

User Experience, Web Design & CRO

Session 2

Designing a Digital Product for Web and App



Contents:

1. The Design process: Conceptual Design and Business success, Personas, User Stories: Roles and Tasks, Storyboards, Lo-Fi, Information Architecture, Interaction Design and Fi-Hi Design (Visual Design)
2. Design Systems Language (DSLs)
3. Wireframing (lo-fi), Visual Design (hi-fi) and prototyping tools
4. Mobile UX Design particularities

Session 2

Designing a Digital product for Web and App

Short readings

Session 2 – Designing a Digital Product for Web and App

Other complementary readings are reflected in each slide of the session.

PDFs and other materials are uploaded in the Campus

1. The new UX and Design Process. Ángel Sánchez. Audiense Engineering. 2017. (pdf)
2. Design Systems (DSL – Design System Language) – Brad Frost – Atomic Design-
<http://bradfrost.com/blog/post/atomic-web-design/>
3. Definition of Design Systems. Nielsen & Norman Group. <https://www.nngroup.com/videos/design-systems/>

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Human-Centred Design Process (UxD) (User Xperience Design)

Methodologies and techniques to:

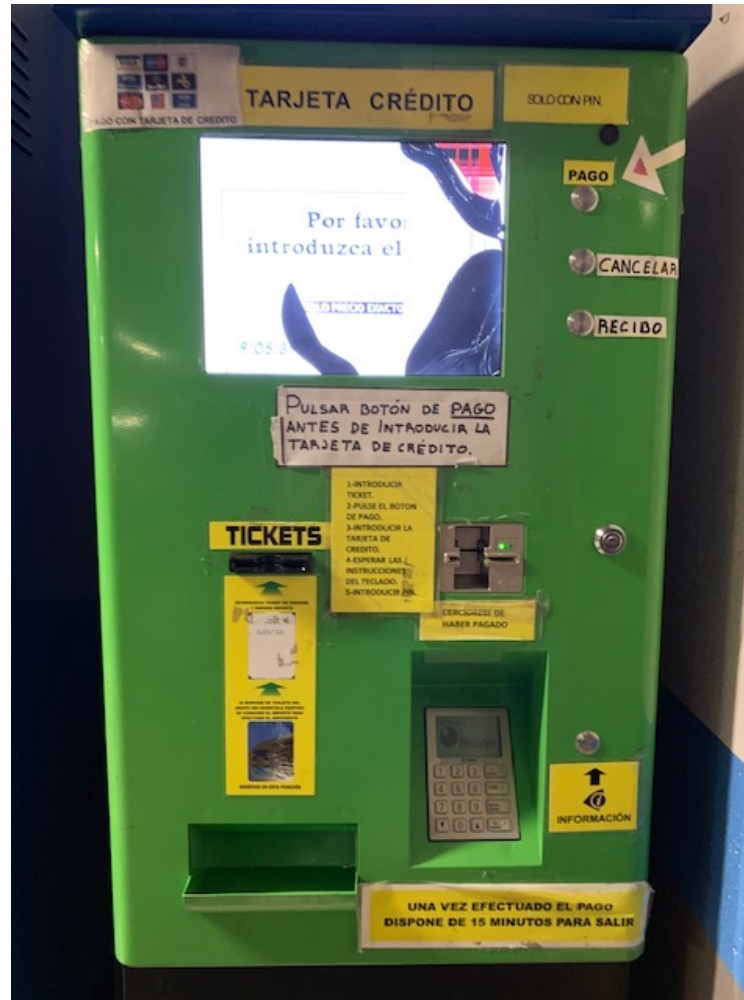
- 1- **Understand** the needs, limitations, behaviour and traits (**Mental Model**) of the digital user
- 2- Involve the user in the **designing process** for a digital product or service
- 3- **Develop** a digital product / service from concept to final deliverable

Reading: What is a Customer Mental Model: <https://econsultancy.com/blog/69021-what-is-a-customer-mental-model/>

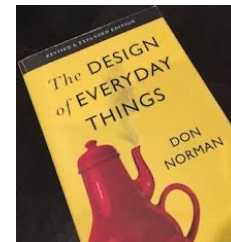
EXPERIENCE



User Mental Model



User Mental Model



Norman Doors (The Design of Everyday Things):

