

MADMD Web Development and User Experience

# *User-Centred Design on the Web*

Peter Otto & Martina Schell

# *Introduction*

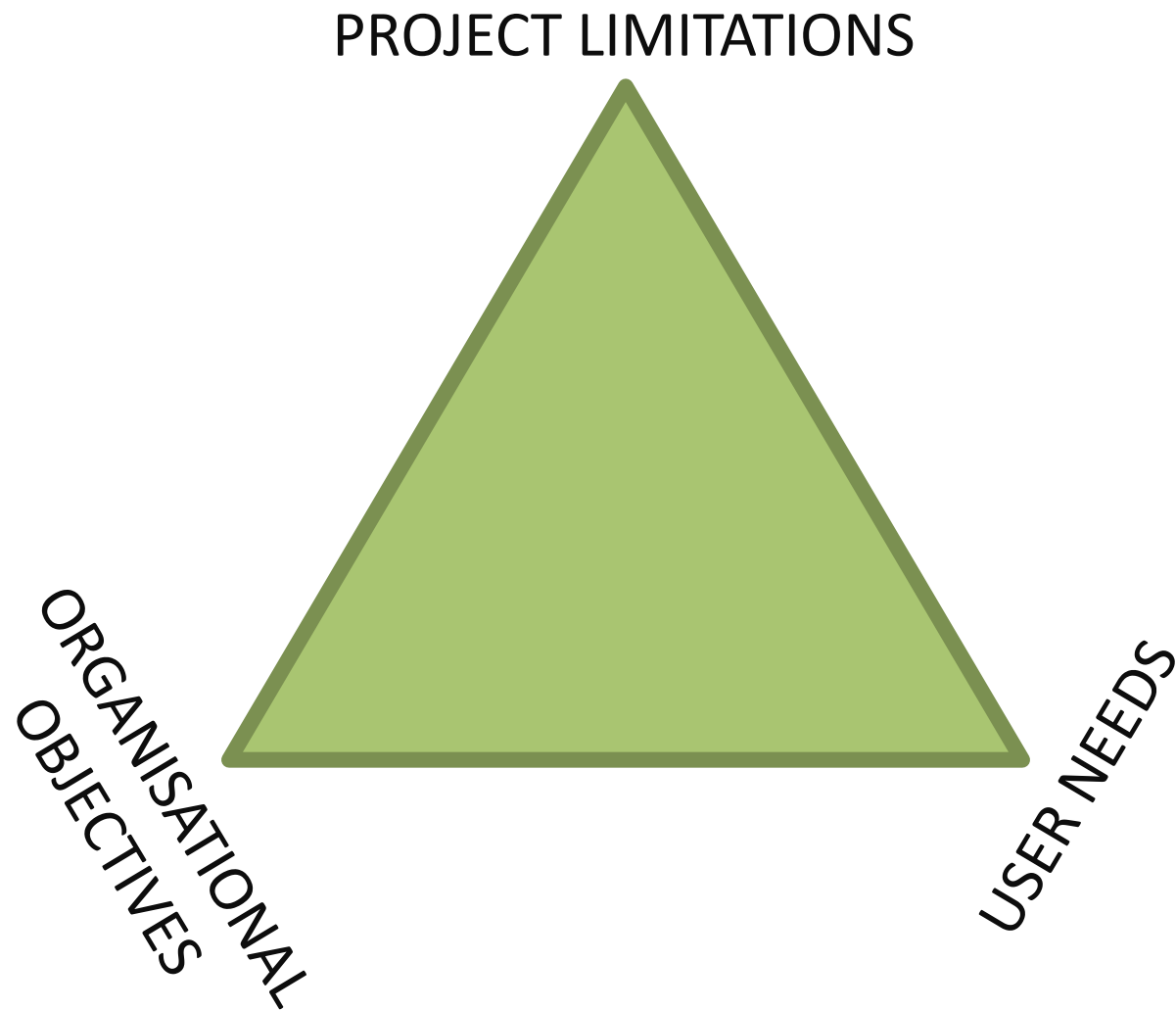
***Discuss: What is design?***

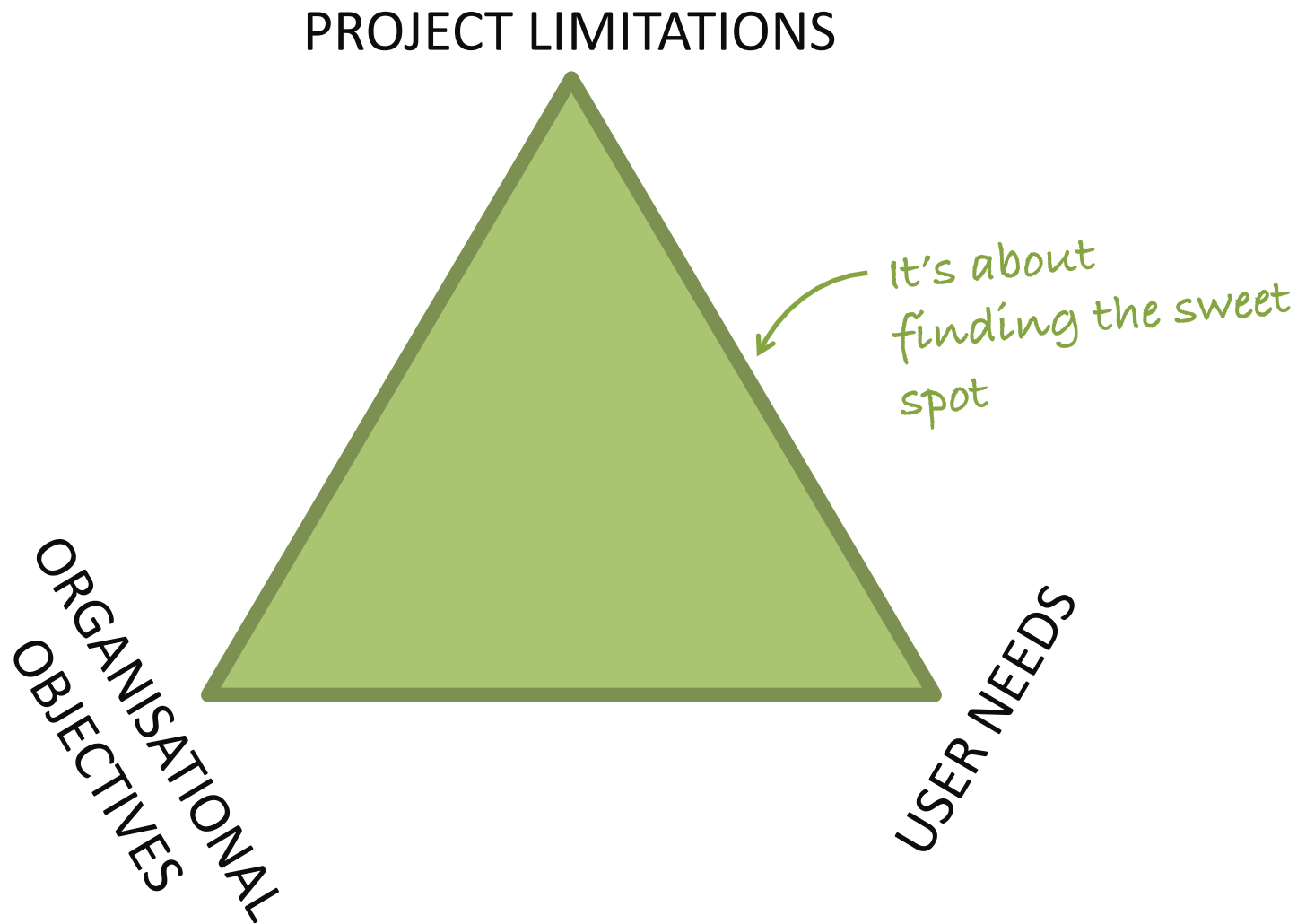
