User Experience Design part III

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Two user-oriented process models

A task-oriented model

- ◆ *ISO 9241-210 (2010)*
  - · *Official international standard, originally from UK*
  - · *Aim: usabilty design*
  - · *Five phases: Feasibility study, User Requirements, Implementation, Evaluation, Deploy*

A goal-oriented model

- ◆ Jesse James Garrett (2011)
  - · Well-known professional, USA, word-of-mouth (passaparola)
  - · Aim: User Experience Design
  - · Five planes: Strategy, Purpose, Structure, Skeleton, Surface

The Elements of the User Experience

By Jesse James Garrett

First a crudely drawn schema passed around by word of mouth by web designers.

Later a web page, finally a book (2006 and then 2010) providing a conceptual model and a series of implementable steps for managing a User Experience Design Process.

Jesse James Garrett invented the term AJAX in 2005.

Here I am extending Garrett's model including a number of other compatible ideas and approaches.
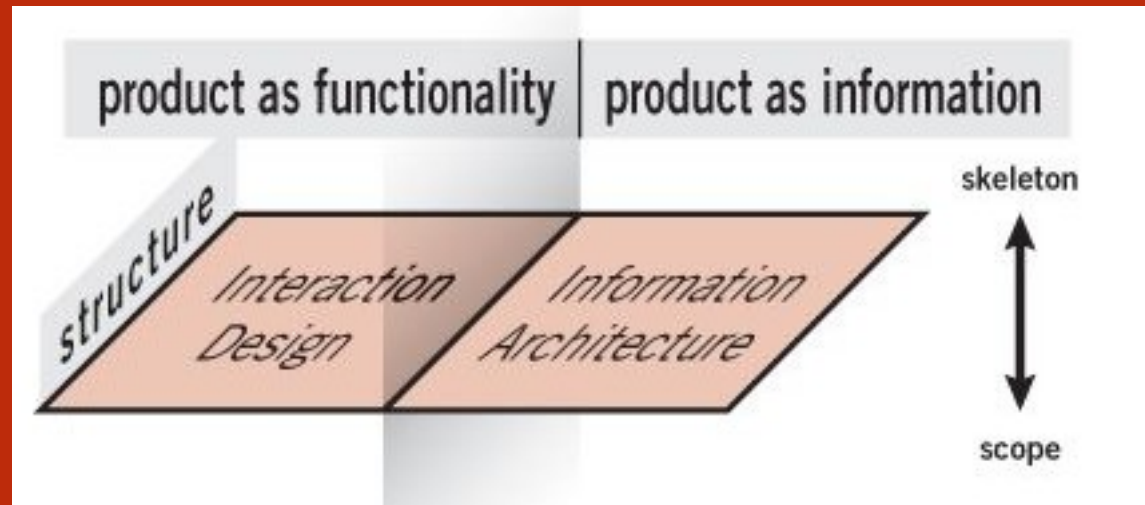
Garrett's schema
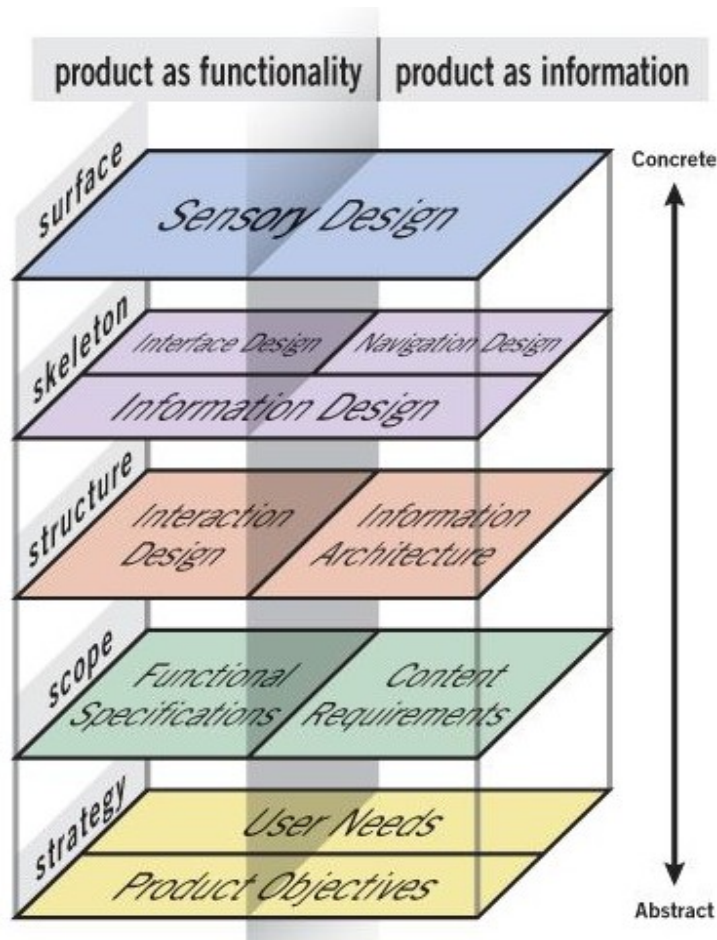
A linear process

- from abstract to concrete
- mainly Web
- Parallelism between application sites and information sites
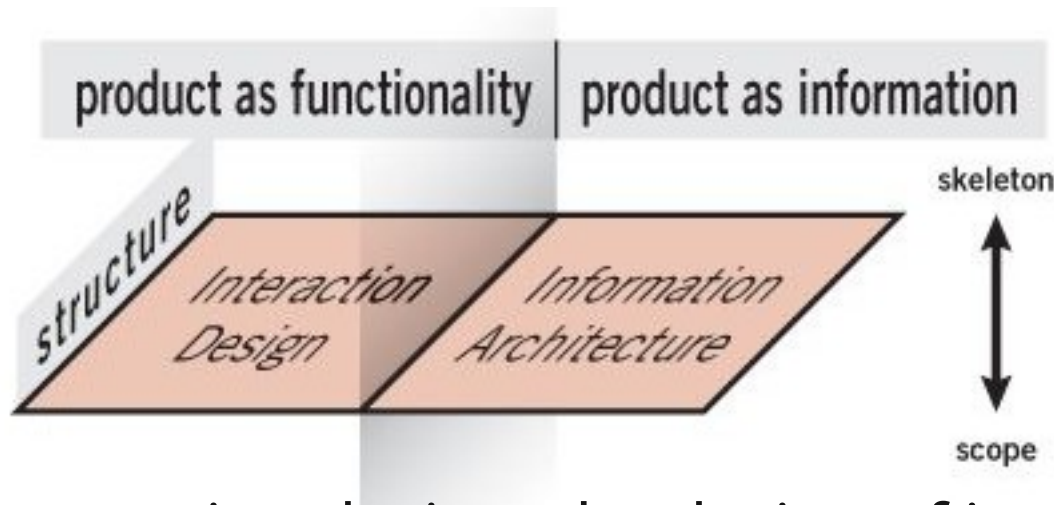- It involves roles from management, architects, implementers, graphics, and sales.