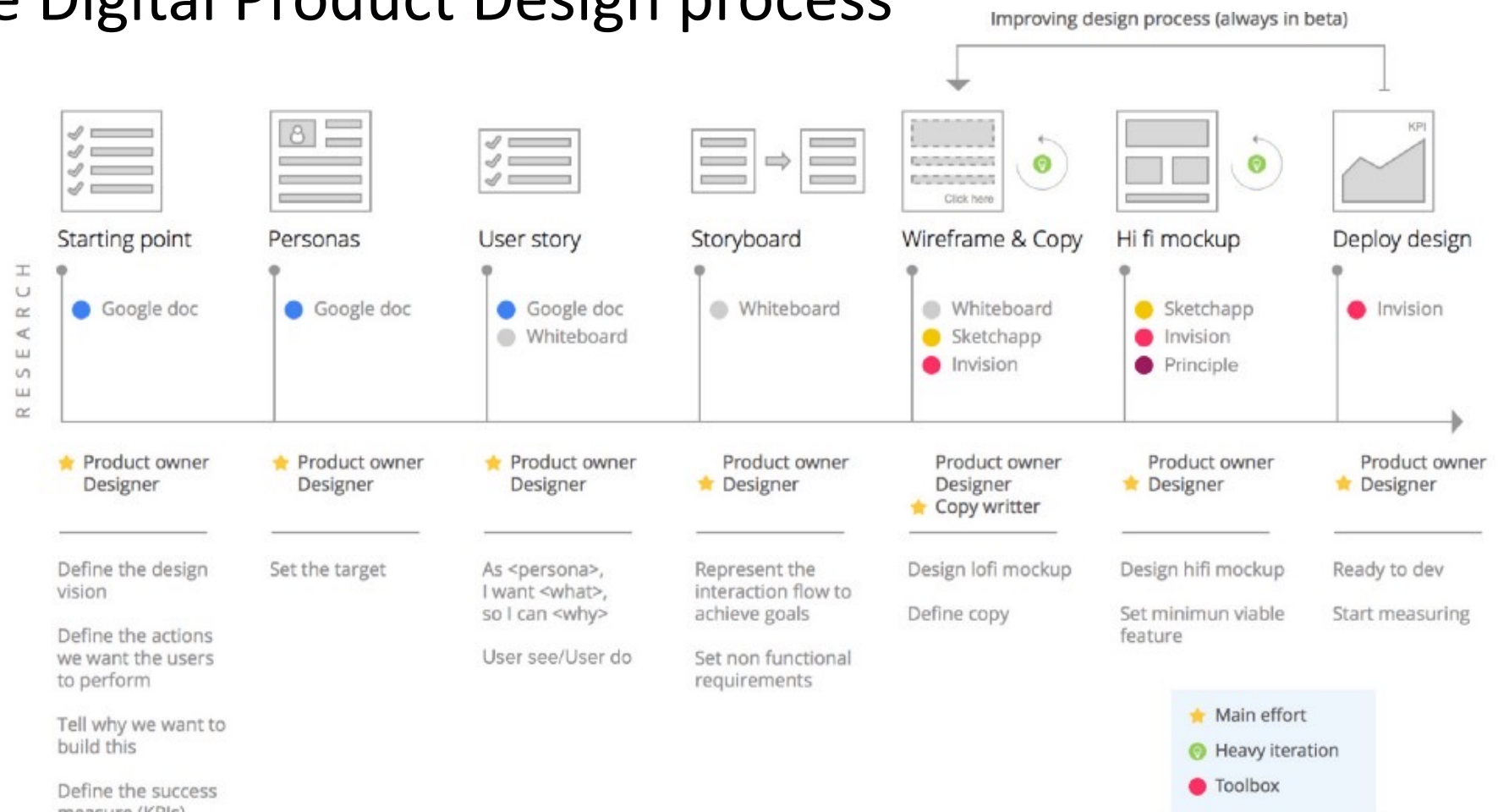
<https://99percentinvisible.org/article/norman-doors-dont-know-whether-push-pull-blame-design/>

“Focus on Results not on perfect UX”

Don Norman

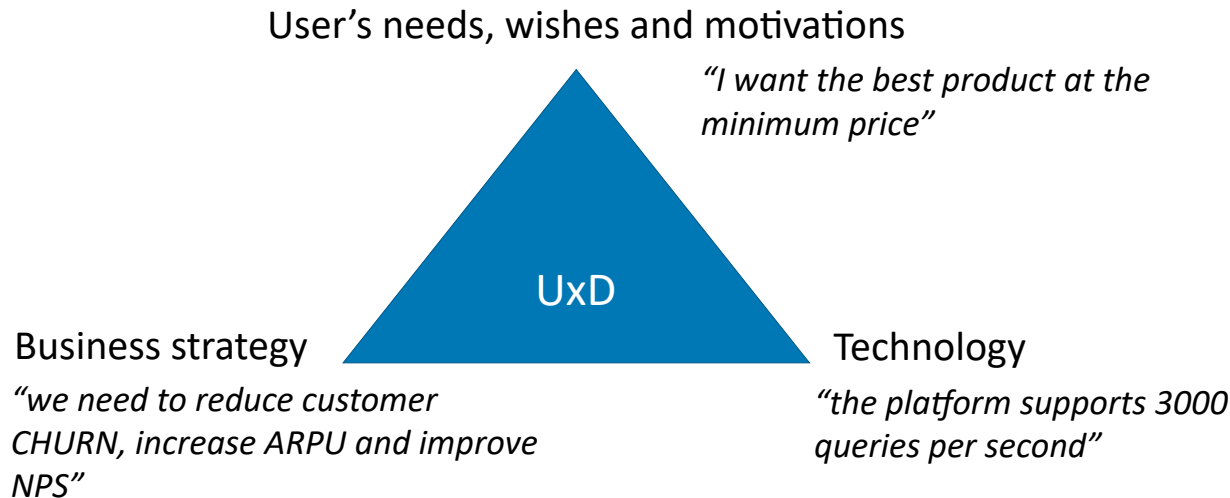
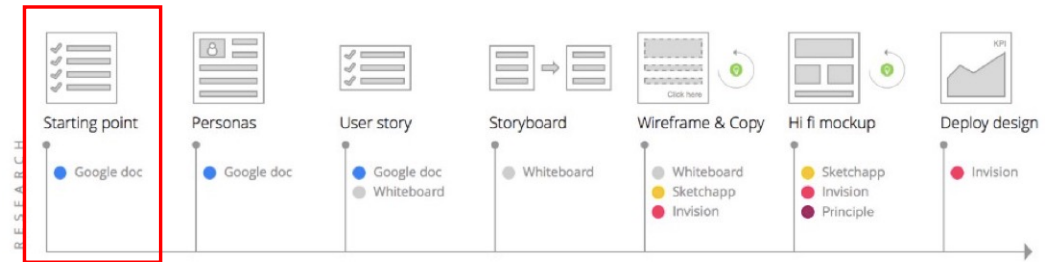
Video: <https://www.nngroup.com/videos/focus-results-not-perfect-ux-don-norman/>