*good*

***Discuss: What is design?***



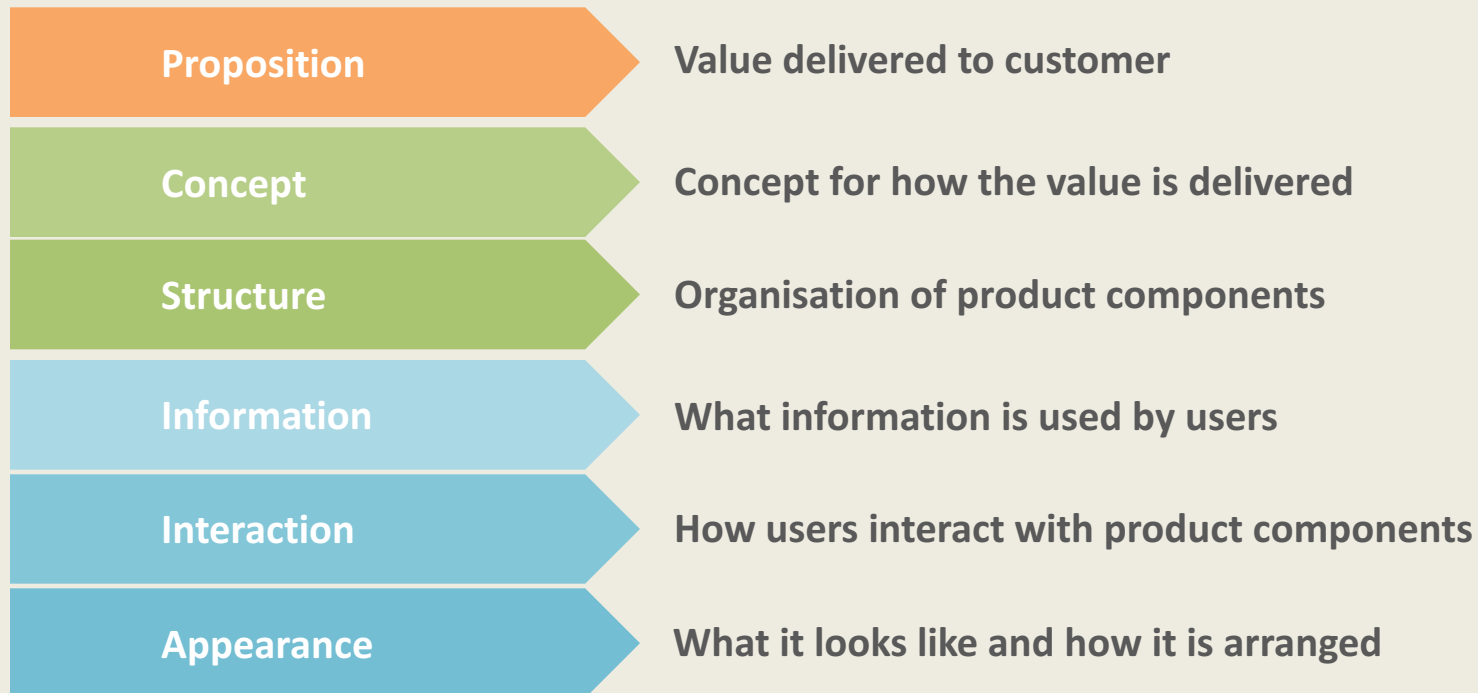
*...think of some everyday examples of good design...*





# What is User Experience?

# Elements of user experience



...one view of it. [Here's another one](#)

