 119. Starts out with personas and moves into emotional design (UX). Lots of ideas and steps on how to create personas. Then moves to the powerful scenarios.

[Nardi] And older text on designing Personas and Scenarios [##](#)

[Rittel] Wicked Problems in a general theory of planning. [##](#)

Homework and preparation



The designer's neighborhood guide

Travel the world through the eyes of creatives.



Created by Hyperakt.
Curated by designers around the world.

New York

Ambassador: Hyperakt



Rotterdam

Ft. Lauderdale

Ambassador: Nick Rourke



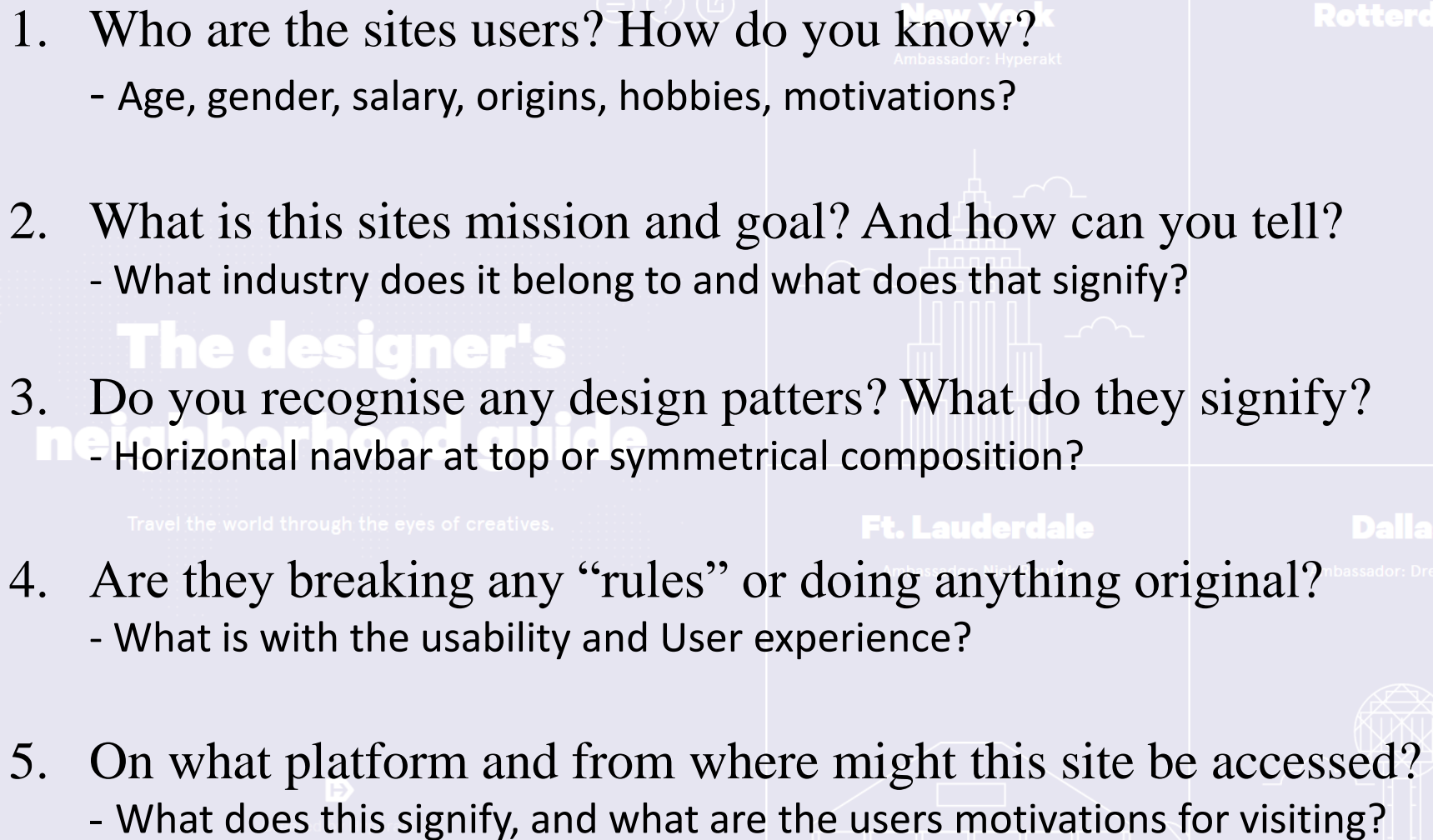
Dallas

Ambassador: Drew Simel



Webpage

BUSINESS ACADEMY
AARHUS

- 
- The background of the slide features a collage of city names and icons. At the top left, there are small icons of a hamburger menu, a question mark, and a speech bubble. Below them, the city names 'New York', 'Rotterdam', 'Ft. Lauderdale', and 'Dallas' are visible in a light green font. There are also faint line-art icons of a skyscraper and a globe. The text 'The designer's neighborhood guide' is written in a large, bold, light green font across the middle. At the bottom left, there is a small text 'Curated by designers around the world.'
1. Who are the sites users? How do you know?
 - Age, gender, salary, origins, hobbies, motivations?
 2. What is this sites mission and goal? And how can you tell?
 - What industry does it belong to and what does that signify?
 3. Do you recognise any design patters? What do they signify?
 - Horizontal navbar at top or symmetrical composition?
 4. Are they breaking any “rules” or doing anything original?
 - What is with the usability and User experience?
 5. On what platform and from where might this site be accessed?
 - What does this signify, and what are the users motivations for visiting?

Webpage



Wicked problems

Wicked problems can be difficult to understand.
This is small exercise to get you focused.

Talk to your group. When have you, ore any of them,
worked with a wicked problem?

What was the problem and why was it wicked?

Did you find a solution?

5 minutes.

Wicked problems



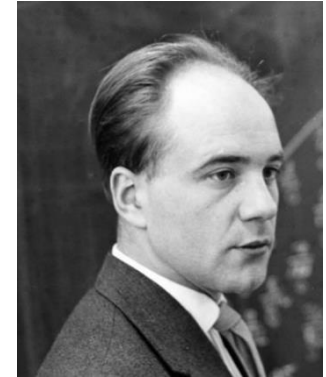
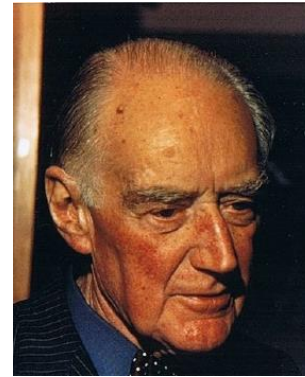
Horst W. J. Rittel

Professor focused on design thinking and planning.

Melvin M. Webber

Professor focused on urban planning and infrastructure design.

Wicked problems are everywhere and they are extremely difficult to define!?



Wicked Problems

Think of them as the opposite of tame problems.

A tame problem:

You know a button is missing!

You know where it is missing!

