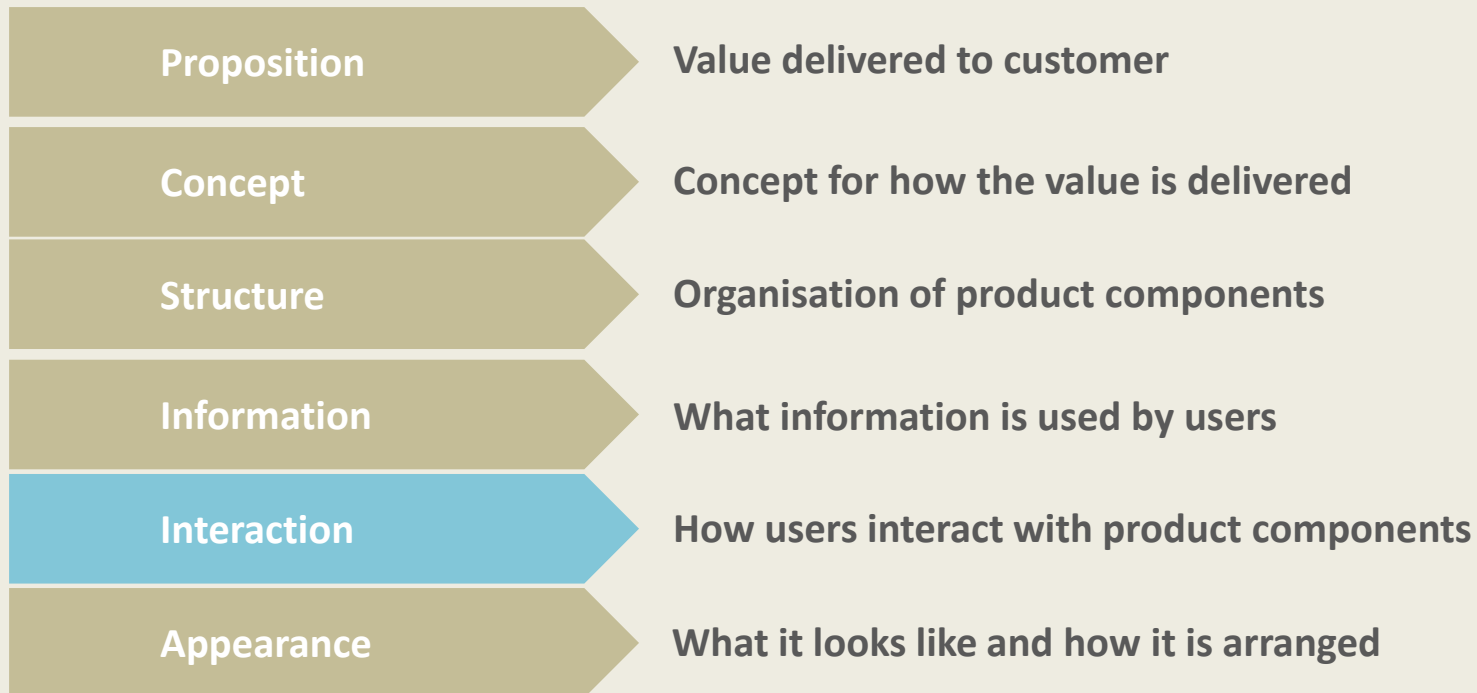


2.2.8 Interaction design

The elements of user experience



...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**
- **Interaction design** is concerned with designing the dialogue between the human and the machine
- Key aspects of interaction design are:
 - Task flow & Task Support
 - Action/Reaction
 - Behaviour of UI component
 - State of UI components
 - Error prevention

(see also [Introducing Interaction design](#)).

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 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)