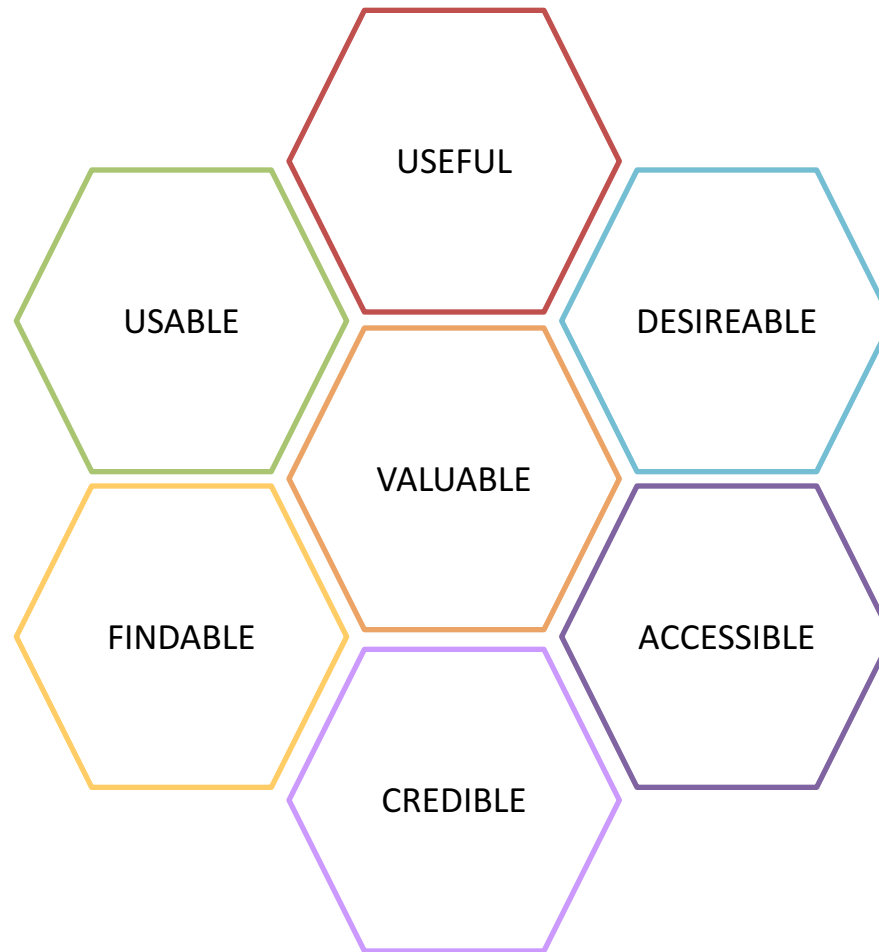


## *Task: Review a website*

- Look a website, for example: [GiffGaff](#)
- What is the website's **proposition**? How relevant is it?
- What is the underlying **concept** that realises the proposition? Does the concept work?
- How is the website **structured**? Is this effective?
- What **information** is on the website? Is it sufficient and relevant?
- How does the **interaction** work? What is problematic and what is well executed?