The Structure plane

The Structure plane

- How are the services used?
- How do I find the information?

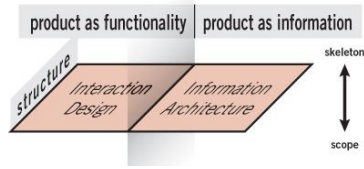Interaction design: the design of interactive services:

- ◆ conceptual models, use of conventions, error handling

Information architecture: the structuring of data

- ◆ top-down approach, bottom-up approach, structures as trees, lattices, organic, sequential. Cataloguing and organizing.

Diagrams and blueprints

Interaction design

Interaction design is with describing possible user behavior and defining how the system will accommodate and respond to that behavior.

- ◆ The dialogue
  - Interaction is not composed of ONE questione and ONE answer
  - It is like a dance: it is not important where we go, but how we move.
- ◆ The conceptual model
  - Having a precise model of the site helps in giving it consistency.
- ◆ The importance of conventions
  - Use conceptual models that the user is already familiar with
  - This is the remain usefulness of metaphors (.g. shopping carts)
- ◆ Handling errors
  - First: avoid the possibility of making errors
  - Second: help the user understand that an error occurred and help him/her fix it.
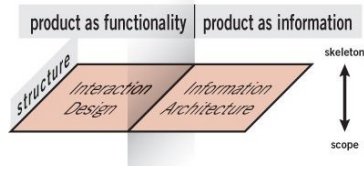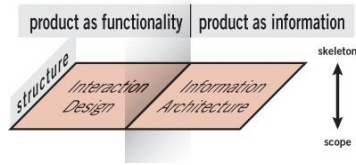
Information Architecture

Information architecture is concerned with how people cognitively process information:

- ◆ Approaches
- ◆ Structures
- ◆ Organizing principles
- ◆ Metadata and metadata models

We will dedicate a whole lesson on Information Architecture. More to come, therefore.
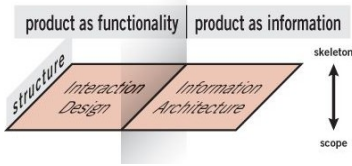
Blueprint (1)

Blueprints are drawings that define:

- ◆ The component for the organization of the content
- ◆ How these components are connected to each other.

It is usually difficult to represent a complex system with just one blueprint, so it is advisable to provide multiple perspectives for the information architecture.
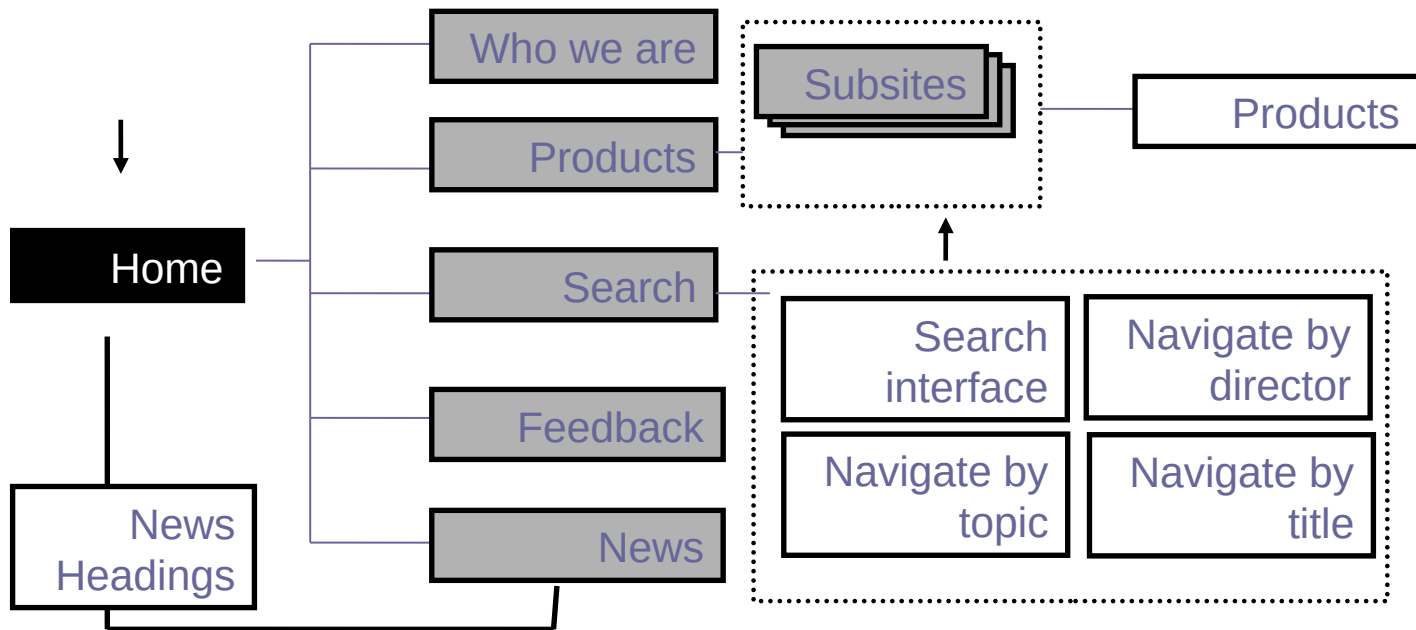
It is also advisable to generate different versions depending on who will see your blueprint (programmers, clients, marketing department, etc.)
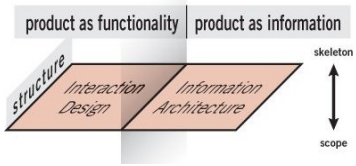
Blueprint (2)