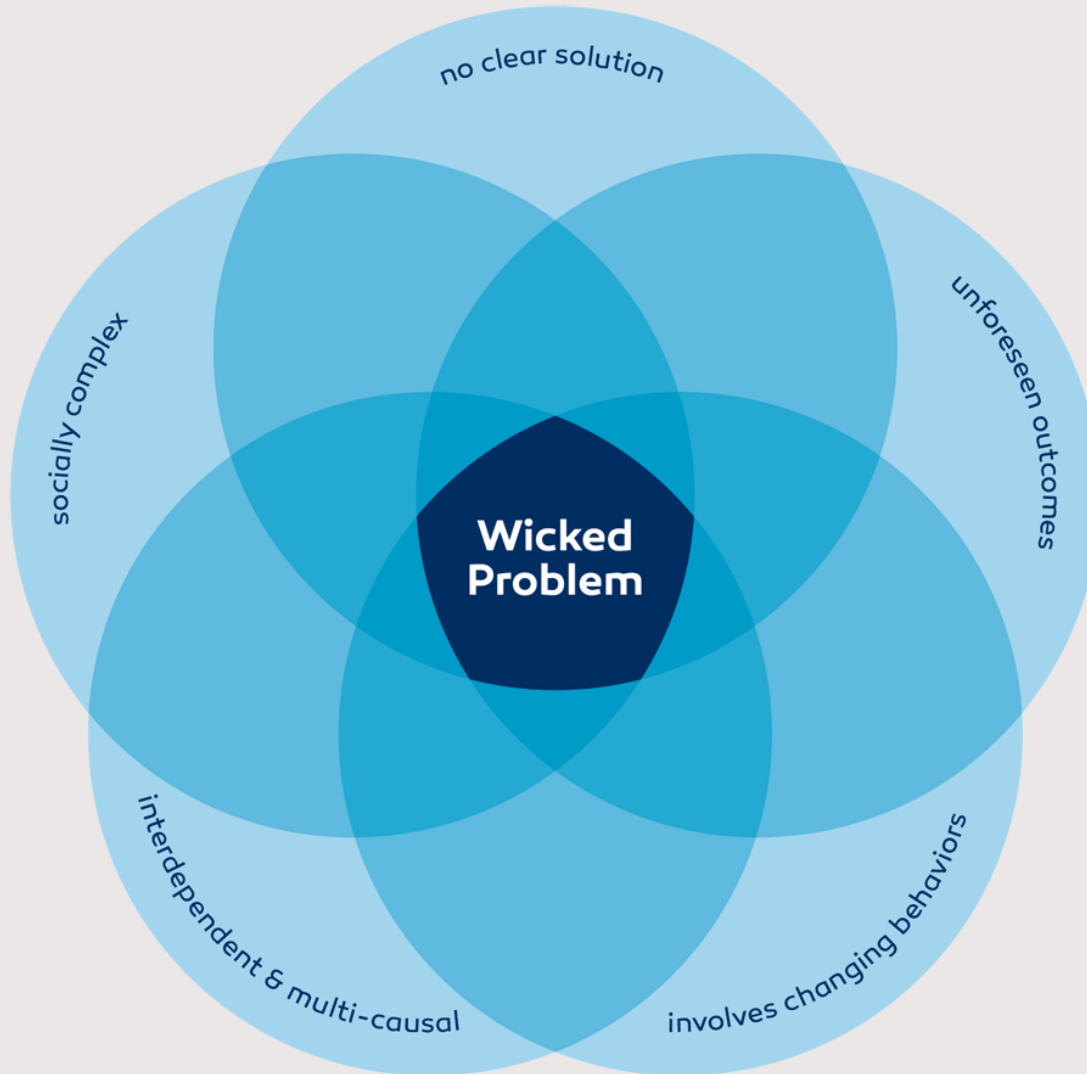
You know what code to
implement and where!

A wicked problem:

The problem of defining a problem
and locating it + identifying actions
need to go from what-is to what-
ought-to-be. (p. 159)



An understanding



What is digital literacy
according to:

Children?

Parents?

Teachers?

Simplifying the wickedness

What elements of wicked problems

exists in our case with the new company and brand? See Page 161 – 167.

Work in your assigned groups:

Which statements make sense and which do not. Is this a wicked problem?
Why or why not?

Ex.

The case is a wicked problem because **the solution is not true-or-false but good-or-bad**. The user group is too wide and undefinable. The buyers share only a need, not a solution, and they share nothing else. This makes it difficult to provide a solution that fits all potential users equally good.



Work with Wicked Problems

4. There is no immediate and no ultimate test of a solution to a wicked problem.

5. Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan.

(Design process: Waterfall - Agile)



Wicked problems

7. Every wicked problem is essentially unique.

8. Every wicked problem can be considered to be a symptom of another problem. (2. Wicked problems have no stopping rule.)

©opyright



Wicked problems

9. The existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem's resolution.



Wicked problems

What is implied by the word:

User?	Gamer?
Customer?	Player?
Visitor?	Subscriber?
Payer?	Contributor?
Client?	Fan?
Contact?	Person?



**How we talk about something affects how we understand it!
Be careful when choosing your words(understanding).**

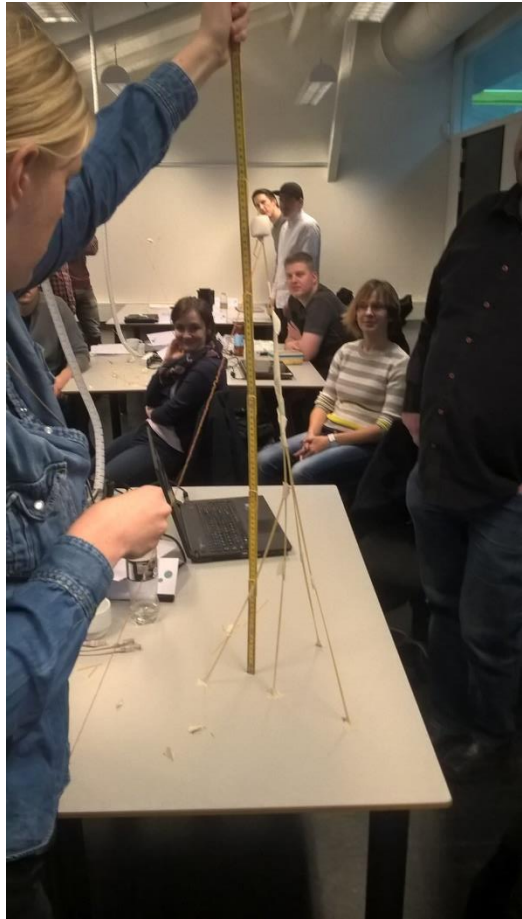
”Do you believe in the users?”

5. Every solution to a wicked problem is a "one-shot operation"; because there is no opportunity to learn by trial-and-error, every attempt counts significantly.

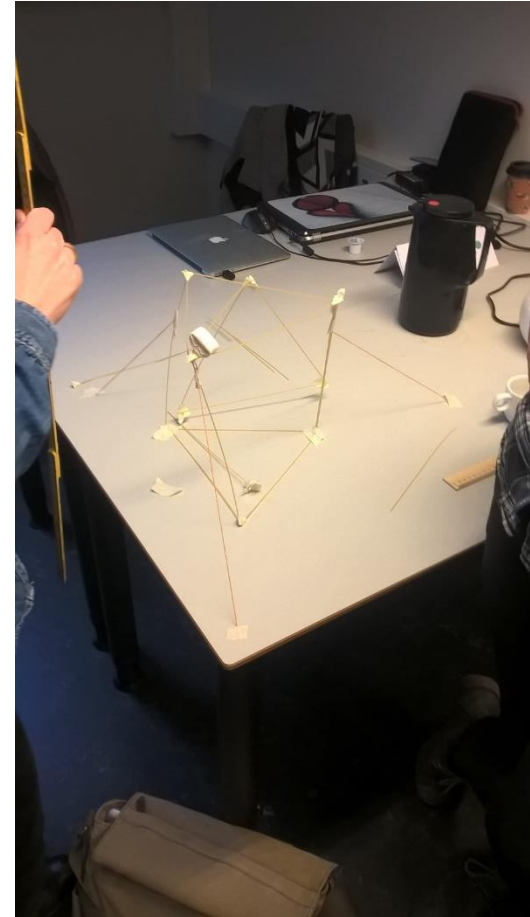
10. The planner(designer or web developer) has no right to be wrong.
- because you are “designing peoples lives”.