- How does the website's **appearance** reflect its proposition, concept and brand?

# What is <sup>a good</sup>User Experience?

# A good user experience is...



Source: Peter Morville: <http://semanticstudios.com/publications/semantics/000029.php>

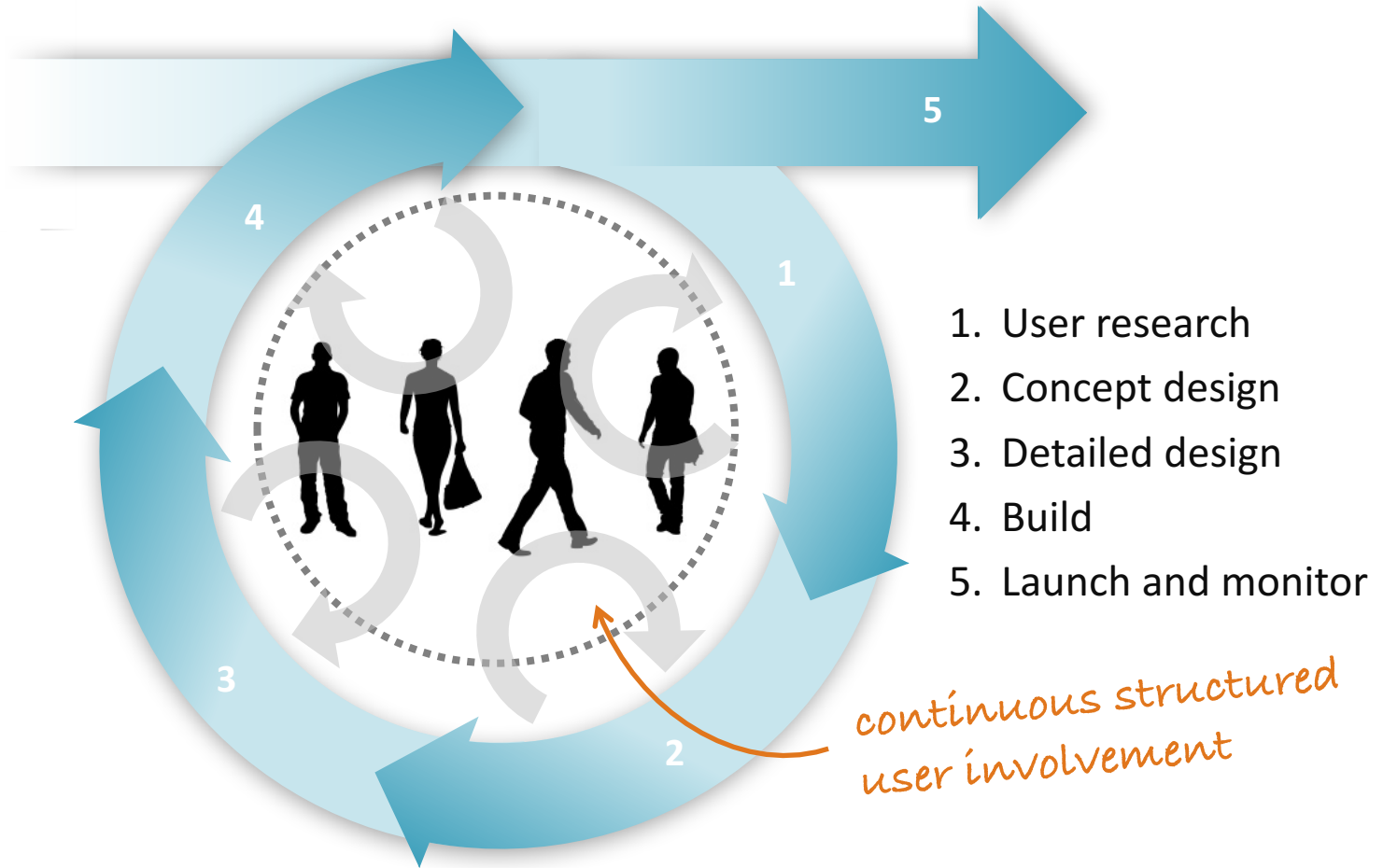
**How do you create a good  
user experience?**

# How do you create a good users experience?

...by involving  
these people  
throughout...



