Interaction design

The elements of user experience

Proposition	**Value delivered to customer**
Concept	**Concept for how the value is delivered**
Structure	**Organisation of product components**
Information	**What information is used by users**
Interaction	**How users interact with product components**
Appearance	**What it looks like and how it is arranged**
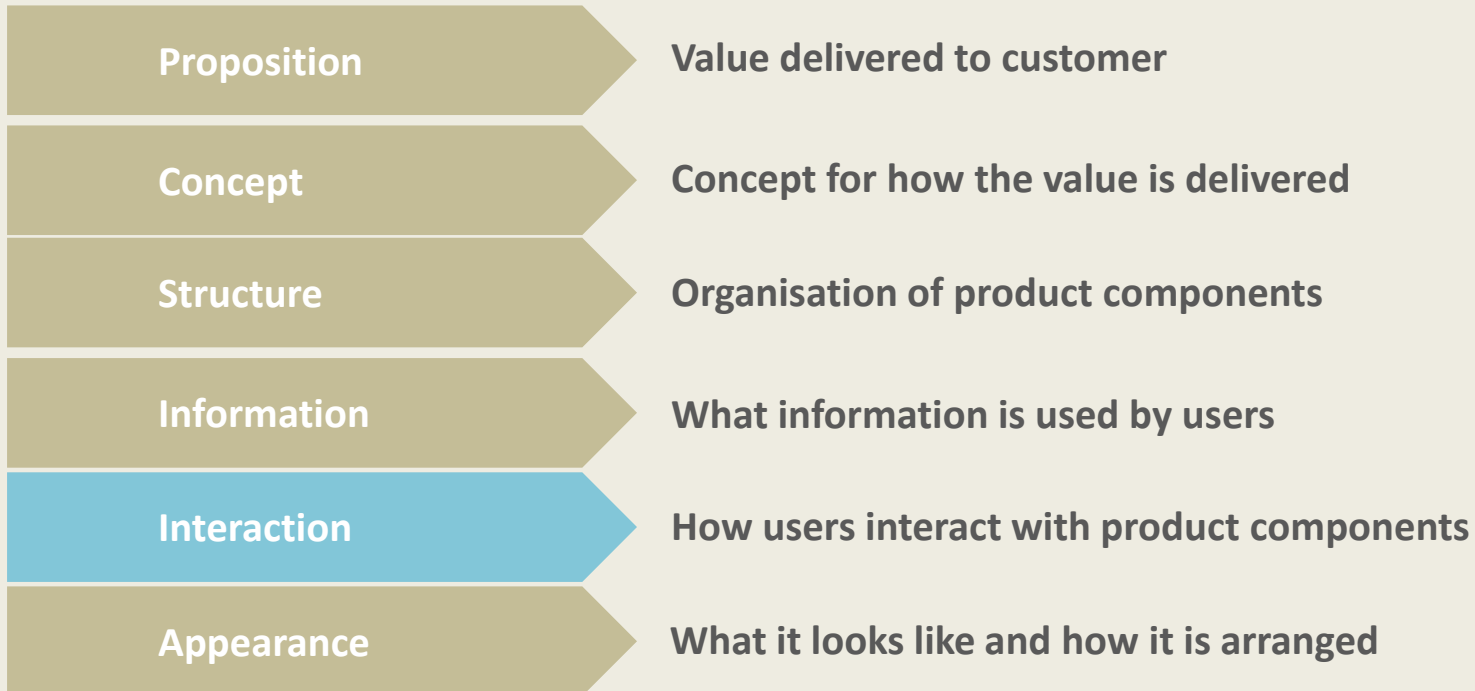
...one view of it. Here's another one

Interfaces & interactions

- Task analysis allowed us to specify the **main goals of users** and the **steps required** to achieve them

- We now need to start translating this detailed **interactions** and how this will be achieved using the **user interface**

Interfaces & interactions

It's essentially about designing simple, intuitive interfaces that support users in their tasks (see [Introducing Interaction design](#)).

Key concepts include:

- Flow
- Task support
- Action/reaction
- State
- Error prevention

Patterns

- A **pattern** describes an **optimal solution to a common problem** within a specific context

- **Patterns** for interface and interaction design are now emerging

- The term is taken from the book 'A Pattern language', originally invented by the architect Christopher Alexander

Web interfaces: pattern libraries

- **Web design patterns**

- **UI patterns**

- **Factory Joe**

- **Yahoo! design pattern library**

- **AJAX patterns**

- **See also:** 37 Signals' article An Introduction to Using Patterns in Web Design

Pattern language applied to interactions and tasks

- **What are the components of an online shopping experience?** e.g. login, selection, shopping cart, payment, order-tracking, etc...

- **How do these parts fit together?** e.g. need to have login before anything else can happen, payment must occur before order tracking, an error message needs to be generated if the password is wrong, etc...

- **What's the best way to design individual interface components?** e.g. use drop down boxes or free text for dates when registering? radio buttons or check boxes for making selections? etc...

- **Once you know about user tasks and goals, and what content is available, you have to be ruthlessly precise** and logical to map interactions that support these goals.

Visualising interactions

- User experience designers usually use **flowcharts (workflows)** to describe the interactions in the site they are designing

- Usually use a tool like **Microsoft Visio** (PC) or **Omni Graffle** (Mac)

A visual vocabulary

- From http://www.jjg.net/ia/visvocab
- This vocabulary is based on a simple conceptual model encompassing both information architecture and interaction design:
  - The system presents the user with **paths**
  - The user moves along these paths through **actions**
  - These actions then cause the system to generate **results**
- You can download a file containing PowerPoint versions of these shapes.
- Example from jjg.net: Metafilter interaction design.

Creating a functional specification

Some or all of the following may be found in a **functional specification document:**

- Business analysis
- [Competitor analysis](#)
- User analysis (may include personas)
- Task analysis (may include scenarios)
- Technical requirements
- Site map/architecture
- Task/workflows (interaction design)
- Prototypes (mock-ups)