The Digital Product Design process



Source: <https://engineering.audiense.com/c%C3%B3mo-montar-un-proceso-de-dise%C3%B1o-de-producto-del-requerimiento-al-c%C3%B3digo-853082de1d03>

1. Starting Point: Conceptual Design and Business success metrics



Metrics to measure Business success:

1. "Acquisition": + customers & Sales
2. "Growth": Cross-selling & Loyalty
3. "Cost to Serve": Service and self-care

Invision Design Principles: <http://blog.invisionapp.com/determine-design-principles/>
Conceptual Design Principles in Big Brands: <http://www.designprinciplesftw.com/>

2. Customer Personas

- Customer fiction
- Traits are based on demographic studies, customer segment data and market research
- Goal is to focus effort on real user needs, wishes and motivations, during the Digital product building process



- Very useful to communicate the conceptual Design principles to other stakeholders in the organization

Segment Personas

Online Organisers

“We'll add it to our to-do list!”

We're likely to work, but running a happy and efficient household is our main priority. We are busy and juggle a number of different roles – we like to be productive.

What excites us

Scheduling and ticking everything off **our lists**, discovering **something new** like websites that are **useful, interesting and fun** (like **walk.com**), or new things **our mobiles** can do (like **posting photos on Facebook**).

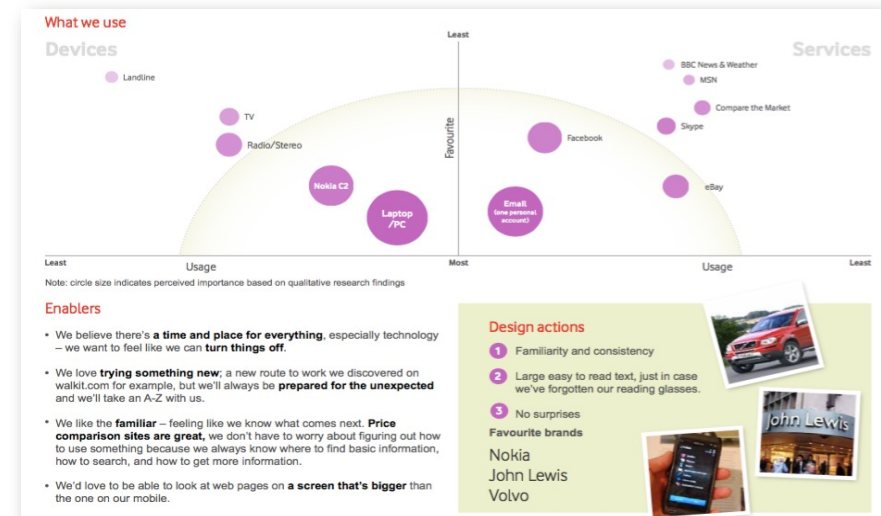
Our differentiators

- 1 We like **being organised**, knowing what's coming next and planning for every eventuality.
- 2 We've just discovered the Internet and how fantastic it is to be able to **choose how and when you connect with people**.
- 3 With **our family growing older** and leaving home soon, we want to make sure our home is somewhere they'll enjoy coming back to.

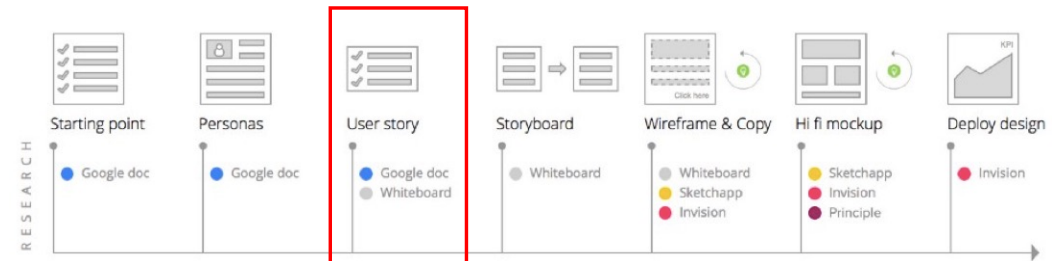
“We want to be in control and organised to make sure we stay on top of things.”