...this process is called user-centred design.



## PROJECT TIMELINE



# User-centred design

- User-centred design (UCD) is a design process that is based on **around structured user involvement** and **iterative design**
- There are many possible UCD models, **but all follow the same sort of pattern**
- There is also an **International Standard** for user-centred design, [ISO 13407](#), which can be used to inform many Web development projects.
- **It's a toolbox:** pick and mix
- Fit for purpose – **we do not have to use every tool!**



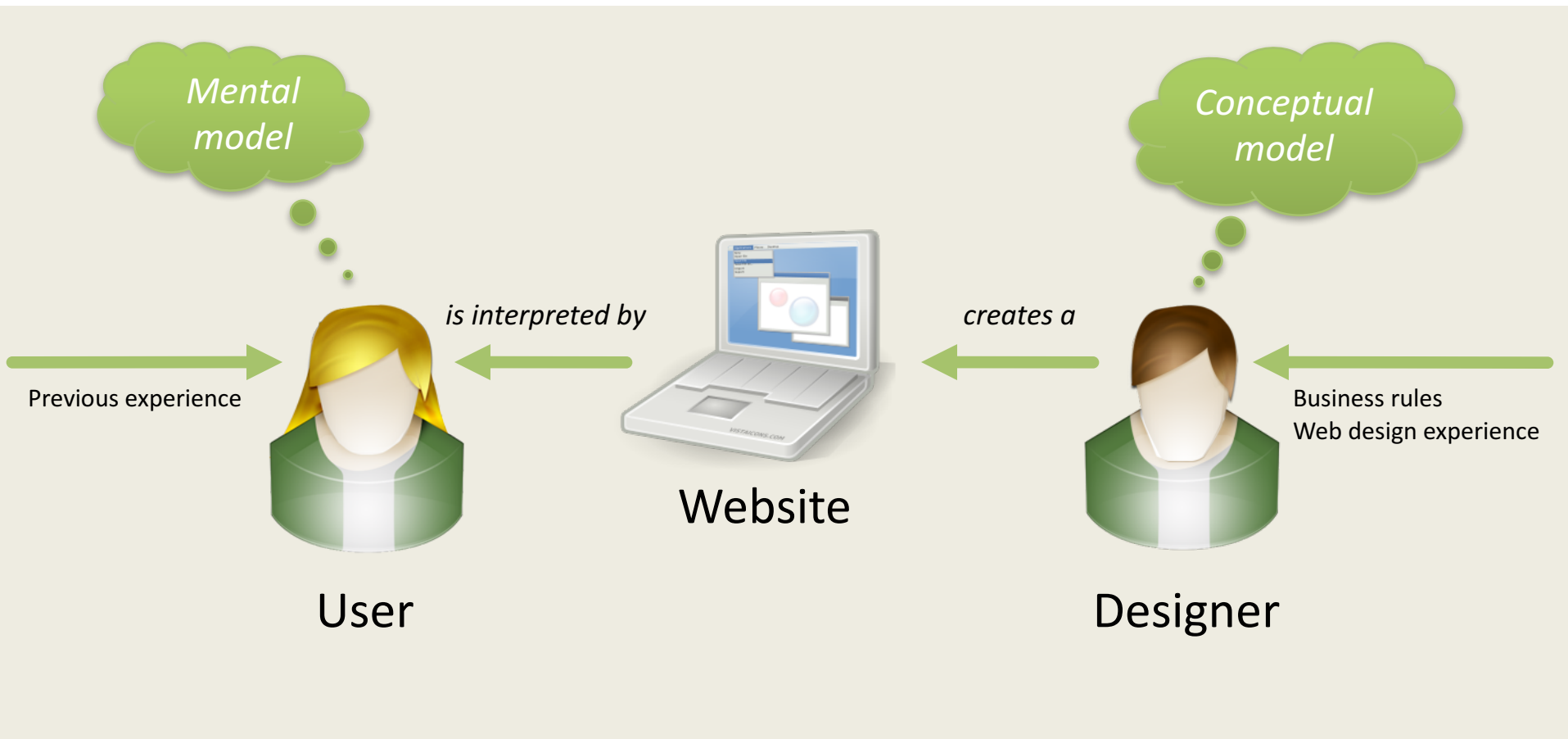
***A recap on terms...***

# Terms

- **User Experience** is the overall experience and satisfaction a user has when using a product or system
- **User-Centred Design** is a design that leverages users insight by continuously involving users
- From the user's perspective, the user experience is built on the **interactions** they have with the website.
- **Individual user interactions are the building blocks of the overall User Experience**