Wicked problems



People
Are
Wicked
Problems

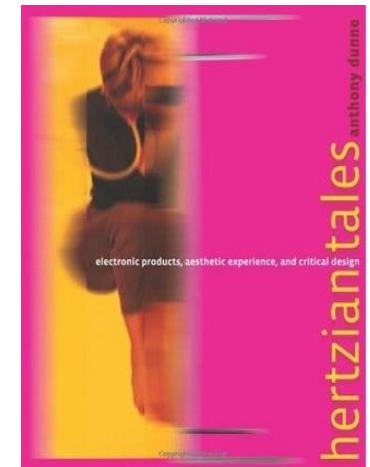
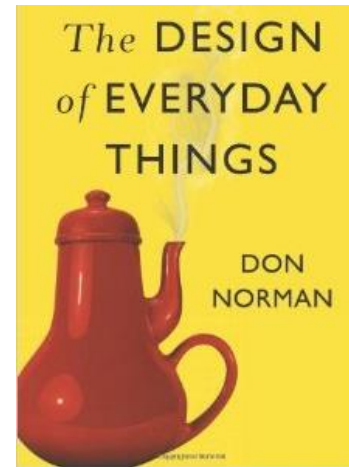
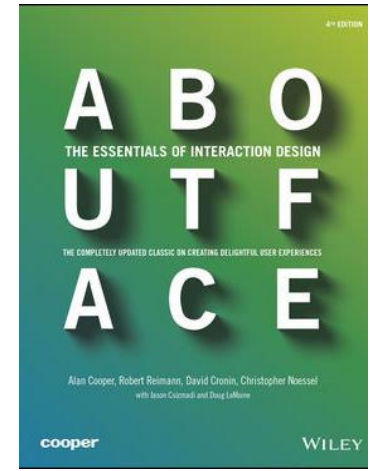
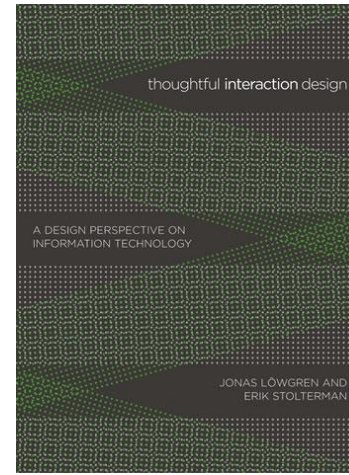


Shipping – A wicked problem?

The solution might be to simply solve wicked problems as tame ones and deal with the resulting problems...

— or —

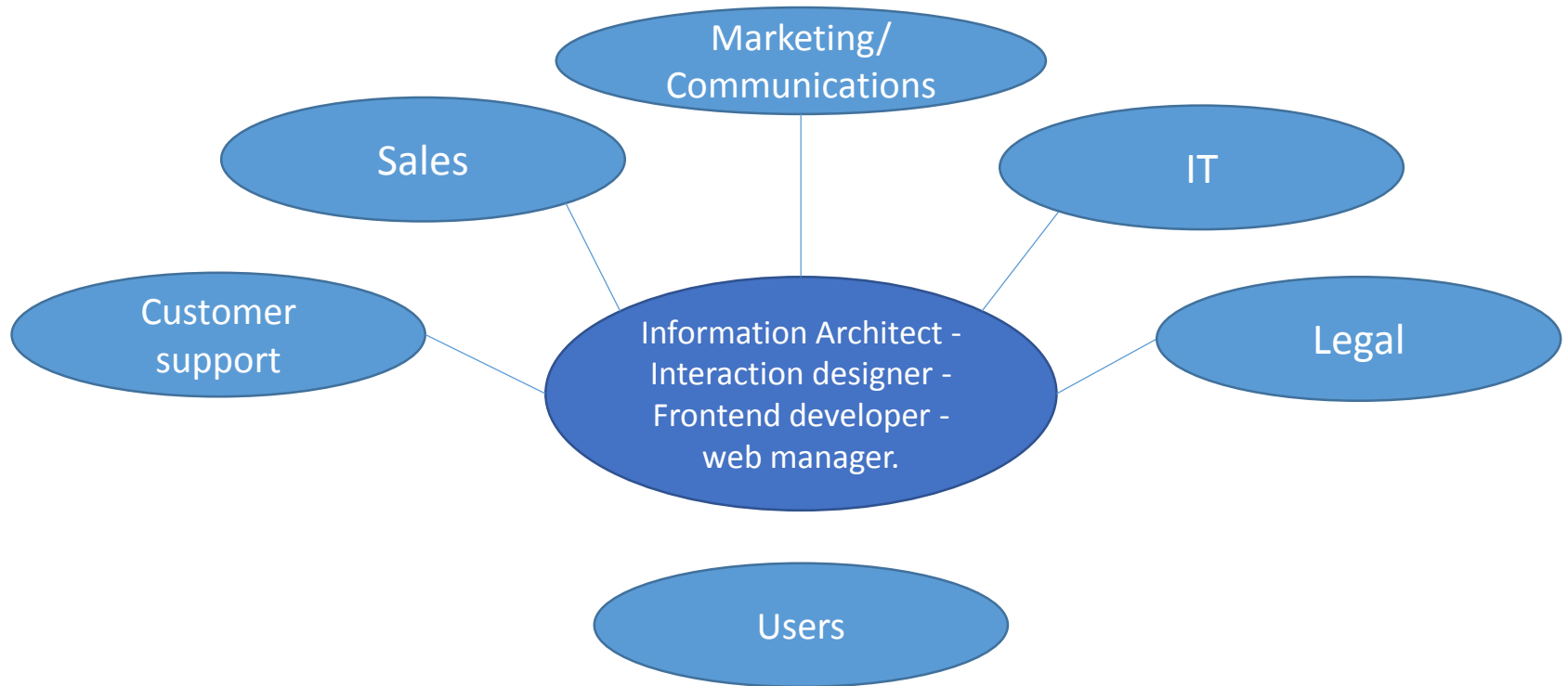
You could do your best at collecting user research, be experienced at interpretation and continue to evolve test methods that ensure enlightened and well informed design choices...



Solving wicked problems

BUSINESS ACADEMY
AARHUS

Wicked problems on both sides of the ”design situation”.