A template (blueprint) of the information architecture, a scheme in which the <u>conceptual model of the site is explained.</u>
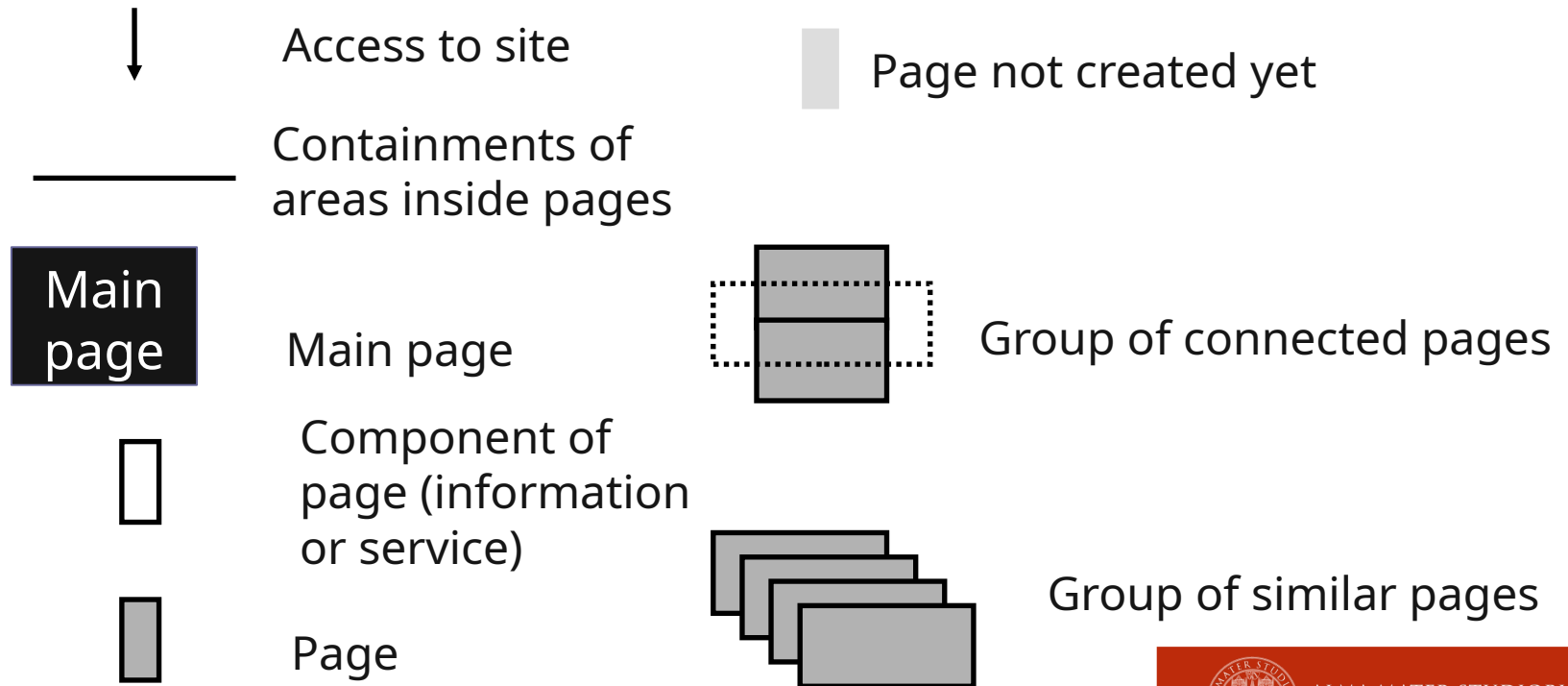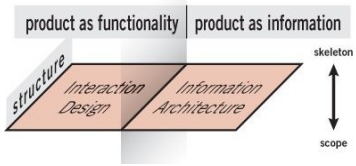
Blueprint (3)

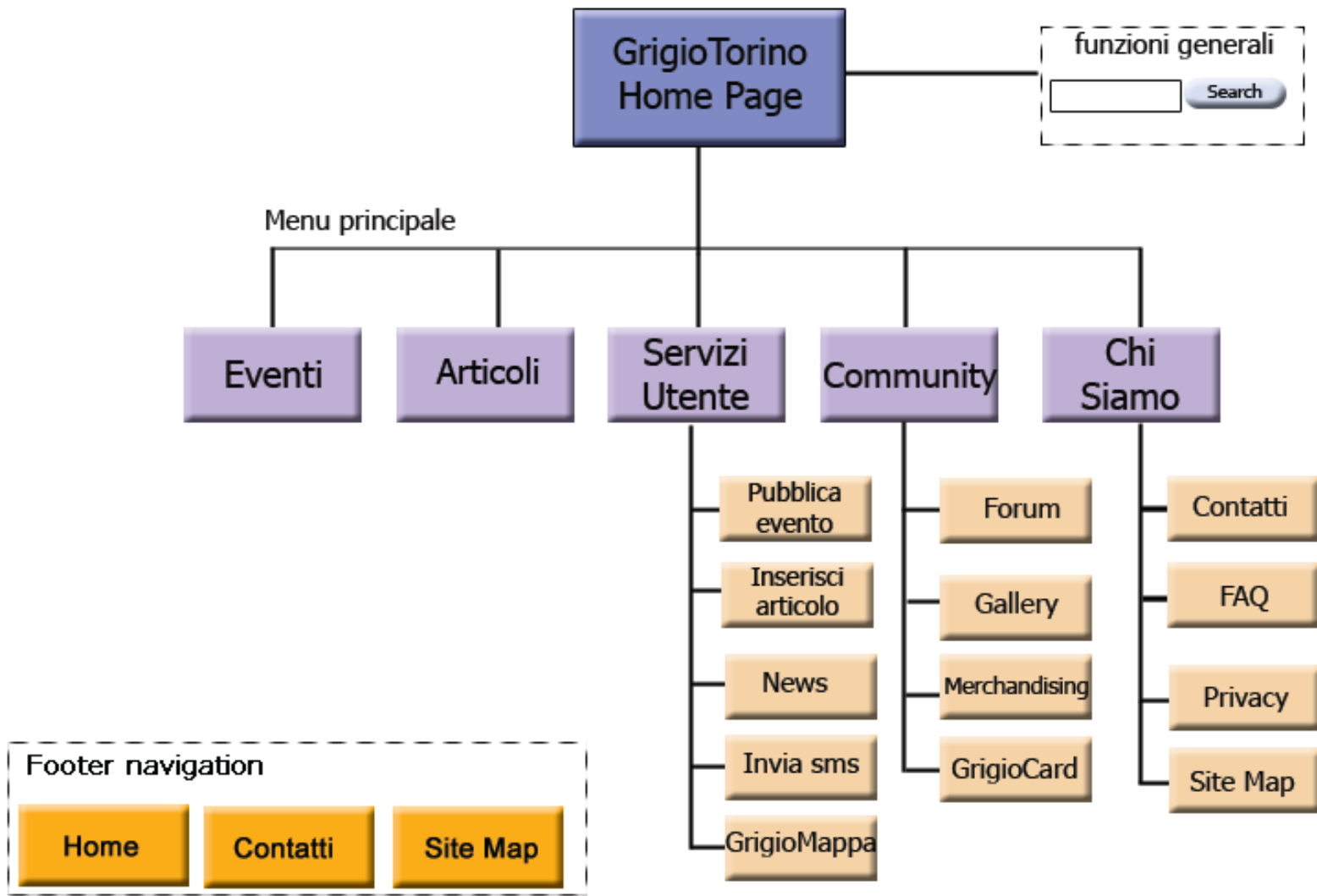There is no standardized syntax for blueprints.