How we feel about technology

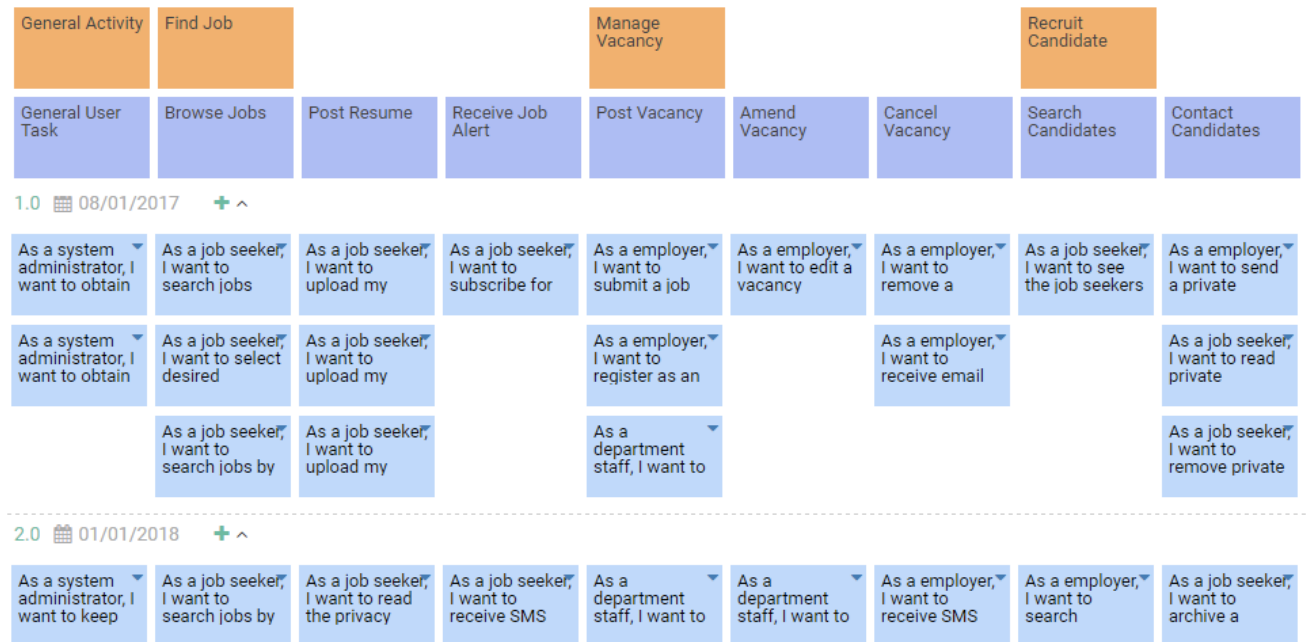
freedom
in control
no
windows to the world
computer
internet
anything
in my own time
work
friends
helping
second opinion
everything
access
flexibility
information



3. User Story: Roles and Tasks



Example: HR recruiting User Stories



User Story mapping:

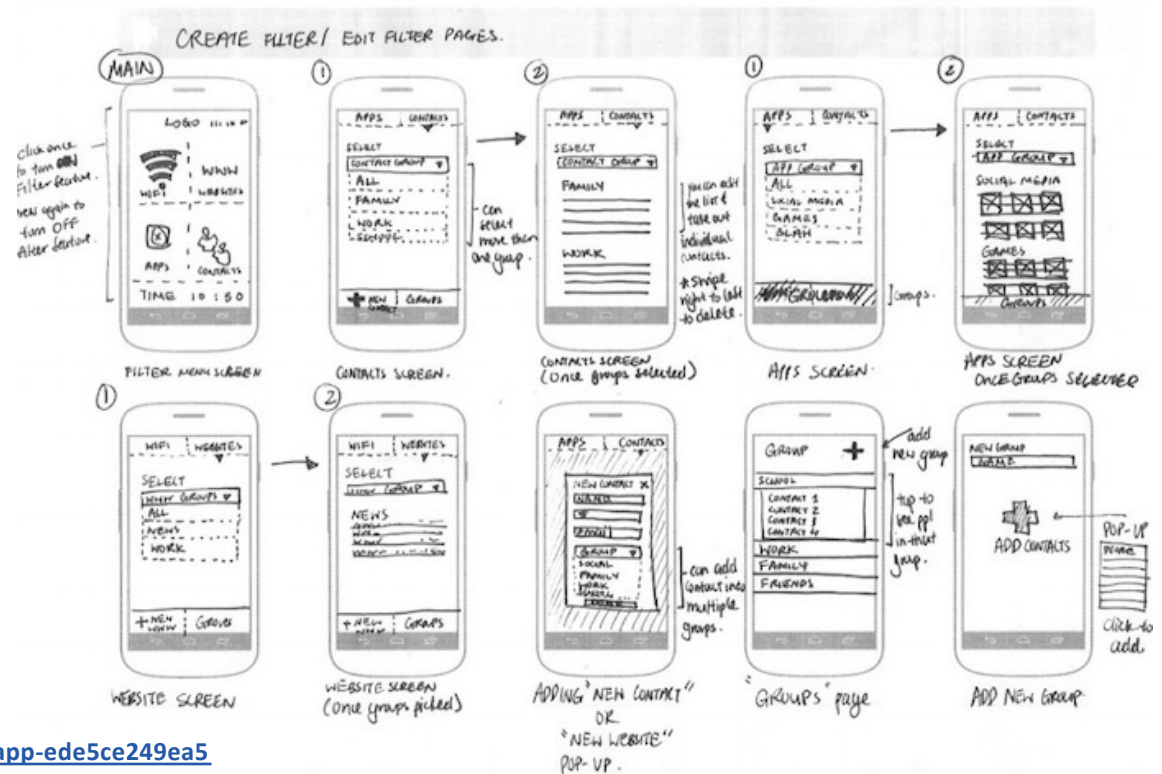
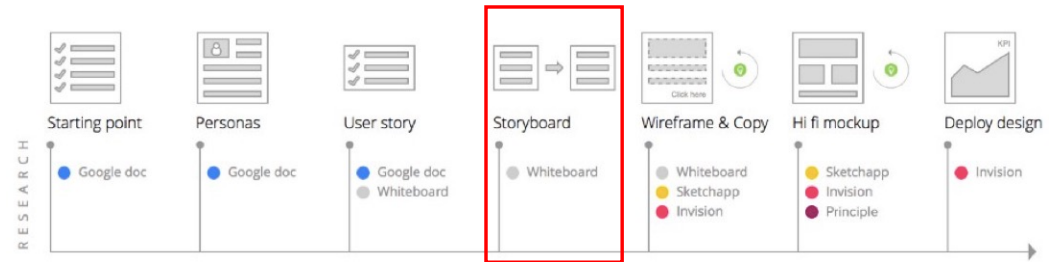
<https://www.nngroup.com/articles/user-story-mapping/>