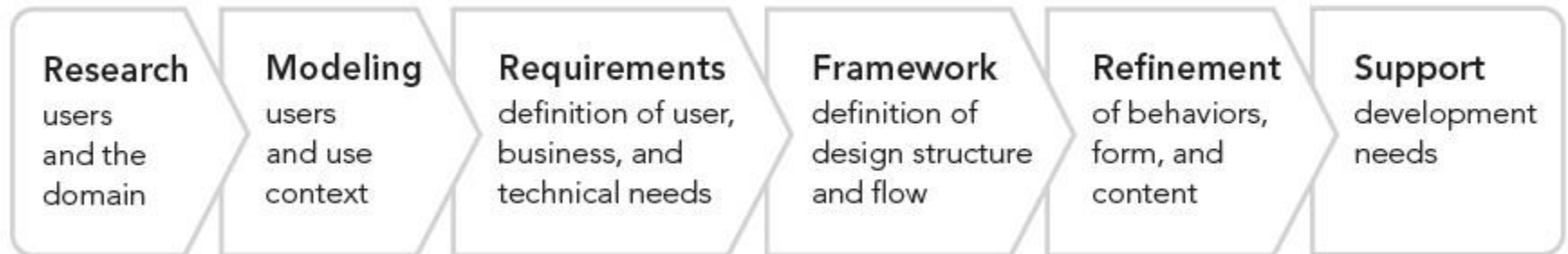


It is going to be a mess

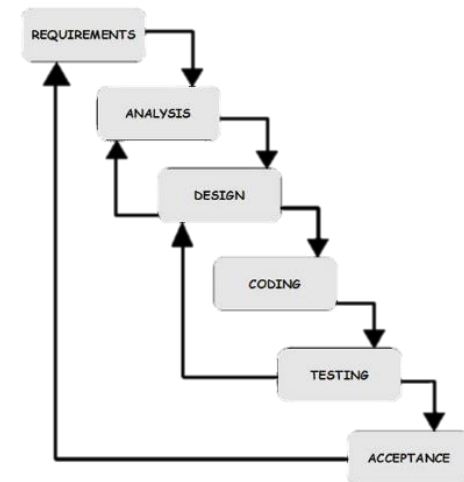
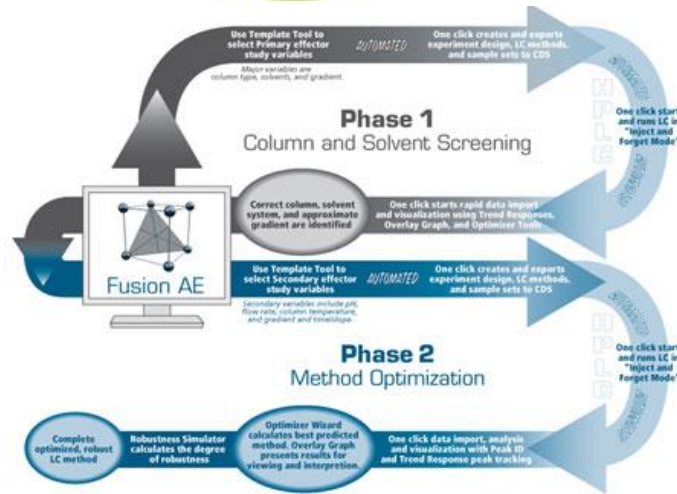
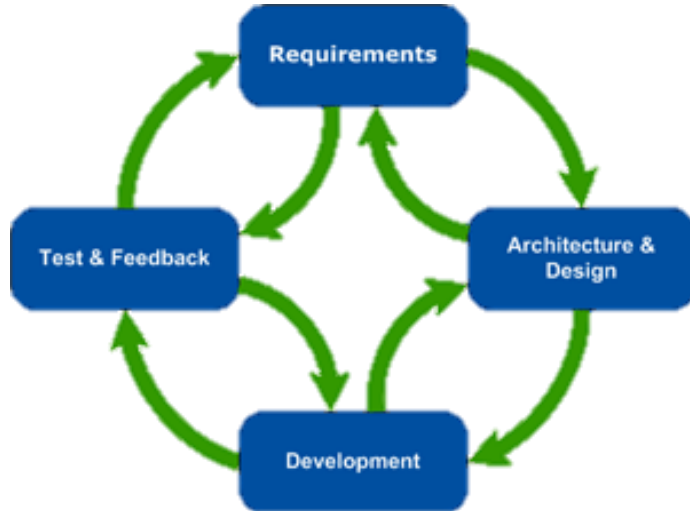
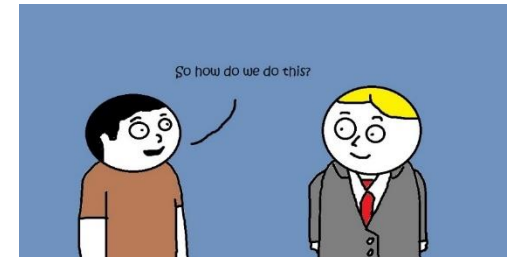
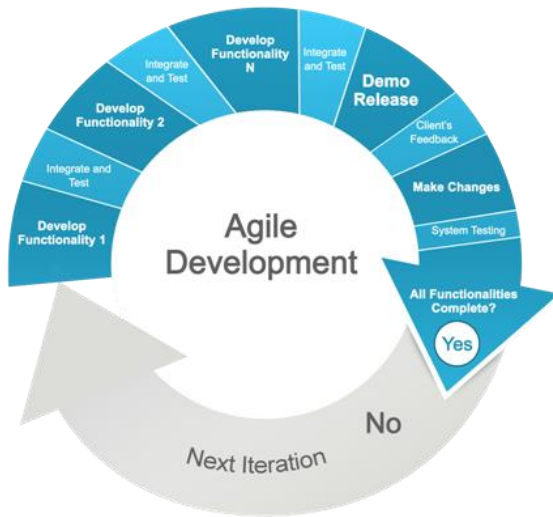
Being goal oriented (in your research)

The method, or structure, of your research depends on the project(wicked):

- Brand, Marketing or Content site/app.
- Task-based site/app for single user or multiple users.
- Communicate brand values, Demonstrating values?
- Generate a interest and buzz?
- Enable users to actively doing something?
- Mobile version, web site, social media platform, print material?



Before you start any process



Development methods and planning

Agile Approaches – Waterfall Approach

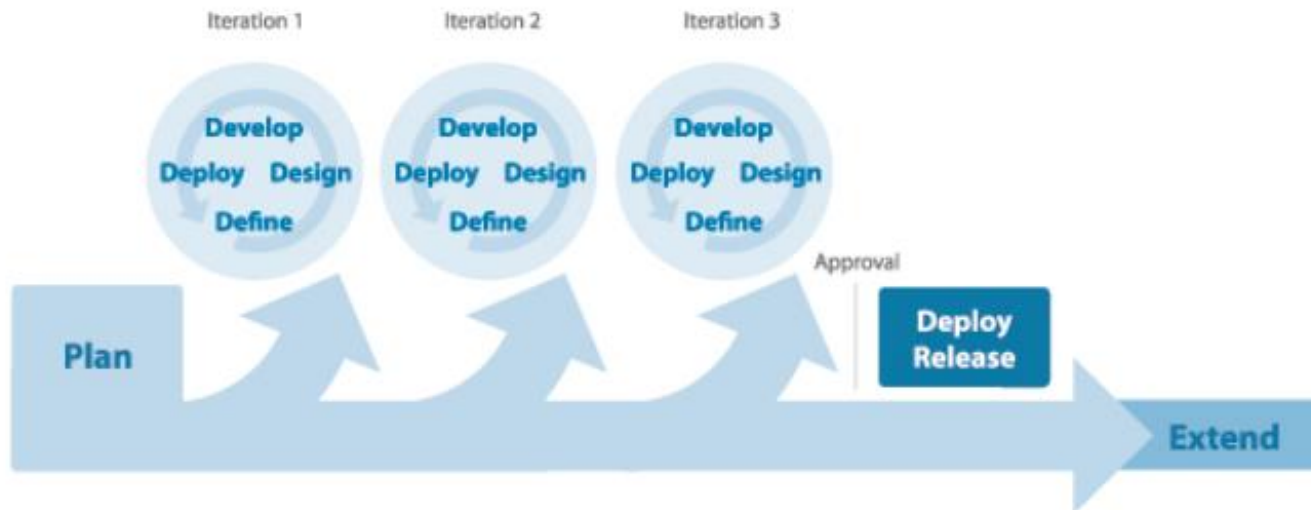
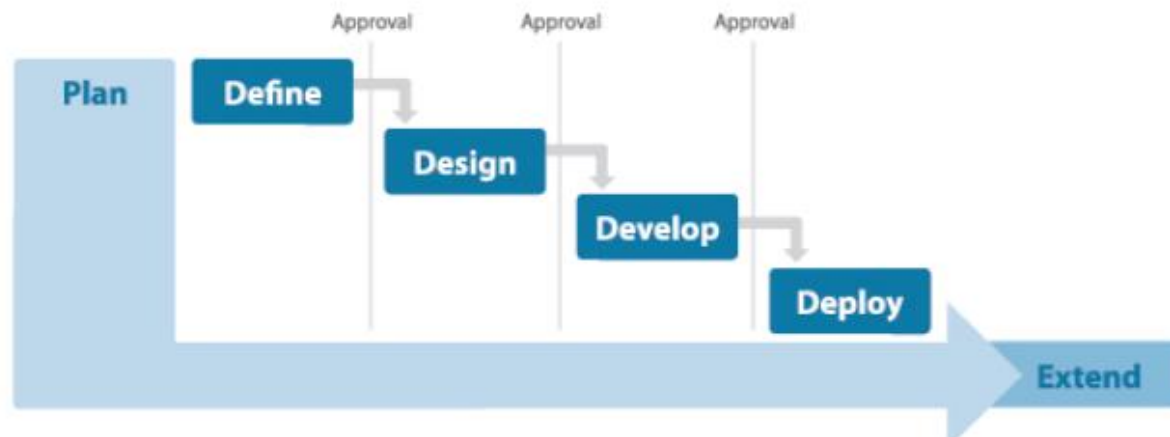


What is the difference?