This is just an example
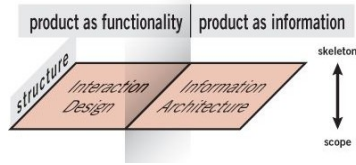
You will need a legend of the icon used so as to explain their meaning . Remain consistent throughout the drawings.

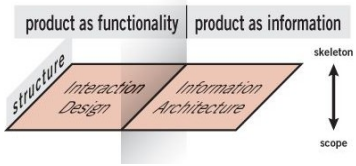|	
↓ Access to site	Page not created yet
——— Containments of areas inside pages	
Main page — Main page	Group of connected pages
Component of page (information or service)	Group of similar pages
Page	

Blueprint, another example

Storyboard

The storyboard is a technique to illustrate through images the structure of the execution steps of a task, showing the state of the screen during the phases of the action.

While a wireframe deals with the single page, the storyboard, possibly with less detail, shows the sequence of pages and the activation of any interactive widgets (buttons, pop-ups, etc.) are necessary to carry out the actions.

It can be done very convincingly by professional illustrators, or through rough sketches sequences by any programmer.
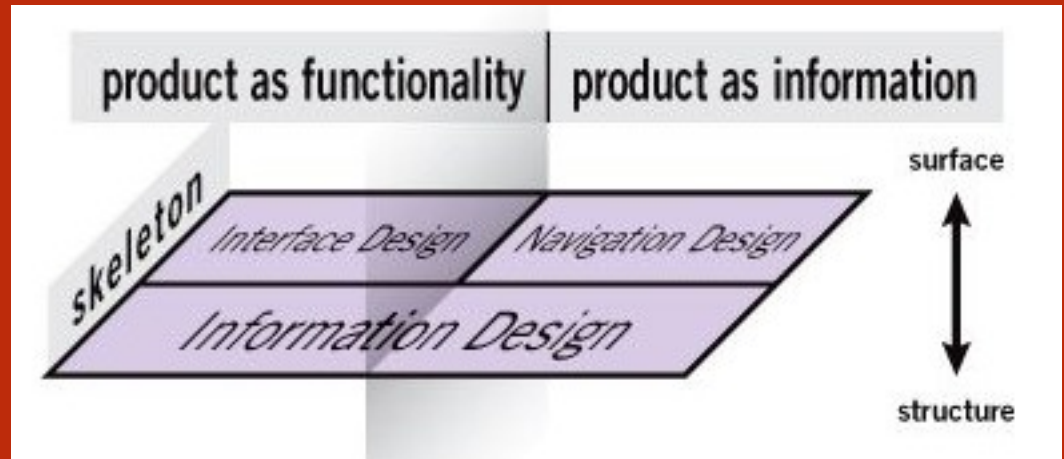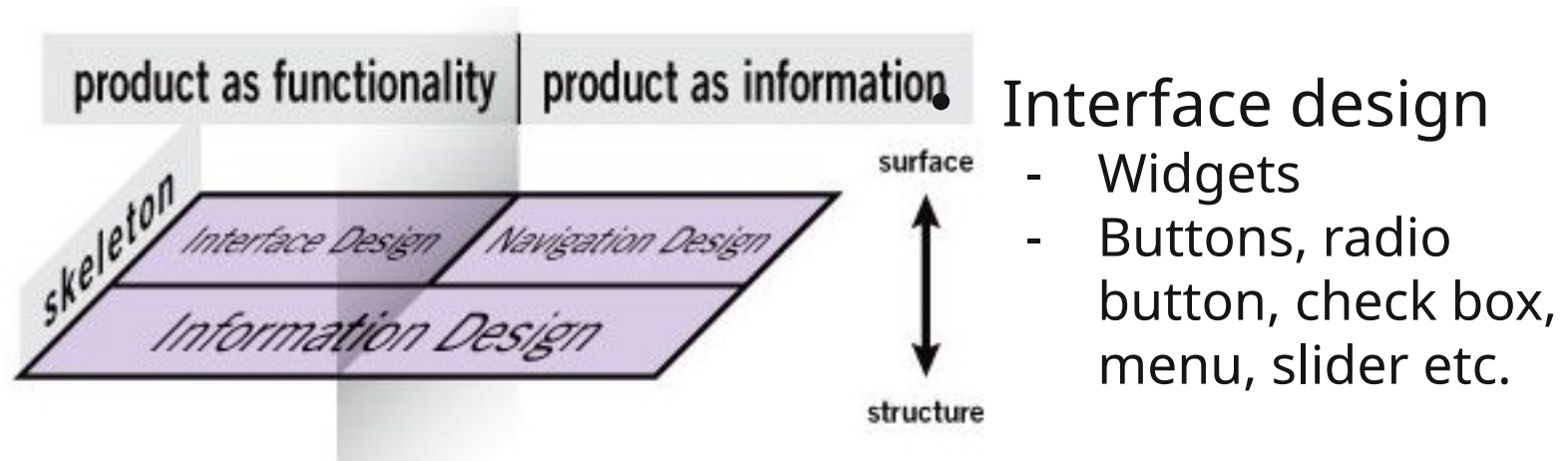
An example of storyboard
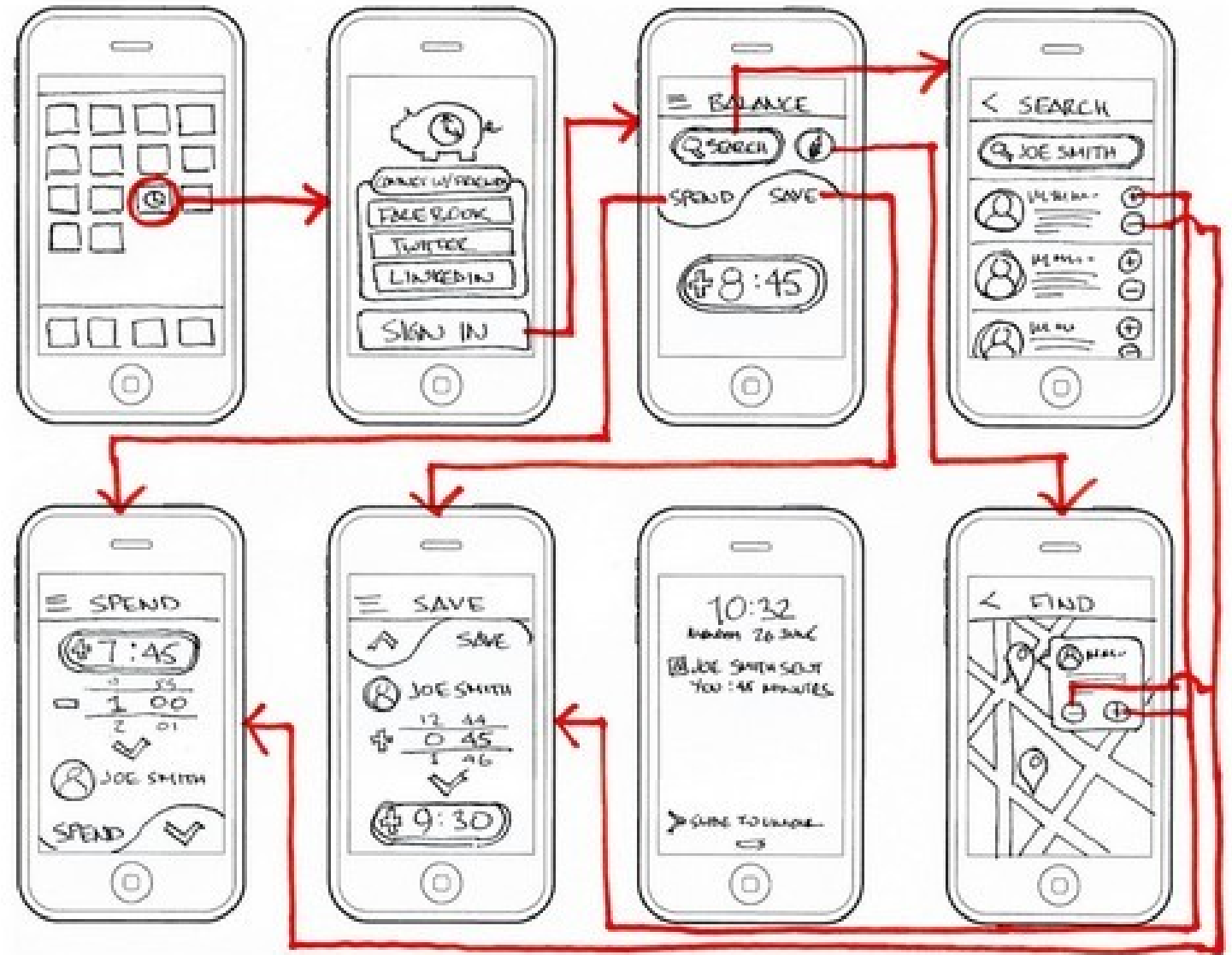
The Skeleton plane