# *Norman's model*

# A model of interactions



**Source:** Donald Norman's [The Design of Everyday Things](#)

# Mental model

- Is a user's **own view of how a website works**
  - Is usually **incomplete, inaccurate** and **naive**
  - Built on **previous experience of websites** and technology that may or may not be applicable
  - But the user's mental model is **good enough** to explain to them how the website works
- 
- An example: Just how much do you know about how your car works?
  - What do you need to know to drive it?

# What are your mental models like?

Write down how an ATM works

# What are your mental models like?

## Write down how an ATM works

- How much money are you allowed to take out?
- What denominations?
- If you take out the maximum and go to another machine and tried the same what would happen?
- What information is on the strip on your card? How is this used?
- What happens if you enter the wrong number?
- Why are there pauses between the steps of a transaction? What happens if you try to type during them?
- Why does the card stay inside the machine?

# How did you go?

- How detailed was your mental model? How shallow?
- How much did you use analogies to explain it?



# Good design helps users build useful mental models

A good website design treats its users like rather lazy detectives... leaving obvious clues around, guiding them to a useful understanding.

There are some key design principles to support this task:

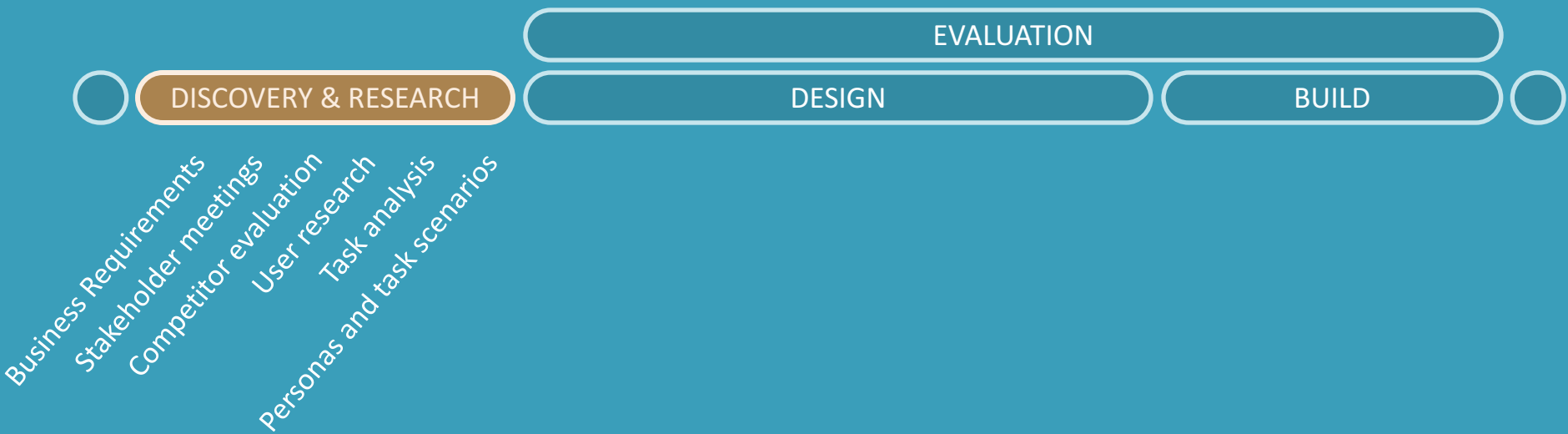
- Functions and system states that are **visible** to users
- **Feedback** that clarifies what the user has done
- Clear and simple **affordances** let users know what is possible on the website
- A natural **mapping** between controls and their effect

## *Task: Review a website*

- **For the search results page of the following website**
  - <http://www.kayak.co.uk/> - use the search results page
- **Identify affordances, feedback, mapping and system visibility**
  - What is unique to this website?
  - What is common to other websites?
- **How does the site help users develop a mental model?**

# *Client and competitor research*

## PROJECT TIMELINE





*...I don't need to do  
this, I've already got  
a brief from the  
client!*

***Discuss: What design briefs won't tell you...***

# What client briefs rarely tell you...

- Hidden agendas & internal politics
- Unstated/undiscovered user needs & behaviours
- Where you can innovate

## **Before you start, you need to understand:**

- Business needs & objectives
- Stakeholders, their involvement and agenda
- The market
- Your users, their goals, needs, and context of work