User Stories:

<https://www.visual-paradigm.com/guide/agile-software-development/what-is-user-story/>

4. Storyboards

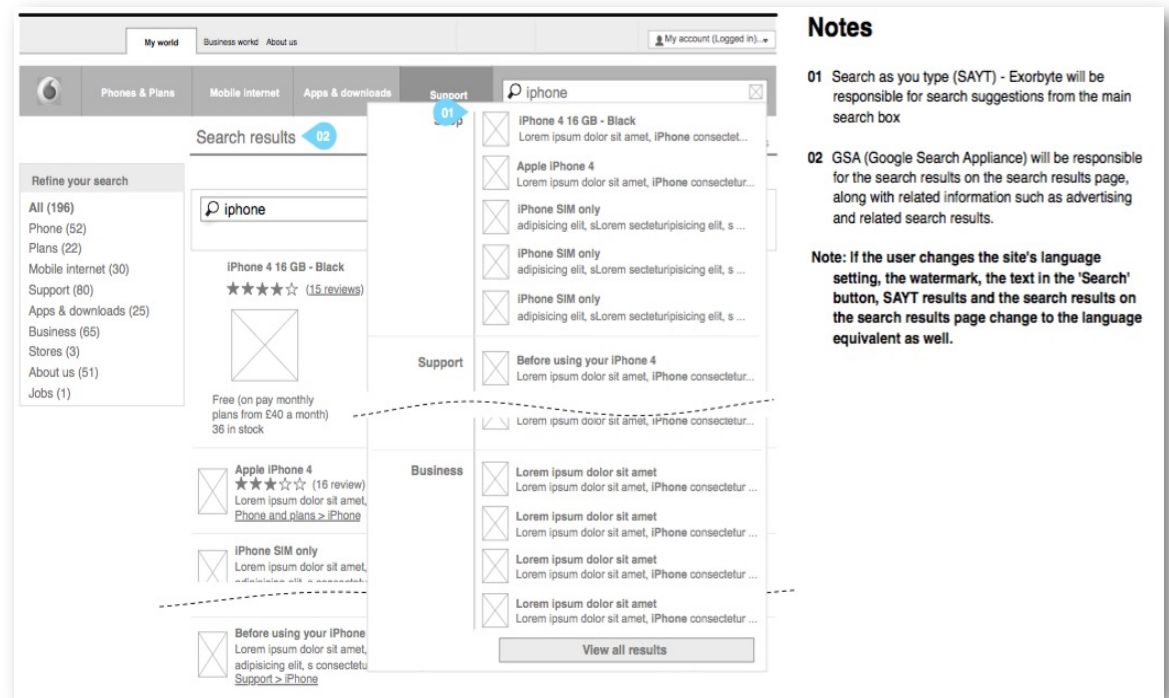
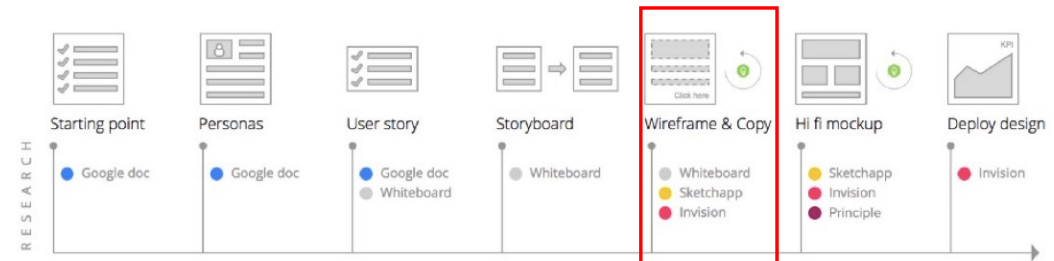
- **Goal: to scope the size of the customer flow** in the Digital Product
- **To estimate the development effort**
- To eliminate Customer Friction through streamlined processes
- Focus: the Customer flow not the detail of each step or screen



Story Boards: <https://medium.com/@jjman505/how-to-storyboard-an-app-e5ce249ea5>

5. Lo-Fi (Low Fidelity) Design: Wireframes and Copy

- Wireframes allow to **communicate and socialize the design** to different team members: visual designers, product managers, developers, etc...
- Wireframes are a summary of all decisions made on **Information Architecture, Interaction Design**, content prioritization, etc...
- Wireframes usually include annotations explaining the behaviour of the different design components (interaction)
- **Solving errors in Wireframes is x100 times cheaper than in development phases (*)**
- Typical Wireframing tools are: Axure, Balsamiq, Sketch, etc...