The Skeleton plane

Interface design
- Widgets
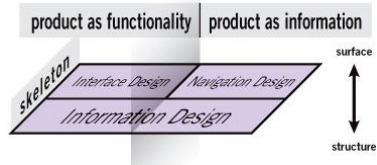- Buttons, radio button, check box, menu, slider etc.

Navigation design
- ◆ Global navigation, local navigation, additional navigation, contextual information, site map, index of topics

Information Architecture
- ◆ Wireframes

Navigation design

Provide users with a means for getting from one point to another on the site.

- ◆ Don't just provide a flat list of links with no hierarchy or order.
- ◆ Organize your navigation

Communicate the relationship between the elements it contains.

- ◆ It's not enough to merely provide a list of links.
- ◆ What do those links have to do with each other? Are some more important than others? What are the relevant differences between them?

Communicate the relationship between its contents and the page the user is currently viewing.

- ◆ What does any of this stuff have to do with what I'm looking at right now?
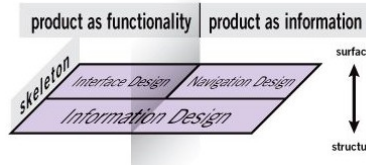
Types of navigation

Global navigation:
- Giving access to the main parts of the site.
- Possibly not present in every page (but a good idea in general)

Local navigation
- Giving access to what is "nearby" in the site.
- Parents, siblings, children

Supplementary navigation
- Giving access to disconnected content somehow related to the current page
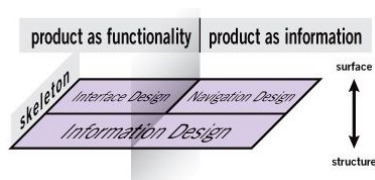- Similar topics from different sections, see also, etc.

Contextual navigation
- Giving access from the body of the page, content and links mixed up together

Courtesy navigation
- Providing access to site-wide services always accessible.
- For instance, FAQs, store hours, legal notices, etc.
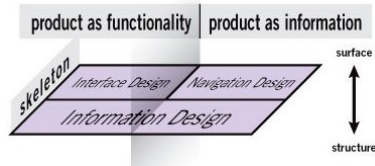
Wireframes

Drawings of the most fundamental parts of the page.

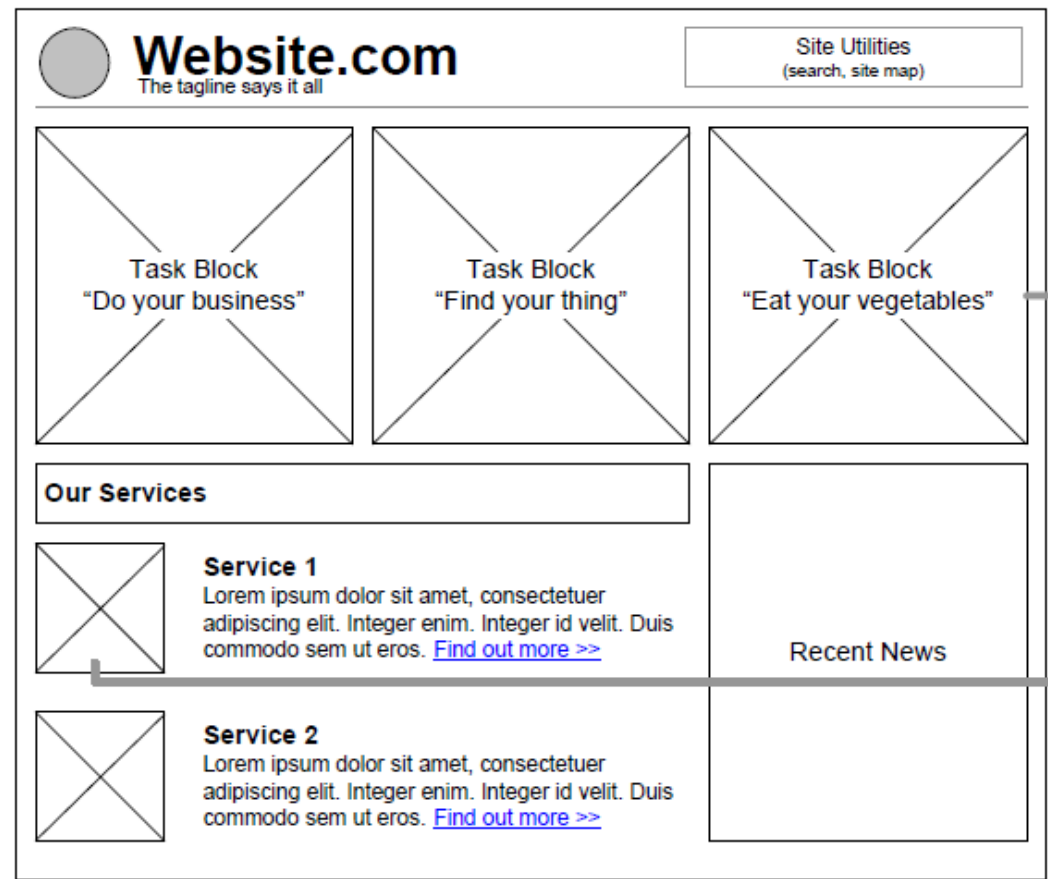A drawing for every screenful of the system.