# Understanding business objectives

- UCD is **all about discovering business opportunities** through user research and improving the way users can interact with products or services.
- Often **there may some resistance** against adopting UCD as it may challenge existing preconceptions.
- So it's vital to understand the **business goals, success factors and politics** of the organisation you are working for.
- It's all about **bringing organisational objectives/business goals and user needs together!**





How the customer explained it



How the project leader understood it



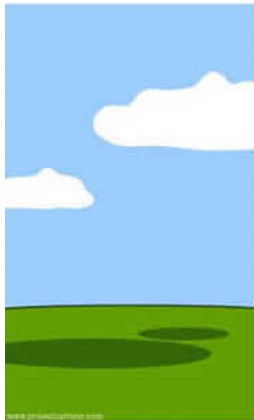
How the analyst designed it



How the programmer wrote it



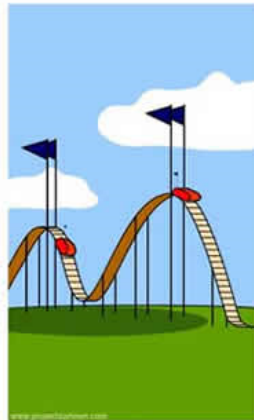
How the business consultant described it



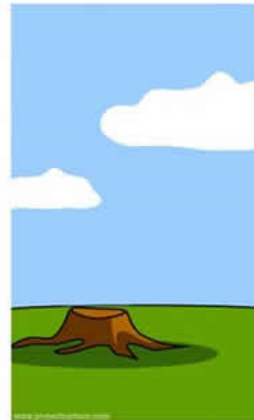
How the project was documented



What operations installed



How the customer was billed



How it was supported



What the customer really needed

# Understanding business objectives

- **Scope & definitions:** WHAT is the product/service supposed to do?
- **Primary purpose/goal of project:** WHY are you doing it? (what are the business benefits?)
- **What's the Business model?**
  - Revenue generating (for example Commerce, Advertising, Subscription)?
  - Non-revenue generating (for example promotional or cost saving)?
- **What is considered a successful outcome and how will you assess it?**

# Planning the UCD process

- Formulate SMART **objectives** for the website
- Formulate **strategies**
- What **resources** are available? (people, equipment etc...)
- What **methods/processes** will you adopt?
- What is your **schedule**?
- What is your **budget**?

...UCD gives you a rich [toolkit of methods](#), from informal low cost “guerilla” methods to thorough research.

# Understanding the organisation

- **What are the politics of project?** (Don't underestimate the importance of politics!)
- **What decision structures are there?** (WHERE does the power lie?)
- **Who are the stakeholders?** (WHO has a vested interest in this project?)
- **A good Project Initiation Process** helps to clarify some of those things.

# Understanding stakeholders & their objectives

- **Get to know people.**
- Have **one-to-one** meetings.
- **Listen to them.** Don't spend the time telling them about all your great ideas!
- When you need to, communicate your ideas clearly and effectively.
- Establish **common frames of reference between** stakeholders.
- **Identify conflicts.**
- **Get buy-in.**

# Some things to ask stakeholders...

- What's your **involvement**?
- **Why do you want to do this** project?
- How do you think this could **benefit the business/organisation**?
- What would be the **best possible outcome**?
- What do you fear **could go wrong**?
- How would you like to be **involved/informed**?
- What are your **key objectives**?
- What is your (departments) **strategy** for the next year/five years?
- What **motivates** you to do this?
- Etc...

[More on stakeholder workshops](#)

# Types of Stakeholders

- Decision makers
- Gatekeepers
- Beneficiaries
- Workers

**Think how, why and when to involve them in the design process:**

- Direct involvement at defined points/throughout?
- Highlights and snapshots only?
- Reports and recommendations?
- Setting priorities?