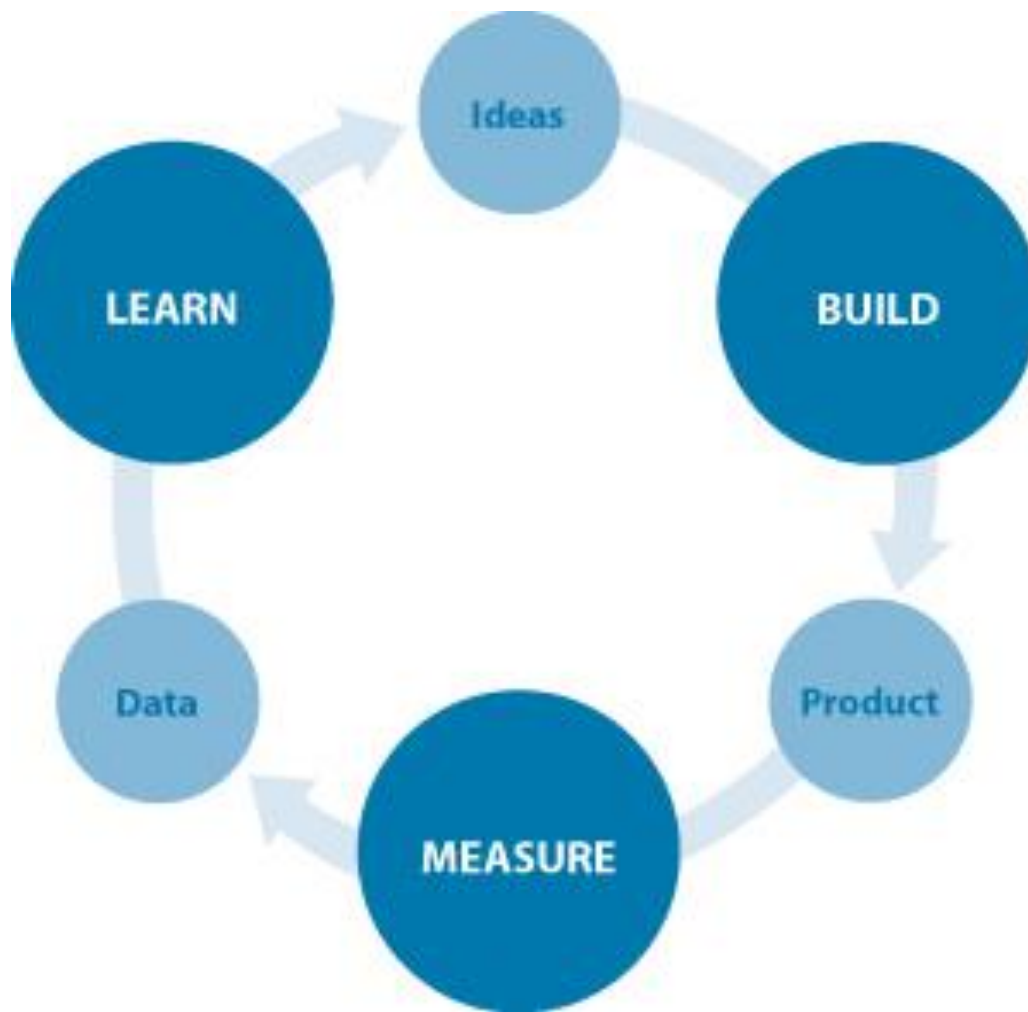
What is your experience?

Waterfall or Agile





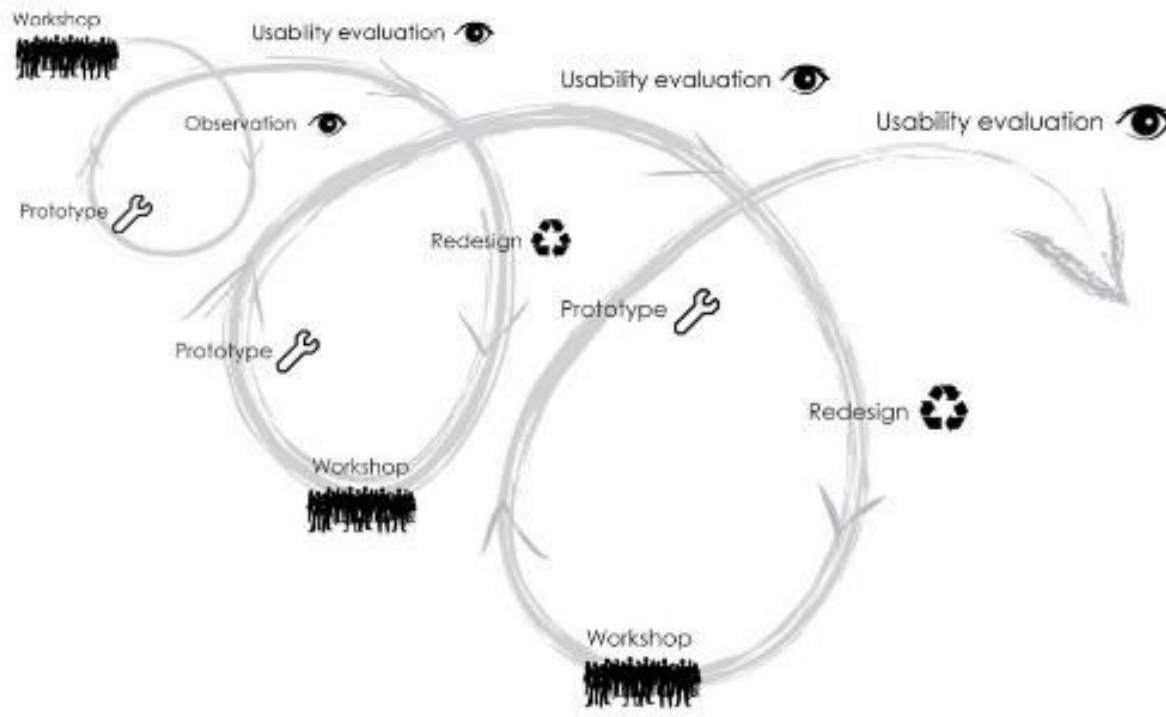
Waterfall or Agile



Iterations



Making room for a wicked problem



Be aware – the problem of documentation!

The iterative design proces

What research, when and where?

It depends on your questions!

Qualitative researches seek “saturation”

- “how many” is not the issue. Do you understand the phenomenon? Have you learned enough?
- Mere numbers are irrelevant. You want “verstehn” or deep understanding.

Quantitative researchers seek statistical validity

- Can you safely generalize to the population? Have you systematically excluded anyone?

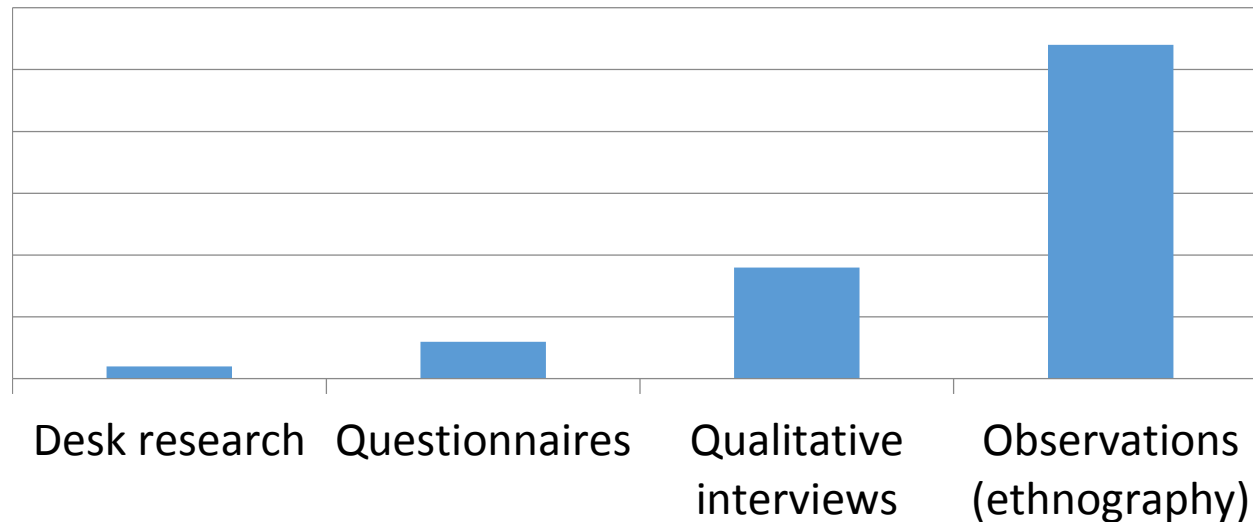
Qualitative and quantitative

The right method is governed by the problem:

What you want to know, controls the method – not the other way

Beware of resources and time:

What takes longer might not provide you with more knowledge



Choosing the right Research method

Break 30 min





Last time we talked
about generating
data...