Tools for wireframes:

- ◆ They are not very complex tools, comparable to a graphic editor, where basic objects are not just rectangles, circles, and arrows, but also windows, buttons, text areas, and so on.
- ◆ Examples:
  - • Balsamiq (commercial, made in Bologna by a former student), http://balsamiq.com/
  - • Evolus Pencil (open source, Vietnamese): http://pencil.evolus.vn/

Wireframes: an example

Sample Wireframes
Home Page

Website.com
The tagline says it all

Site Utilities
(search, site map)

Task Block
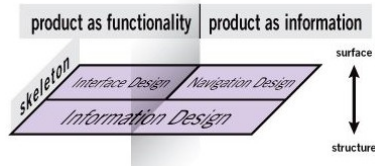"Do your business"

Task Block
"Find your thing"

Task Block
"Eat your vegetables"

Annotations appear here on the right.

Some annotations have pointers. If there's a lot of stuff to annotate on the left side of the page I'll center or right-justify the wireframe

Our Services

Service 1
Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Integer enim. Integer id velit. Duis commodo sem ut eros. Find out more >>

Recent News

Service 2
Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Integer enim. Integer id velit. Duis commodo sem ut eros. Find out more >>

Boxes with Xs mean images or Flash components.

Wireframes: another example

Wireframes: describing behaviors

Describe grafically behaviors

Login [   ]

Password [   ]

Recupera i tuoi dati

Abbonati   entra

Before login

Fabio Vitali

Abbonamento Premium
Residuo 127,50 €
Storico Operazioni

Modifica profilo   logout

After login

Hi-fi vs. lo-fi prototypes

A shared characteristics of wireframing tools is that they create low-fidelity mockups:

- ◆ Simple looking, like a quick sketch
- ◆ Unrefined, approximate, drafty
- ◆ Focussing on fundamental aspects, not details
- ◆ Looks easy to produce, to modify, to discuss
- ◆ Leaves ample potential for creation of High Fidelity designs

Lo-fi prototypes havean important psychological factor

- ◆ Customers and management feel empowered by its simplicity to suggest ideas, improvements and criticisms
- ◆ In the end, delivery does not look like an accept/reject phase, but as a collaboration between designers and customers on reaching an acceptable design.

Wabi Sabi

わびさび

An important characteristics of Japanese aesthetics:
it describes beauty

- ... of imperfect, incomplete, impermanent things
- ... of humble and modest things
- ... of unconventional things

Characteristics of Wabi Sabi
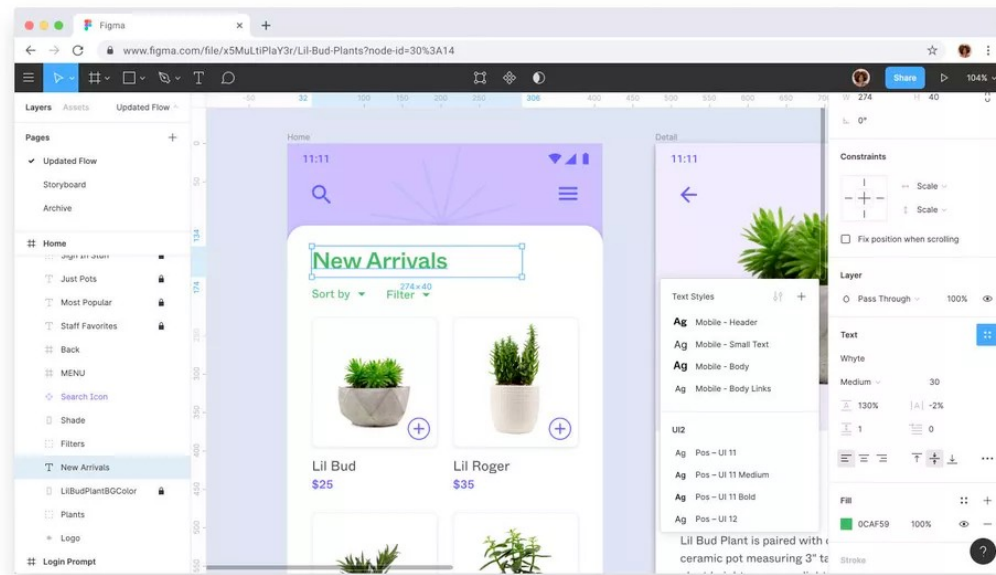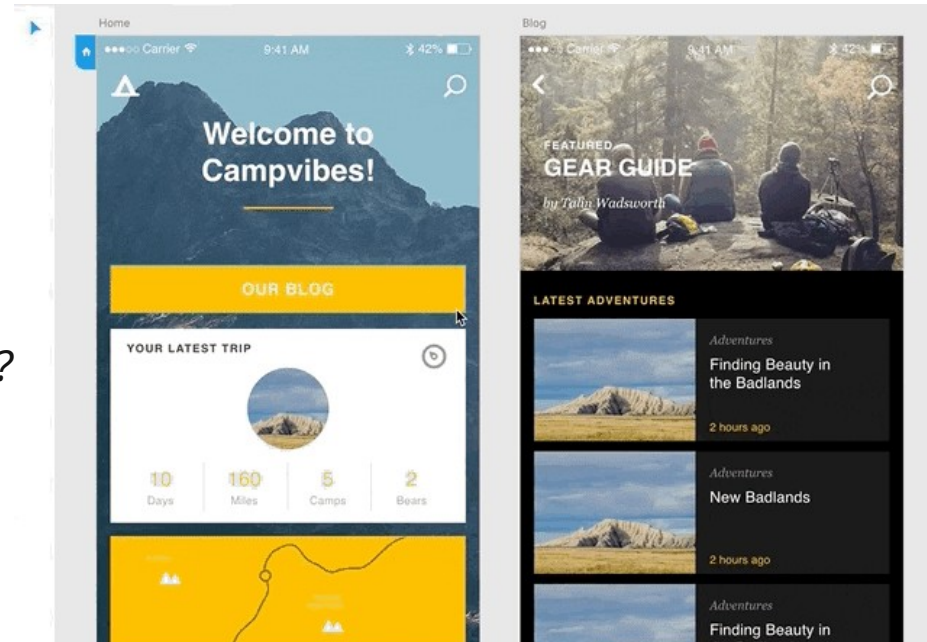
- Irregular
- Intimate
- Suggesting a natural process
- Unpretentious
- Earthly
- Simple