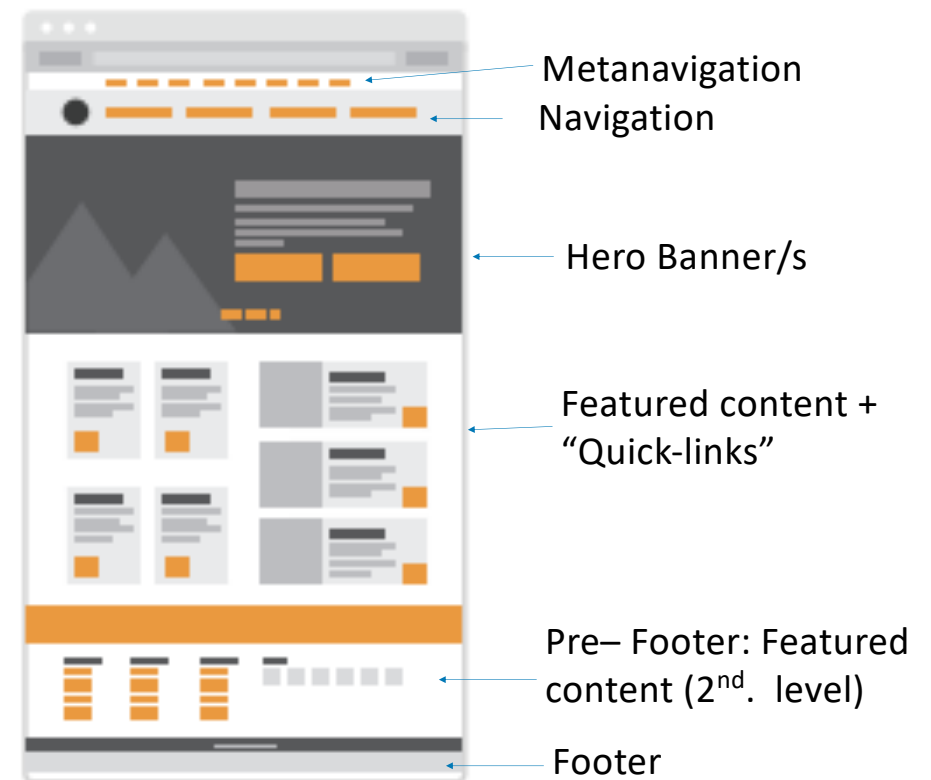
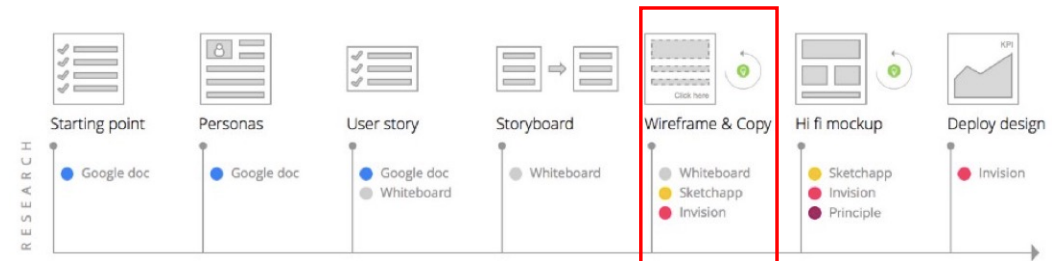
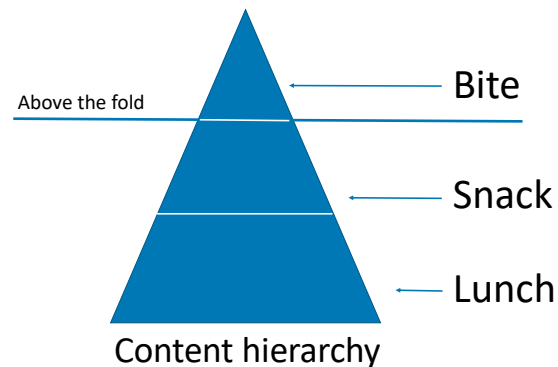
(*) Fte.: IEEE – Institute of Electrical and Electronics Engineers (Susan Weinschenk)