Today we have talk
about problems and
understanding them.

Now lets talk about
using data!

You read about personas
and user journeys.

Using user data

What is the difference between:

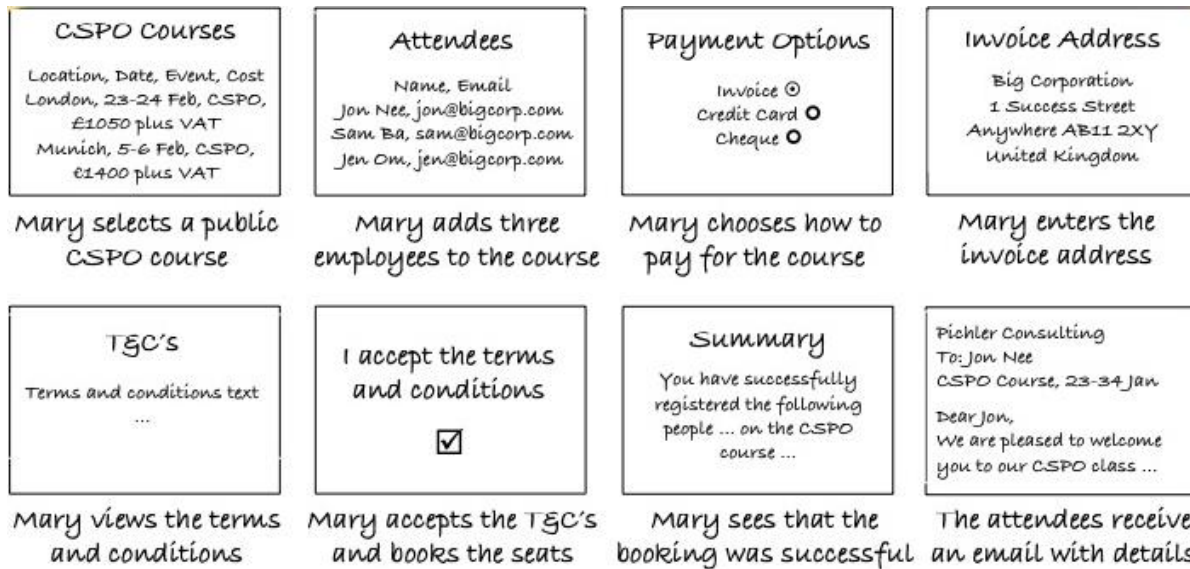
- Personas?
- Scenario?
- Use case?

Any experience working with either one?

Examples?

Scenario vs use case vs personas





Use cases focus on the technical system and less on the user himself:

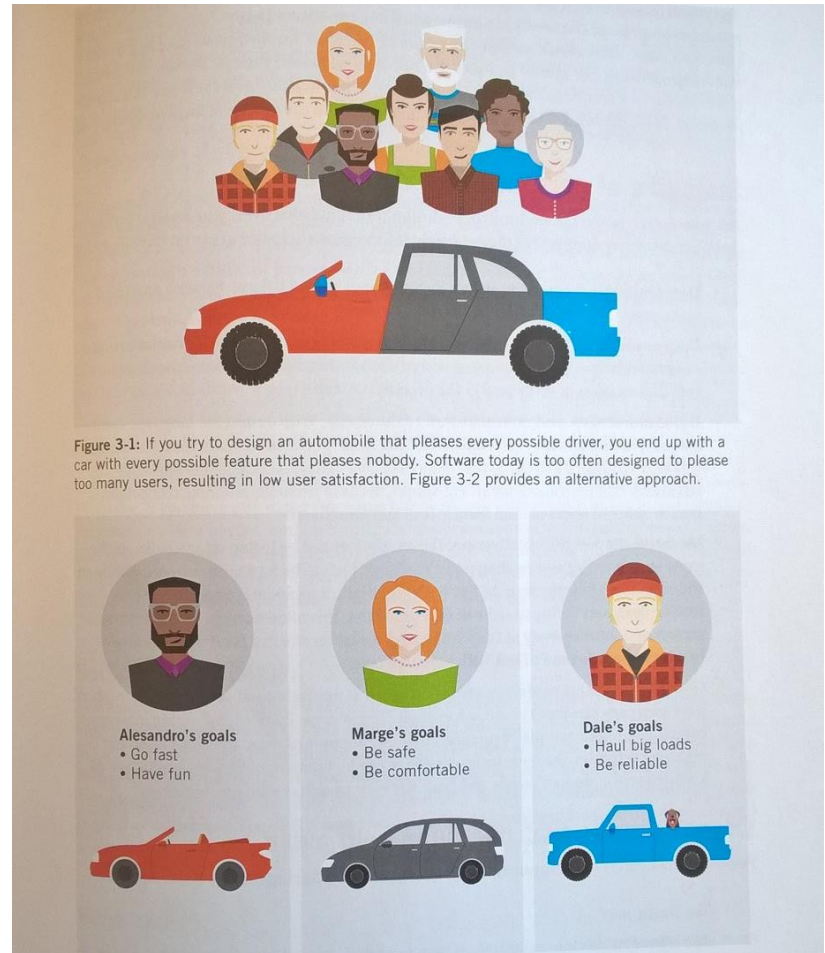
Use cases can be used to focus on problematic interaction with a system that you want to improve. They tend to see all users as equal and make no distinction for context or use situation.

Use case

Personas are models that collect and qualify your research data. They are made up of the data you collected when you researched different users.

Personas are great for answering wicked problems... why?

Personas allows you to think and work with users and their attitudes and behaviours in specific contexts. They personify the design situation and evoking empathy.



Personas


Personas provide information about whom the user is. Including specific information about why the user wants to engage with a certain product, but not how this is done.

Personas are used to build trustworthy scenarios focusing on actual people and not just what the designer thinks or what the client wants.

BRANDI TYLER



PROFILE	Narrow Feet
GENDER	Female
AGE	36
LOCATION	Los Angeles, CA
OCCUPATION	Receptionist; \$38k



"It's SO difficult to buy shoes that fit my feet."

MOTIVATIONS

Brandi gets very emotional about shopping for shoes in retail stores because she rarely can find a pair that fits her narrow feet. Recently, she's turned to online shopping to avoid the hassle of shopping in stores. Brandi found Munro after Googling "narrow width shoes" and reading other reviews online about the company.

GOALS

- Needs an SS (4A) width shoe
- Would like to purchase several pairs to fit occasion, style, and color
- Hoping to find that she doesn't have to sacrifice style or options when searching by fit

FRUSTRATIONS

- Not being able to filter available shoes by width
- Getting far fewer options when she applies width filter
- No other recommended shoes when she's looking at a pair she particularly likes

REAL MUNRO CUSTOMERS

"My whole life has been a choice between fit and style - when I was younger, I went for style & my feet killed me. As an adult, I tried for fit & the styles were for 95 year olds. This shoe is the 1st time I could get both."

"I wear a 4A and I have struggled my entire life finding shoes narrow enough for my feet and more so in recent years. I stumbled onto this Munro brand sandal and was shocked to find it comes in up to a 4A width and it actually fit and is like wearing a glove! I now have two pairs in different colors."