A short list of wireframing tools

- Adobe XD
- Balsamiq Wireframes
  - *from a former UniBo student*
- Figma
  - *Just acquired by Adobe. Will replace XD?*
- MockFlow
- Sketch
- Justinmind
- UXPin

The Surface plane

The surface plane

product as functionality | product as information
surface — Sensory Design
skeleton
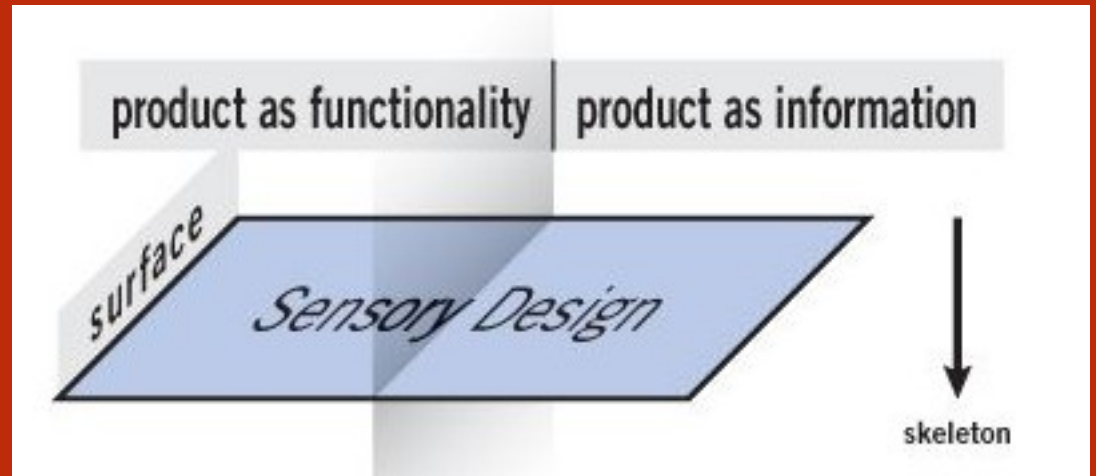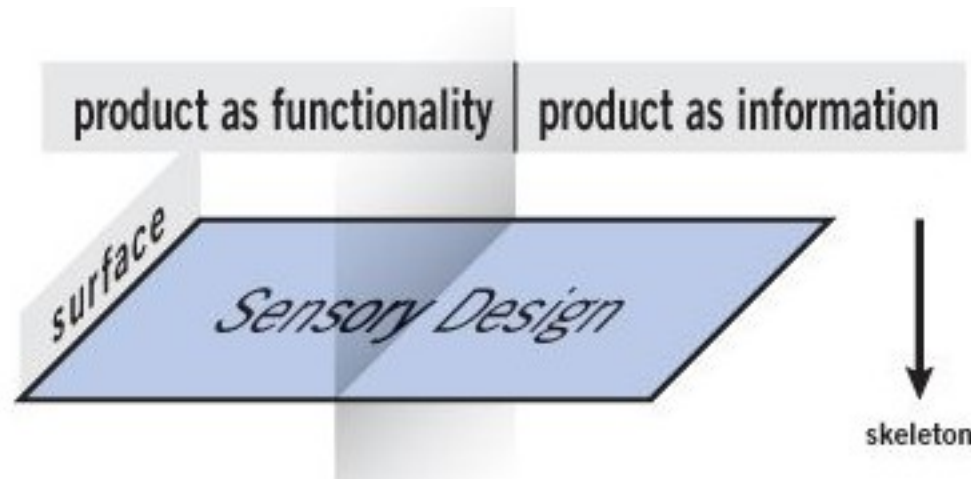
Aesthetics of perception
- Exploit the Gestalt

Contrast and uniformity
- Facilitate recognition and orientation

Internal and external Consistency
- To facilitate learning

Guidelines from O.S., company and project
- For consistency over time and across development teams

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Visual acuity

Human eyes can read or perceive actual colors only in an area about 6° around the fovea (focal centre of vision). This corresponds to about 5-6 characters.

Content, for instance, will NOT be visible if the eye of the reader is fixing more than a few centimeters away from it, unless it is moving or changing in shape (in which case ganglions are activated).

Scanning and the F shape gaze pattern

Scanning is modal: when we scan for font size we ignore colors, when we scan for images we ignore words, etc.

The eyes move from left to right, from top to bottom, in a rough F shape: The top area is scanned in most of its width, then the head goes downward ith shorter and shorter movement to the right, in a more or less clear F

Of course the opposite happens in right-to-left writing systems such as Hebrew and Arabic

– the *attentional desert*

Motivation, attention and gaze patterns

when searching information, the readers will scan the page according to the F shaped gaze pattern looking for something related to the information they are seeking:

1. headers
2. icons
3. blocks of words
4. individual words
5. individual letters

The problem is that the attention ladder requires more and more energy, and therefore motivation plays a big role here.

Readers will stop going through the attention ladder as soon as the energy required is greater than the motivation, and people will stop looking for the

Orienting response and overwhelming

Unexpected perception from the peripheral vision is activated by the ganglion, which are more frequent there.

Given the potential role it has in informing us of dangers, the correct analysis of peripheral information must be done with great priority in what is called "orienting response"

the brain is overwhelmed by signals from events that shifts our response in that very direction.

Therefore the collection and integration of notification has become an important issue in recent years in o.s..