Ejemplo: Wireframe Web

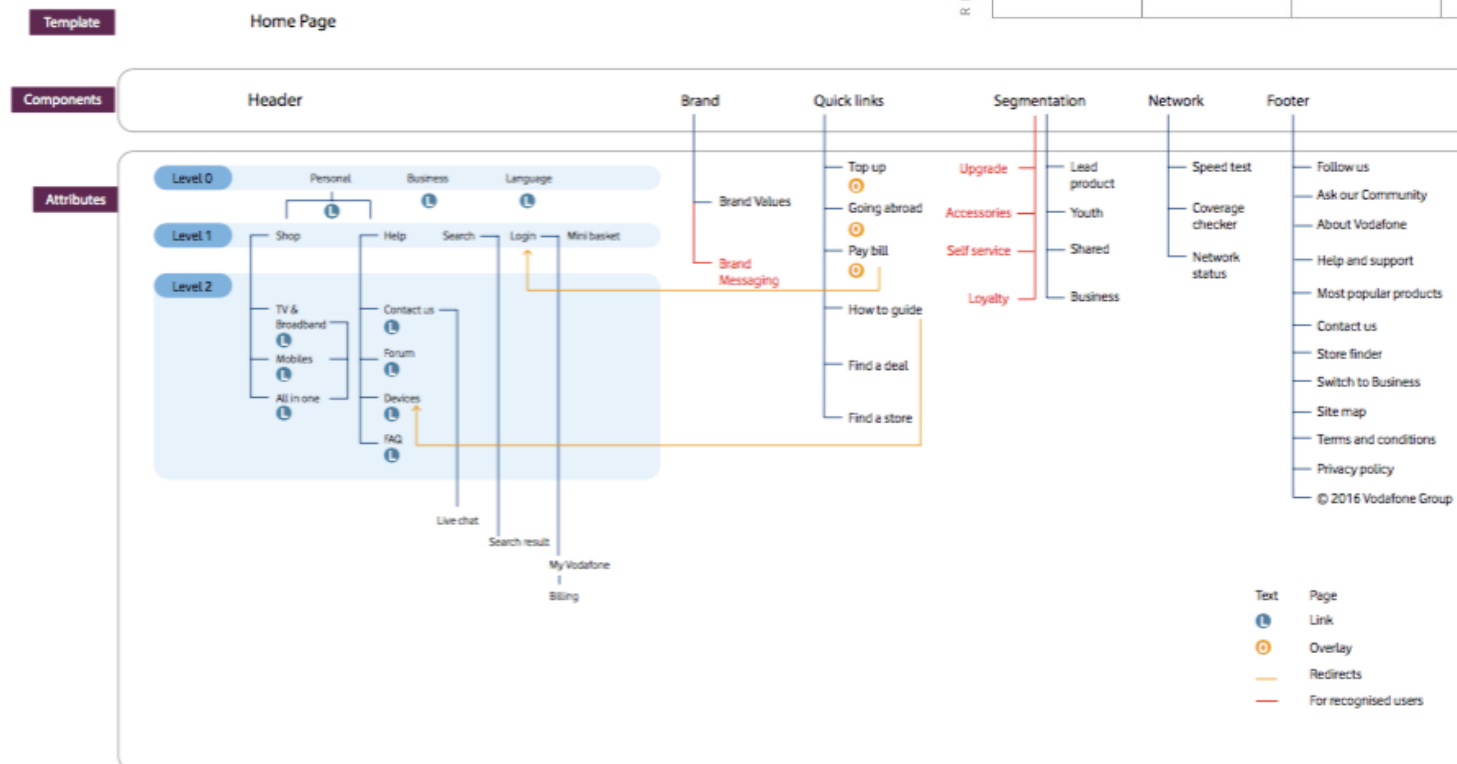
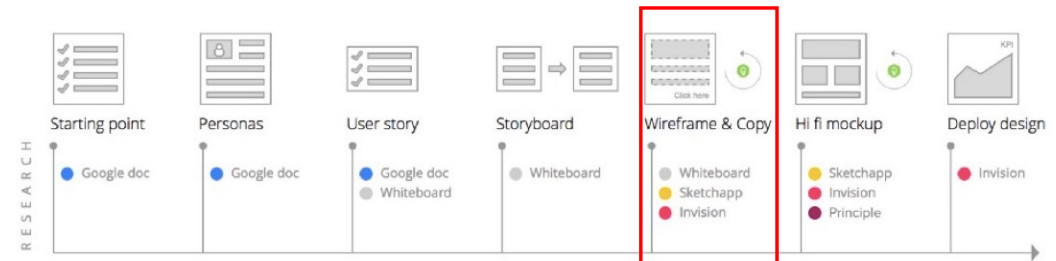
5. Lo-Fi (Low Fidelity) Design: Information Architecture

What is it included in the Information Architecture?

- Prioritized content elements, grouped by taxonomies
- Template structure per type of page
- Internal Navigation and orientation system
- Searchability elements (menus, footer, search engine, etc...)
- CTAs (Call to Actions)
- Copies (Texts)