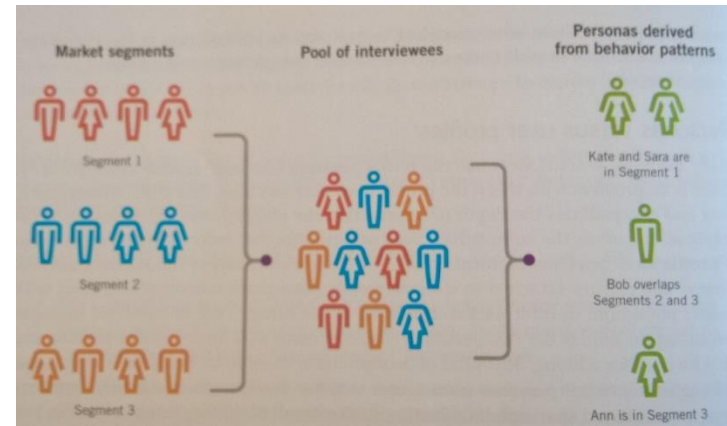
"Love these slides so much I went out and bought two more pairs. I have very narrow feet and they fit perfectly. They're very stylish and I get compliments whenever I wear them."

Personas

Personas gather user groups together and represent them as archetypes (not stereotypes) which lets you test you design against a large part of the user group.

“If the designer does not respect his persona, no one else will either”

Use segmentation tools, user profiles and demographics to inform you persona, but don't rely on them.



Personas

Personas...

... are based on research.

... represents types of users of a specific product.

... explore ranges of behaviour.

... have motivations.

... represents relevant nonusers.

Understanding goals – Goals motivate usage patterns and arise from different cognitive processes. More on this later.

Cooper on personas



1. Group interview subjects by role. (What type of user did you interview)
2. Identify behavioural variables. (What behaviour is associated with that user type)
3. Map interview subjects to behavioural variables. (How type specific were interviewees)
4. Identify significant behaviour patterns. (Pick the most common behaviours as basis persona)
5. Synthesize characteristics and define goals. (Reality check and thicken common behaviours)
6. Check for completeness and redundancy. (What he says – evaluate personas)
7. Designate persona types. (Primary, Secondary and Supplemental)
8. Expand the description of attributes and behaviours. (Write a narrative from what you have)

How to build (believable) personas





'I need to know the businesses can be trusted.'

Occupation: Housing Coordinator

Age: 32

Home life: Lives with partner and her dog

Hobbies: Cycling, dancing and socialising

About Nikki

Nikki works in a team, finding housing for vulnerable people. She has fairly structured days, that consist of meeting with people and using her computer. She like to be in control of her work life, but her personal life is far more spontaneous. She plays a key role in her company's social activities.

She has just taken a call from her partner and has been told her washing machine has flooded her kitchen.

Key differentiators

- Priority listings are trusted
- Description of businesses aid decision making
- Reads reviews to help with decisions
- Writes reviews frequently

Use of the web:



Reads reviews:



Writes reviews:



Planner vs spontaneous:



Likely route to BT Exchanges:



Goals & Behaviours

Goals

- To contact businesses in priority listings as a first step, as assumes that they are tried and tested businesses
- To read reviews to help with decision making
- To contact companies via free call options to see if they are able to help her

Behaviours

- Uses Google as her starting point
- Has a couple of directories saved in her bookmarks
- Uses directories for research
- Uses specific sites to help with planning events, such as Event Elephant
- Reads reviews to aid decision making, but is likely to ask friends before she makes a significant purchase
- Writes reviews on sites she frequents

Internet Behaviour

- Always online, and loves to interact with her friends on a variety of social networking sites, such as Facebook
- Doesn't spend all her time in front of a computer at work
- An advanced computer user
- Owns an Apple Macintosh, and hates when sites do not work on her computer
- Like to use WiFi when travelling

Wish List

- Wants to be able to see the opening times of businesses to know if they are worth contacting
- Is interested to read what the size of company is, so she can make a decision on if they are worth contacting
- Social networking groups on BT to be able to see what trusted people have rated and recommended

Joanna, 30 years old, works in a pet shop in Aarhus where she earns an annual salary of 250.000 Dk. She lives alone in a small apartment in the city.

Johanna is very conscious of her spending, and she is always trying to find the best buys. This is true for her spending in daily life and her interests, which include growing her own food in her garden, running to keep in shape.



Johanna has never travelled before, except for small vacations to neighbouring countries, but this summer she wants to visit a friend in New York and explore the city. The journey must be on a budget of around 15.000 Dk.

Johannes computer skills are average and she prefers functionality, safety and overview. Therefor she wants to organizes her journey online and expects an airline company to anticipate and understand her needs. She needs to know the important details at the same time as not having to scroll over pages after pages with disclaimers.

Persona example

Mandatory assignment part 2:

Understanding users

Iteration 2. We will work on the second iteration to day. The second iteration must consist of three elements. We will start them today.

- Create personas. The personas should describe average users in your target group. Make enough to cover the target group.
- Create a future scenario using your persona.
- Write a description of you persona and scenario explaining why you choose to shape it in this manner. User CH 3 from About face.

**REMEMBER
HAPPINESS IS
MANDATORY**

First Mandatory assignment



Scenarios - any experience?

Jumping in to a design without knowing the “what and how” of the users leads to endless iterations. Without clear agreement on problem setting you end up with “I like” arguments.

Scenarios helps you to convey a narrative that captures what a user does to complete a task - and his primary motivation behind doing so. It's a step by step story of a users experience.

Om morgenen
cykler Oliver af
sted mod stationen

Bliver undervejs i
tvivl om han når
toget. Skynder sig

Ankommer til
stationen
forpustet og varm

Vil parkere sin
cykel, men der er
fyldt i cykelstativet

Scenarios are based on your persona and knowledge of the design situation, which in turn is based on your research.

Why scenarios

Bad example of Scenario(or persona) creation:

Client:

1. I want to make page – I believe my users need this.
2. Tada! my page is done.
3. It is not doing to well?!
4. I do not know why (wicked problem).
5. Hire designer.

Designer:

1. Sure I will help – I will make a scenario.
2. I believe your user are like this and need this.
3. Propose a new page and launch it.
4. Still not doing to well
5. Same problem (wicked problem)



You may be an experience designer - and the site will properly be better.

But its not a valid solution. All you did was change the owners assumptions into your own assumptions!

Dont be this kind of developer

There are two basic kinds of scenarios:

1. Present scenarios (Use scenario or context scenario):
 - Show what is now.
 - Uncovers current use experience and potential problems.
 - Does not focus on a particular problem but shows the entire user experience - including both good and bad.
2. Future Scenarios (Solution scenario or key path scenario):
 - Show what ought to be when the solution is implemented.
 - Predicts user experience after implementation of changes.
 - Re-evaluates goal of design continuously.
 - Restate the goal of the design process and focus of team.

Present and Future Scenario

A good scenario answer the following questions:

- Who is the user? (the persona)
- What are the users goals and motivations?
- What is necessary for the user to accomplish her goal?
- Why would the user engage with this particular product or company.
What would lure the user to this moment?
- What does the user need to do – to interact with? How is the goal accomplished? And how does the user feel?



Scenarios

Coopers “easy” five step guide:

1. Create problem and vision statements. (Agree upon the “what” and “how”)
2. **Explore and brainstorm.** (Designing. Get rid of preconceptions and move from analysing data to solution thinking)
3. Identify persona expectations. (Copy-past from persona and fill out)
4. Construct context scenarios. (Make it believable and real – not systematic)
5. Identify design requirements. (Data, functions and context needs)
6. Moving on to the actual design part – the fun part 😊

How to build (believable) scenarios

Vivien's context scenario:

1. While getting ready in the morning, Vivien uses her phone to check e-mail. It has a large enough screen and quick connection time so that it's more convenient than booting up a computer as she rushes to make her daughter, Alice, a sandwich for school.

2. Vivien sees an e-mail from her newest client, Frank, who wants to see a house this afternoon. Vivien entered his contact info a few days ago, so now she can call him with a simple action right from the e-mail screen.