Red meatballs are used for this integration
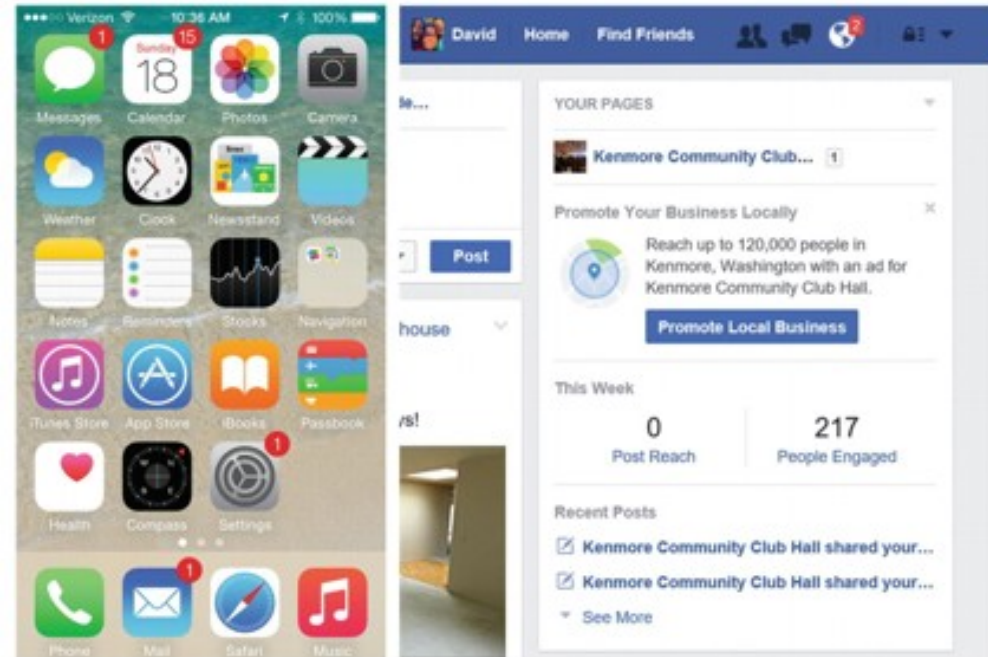
Orienting response and habituation

To be useful, notification should be unexpected, transitory and unfrequent.

Constant perception of notification notices stops the orienting response and activates a form of *habituation*, where we happily ignore perceptions that would usually trigger response.

The more we trigger an orienting response with sound, color and movement, the more the attentional bottleneck will constrict and users will ignore it.

Gestalt and avarice (before)

Grouping of objects according to size, position shape, etc, allowed by the Gestalt principles are mechanisms that our brain employs to reduce fatigue when analyzing and making sense of perception.

Download for Office 2007 - BEFORE

The brain is always looking for ways to reduce the mental effort necessary to arrive at the new decision, in a clear form of avarice of energy.
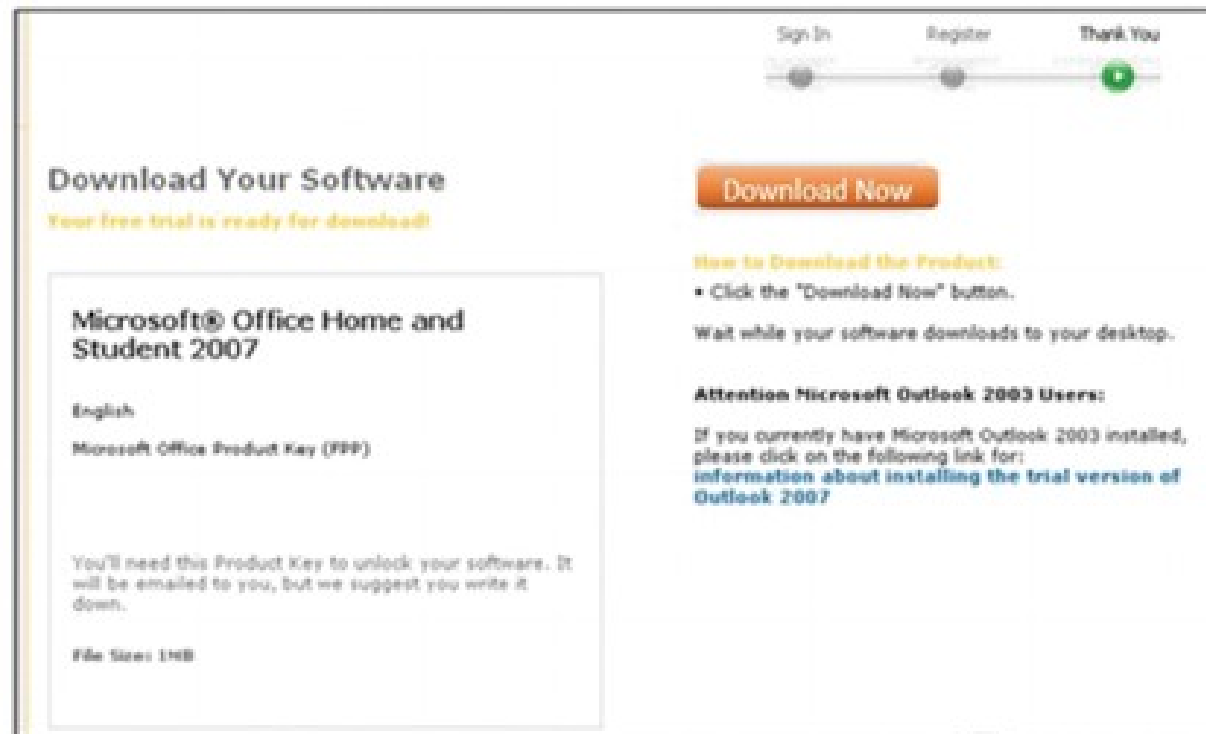
Gestalt and avarice (after)

Grouping of objects according to size, position shape, etc, allowed by the Gestalt principles are mechanisms that our brain employs to reduce fatigue when analyzing and making sense of perception.

Download for Office 2007 - AFTER

The brain is always looking for ways to reduce the mental effort necessary to arrive at the new decision, in a clear form of avarice of energy.

Sign In   Register   Thank You

Download Your Software
Your free trial is ready for download!

Download Now

How to Download the Product:
• Click the "Download Now" button.

Wait while your software downloads to your desktop.

Attention Microsoft Outlook 2003 Users:

If you currently have Microsoft Outlook 2003 installed, please click on the following link for:
information about installing the trial version of Outlook 2007

Microsoft® Office Home and Student 2007

English

Microsoft Office Product Key (FPP)

You'll need this Product Key to unlock your software. It will be emailed to you, but we suggest you write it down.

File Size: 1MB

Gestalt and avarice (2)

Without Gestalt grouping we must spend energy to scan and understand perception and even engage our conscious mind.

Older remotes

Newer remotes

(a)

For instance, rows and rows of identically looking commands are hard to scan and map to meaningful functions.

Change shape and group them appropriately and the conscious mind is not necessary anymore.

(b)

References

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