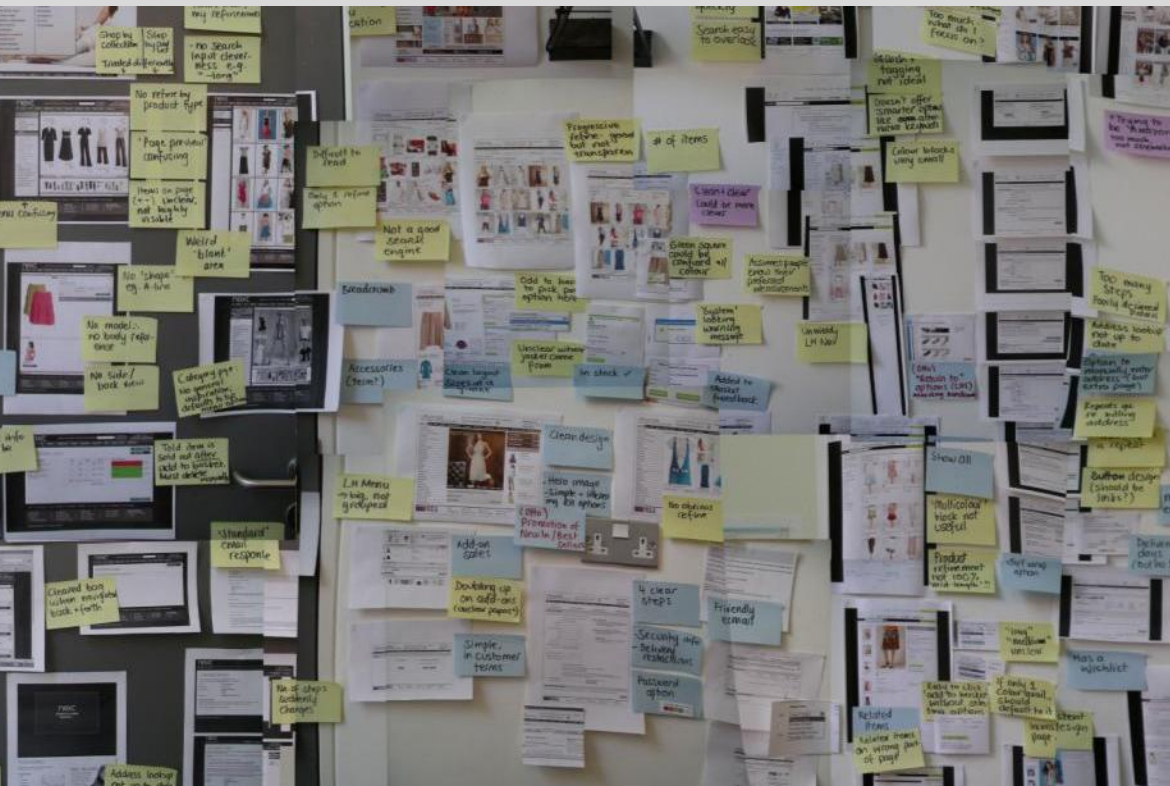
This has to be part of your **communication plan...**

# Competitor evaluation

- Looking at other companies products is a great source of inspiration...
- Get lots of **photos/screenshots**
- **Compare features** and functionality
- Pick out the **stuff that works well**
  
- There is **no point in re-inventing the wheel**
- Design is **evolutionary** process; no one designs everything from scratch
- Competitor evaluation lets you **identify what the state-of-the-market is**
- **Your business goals will tell you whether you can match them or whether you need to set a new standard**



## Competitor evaluation

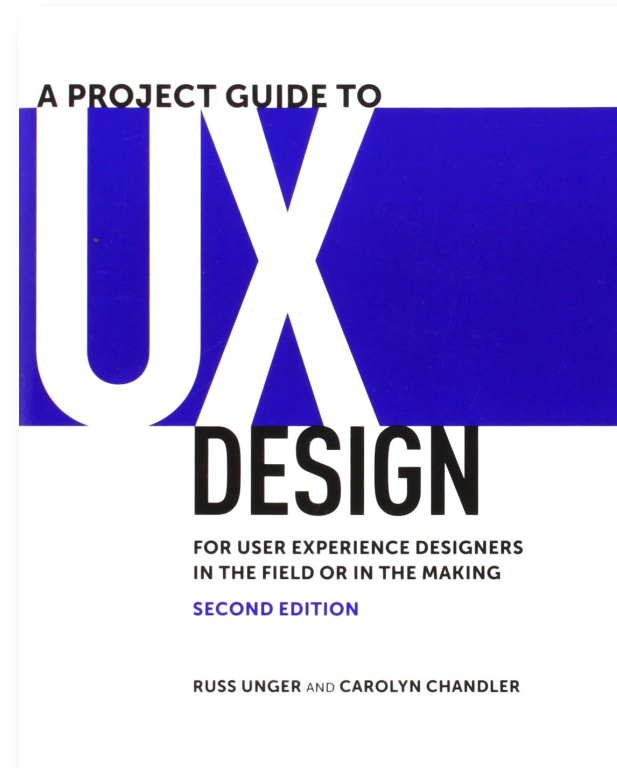


If you can, print out screenshots and put them on the wall. Identify trends and common themes, unusual ideas and things that do or don't work well.

# Further reading...

**Chapter 4:** Project objectives

**Chapter 5:** Business Requirements



# Further reading...