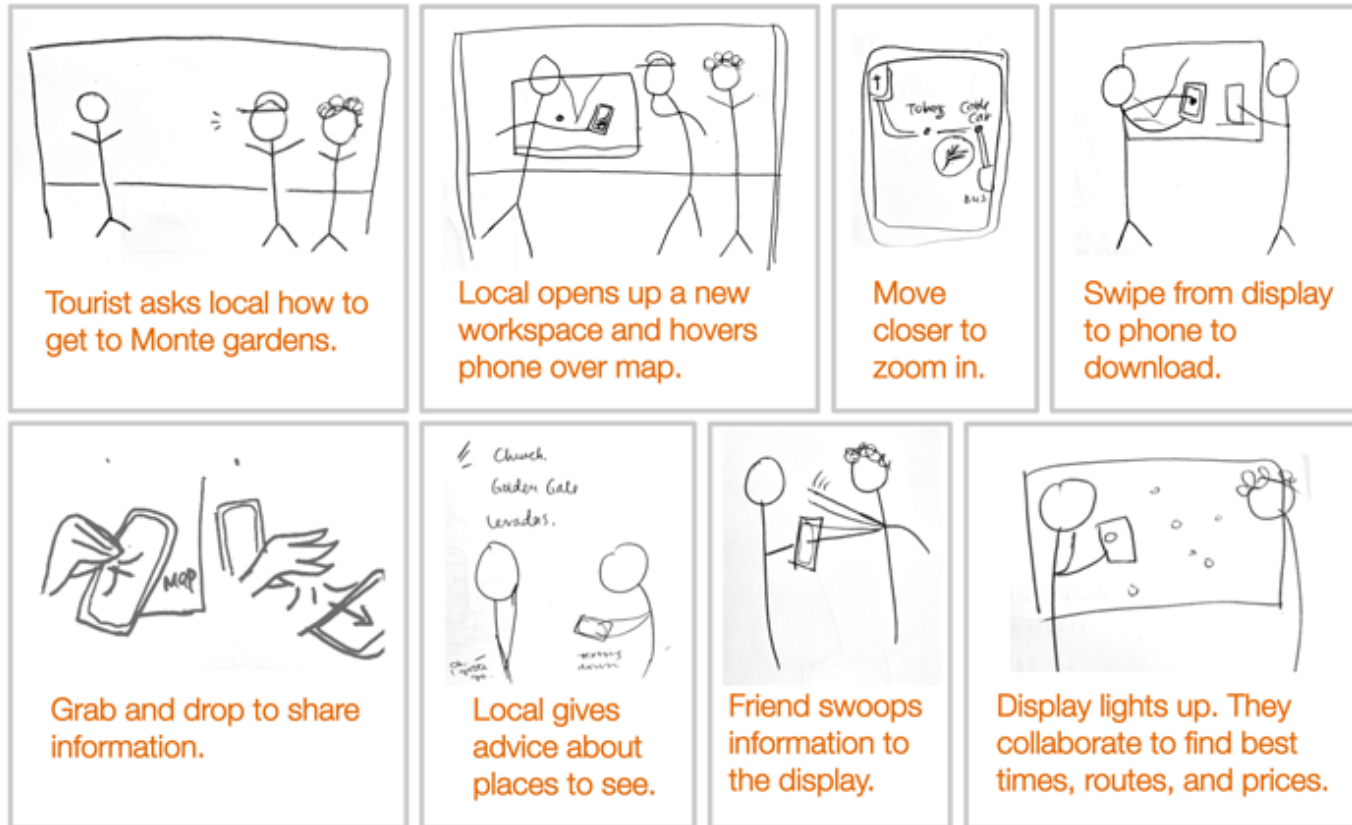
3. While on the phone with Frank, Vivien switches to speakerphone so she can look at the screen while talking. She looks at her appointments to see when she's free. When she creates a new appointment, the phone automatically makes it an appointment with Frank, because it knows with whom she is talking. She quickly keys the address of the property into the appointment as she finishes her conversation.

4. After sending Alice off to school, Vivien heads into the real-estate office to gather the papers she needs for the plumber working on another property. Her phone has already updated her Outlook appointments, so the rest of the office knows where she'll be in the afternoon.

5. The day goes by quickly, and she's running a bit late. As she heads towards the

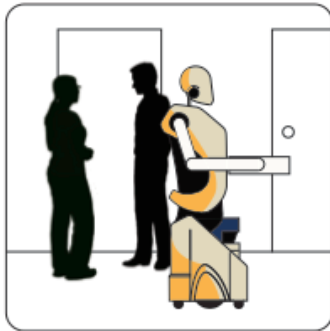
Coopers example

scenario: local helping tourists

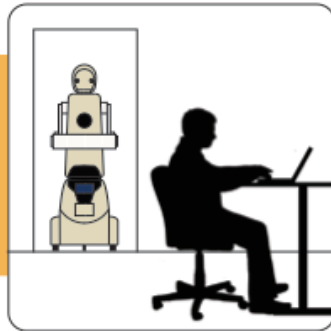


Scenario example

Delivery Mode - Future



- 1 Travel**
- avoid collisions
 - discourage interactions



- 2 Arrival**
- ambient
 - peripheral



- 3 Greeting**
- cheerful
 - nod



- 4 Confirm Identity**
- customer says:
"yes" - go to 6
"no" - go to 5



- 5 Identity Incorrect**
- sorry
 - go to 8



- 6 Confirm Order**
- Apple or Cookie
 - customer says:
"yes" or "no"



- 7 Take Your Snack**
- head helps to cue customer



- 8 Goodbye**

Scenario example



Om morgenen
cykler Oliver af
sted mod stationen



Bliver undervejs i
tvivl om han når
toget. Skynder sig



Ankommer til
stationen
forpustet og varm



Vil parkere sin
cykel, men der er
fyldt i cykelstativet

Scenario example



Scenario example



Make it usefull (week 10 - lecture 6)

Mandatory assignment part 2:

Understanding users

Iteration 2. We will work on the second iteration to day. The second iteration must consist of three elements. We will start them today.

- Create personas. The personas should describe average users in your target group. Make enough to cover the target group.
- Create a future scenario using your personas.
- Write a description of you personas and scenario explaining why you choose to shape it in this manner. User CH 3 from About face.

**REMEMBER
HAPPINESS IS
MANDATORY**

First Mandatory assignment

Wicked problems.

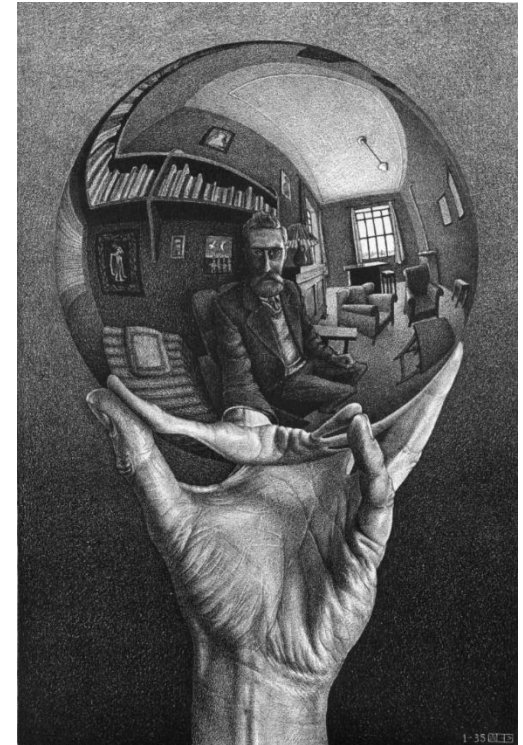
- Hard to define with no final solution.
- No room for trial and error but high responsibility.
- Involves people and social relations with different goals.

The design process.

- Agile processes fit wicked problems.
- Waterfall process fit tame problems.
- Think in iterations of continued learning, not names.

Personas and scenarios.

- Build on research to provide knowledge for decisions.
- Active tools for the design process ensuring user focus.
- Uncovers hidden truths and makes them operational.



What happened today?

Next time:

Topic: Building a design on a base of knowledge about users.

Read, watch and do:

Get to know this tool at axure.com/

[Plural sight] Introduction to Axure by Antonia Anni 2 hours. [Here](#)

[Norman] p 1 – 36. Intro to understanding the design of everything.

[Idler] Very interesting article on metaphors in design! [Here](#)

[Cooper] p. 299 – 322. Secondary - good collection of the above.

+ might be a good idea to start sketching ideas for the site.

Homework and preparation