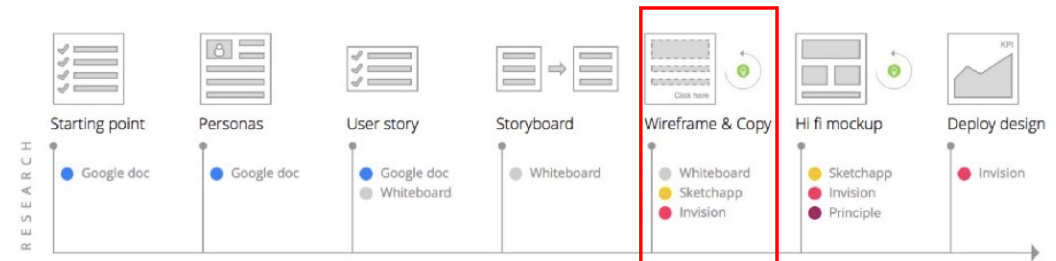


5. Lo-Fi (Low Fidelity) Design: Information Architecture



Typical View of Information Architecture and navigation – Source: Vodafone

5. Lo-Fi (Low Fidelity) Design: Information Architecture



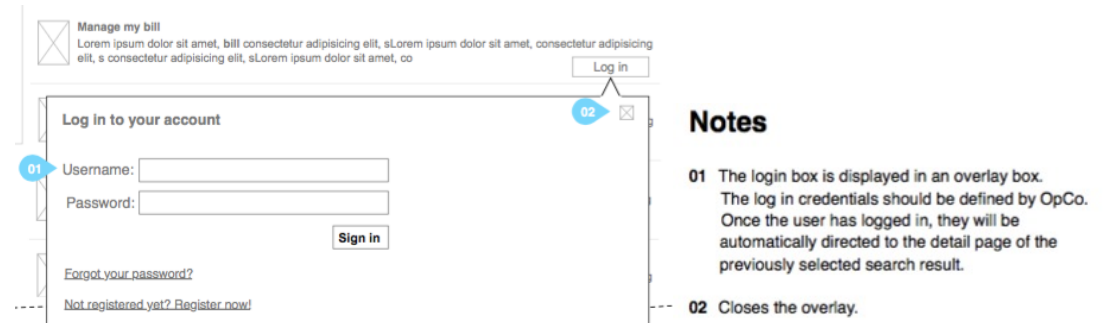
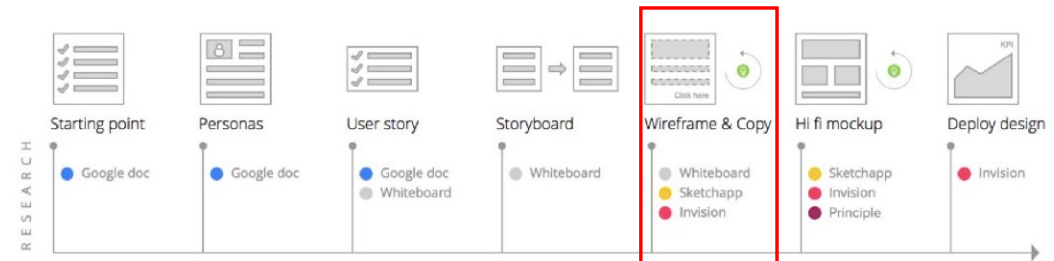
1st level	2nd level	3rd level	4th level	5th level	6th level	Visits average / month
Home						1.812.916
	Shop					7.059
		Mobile products				33.823
			Handsets			33.823
				Apple Iphone	Iphone 11	175.987
				Samsung	Samsung Galaxy S10+	24.860
				Xiaomi		16.336
				Huawei		1.944
				Nokia		1.560
				Other Brands		1
			Smart watches			24.305

Information Architecture View with traffic information to identify popular contents

5. Lo-Fi (Low Fidelity) Design: Interaction Design (IxD)

How we create the Interaction Design?

- Build a sequence of use matching the **user mental model** and his expectations
- Making decisions on what are the priority of functionalities (which are the most important ones)
- Reusing continually the **most common and popular Interaction Design standards**
- At this point the design is typically reflected in **wireframes** or low fidelity screens lay-outs and in some occasions using browsable prototypes
- The wireframes include the description of user-product interactions and the expected response from the interface
- Interactive prototypes can be tested with real users before building the final product



Jakob's Law of the Web User Experience:

*Users spend most of their time on **other** sites.* This means that users prefer your site to work the same way as all the other sites they already know. Design for patterns for which users are accustomed.

Thus, anything that is a convention and used on the majority of other sites will be burned into the users' brains and **you can only deviate from it on pain of major usability problems.**

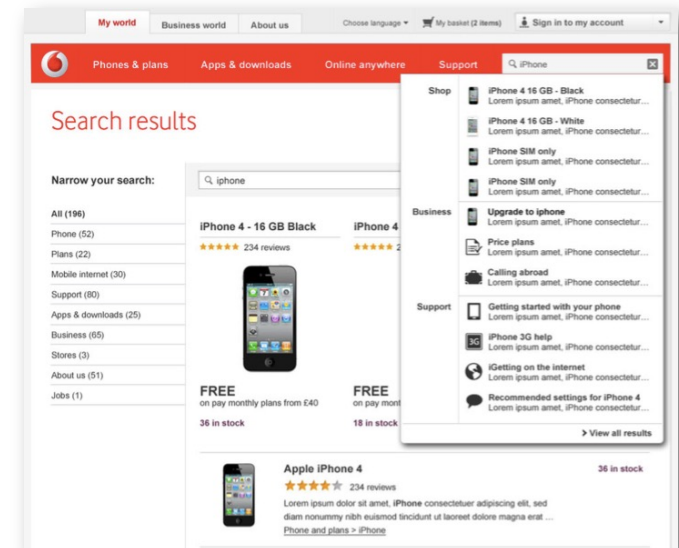
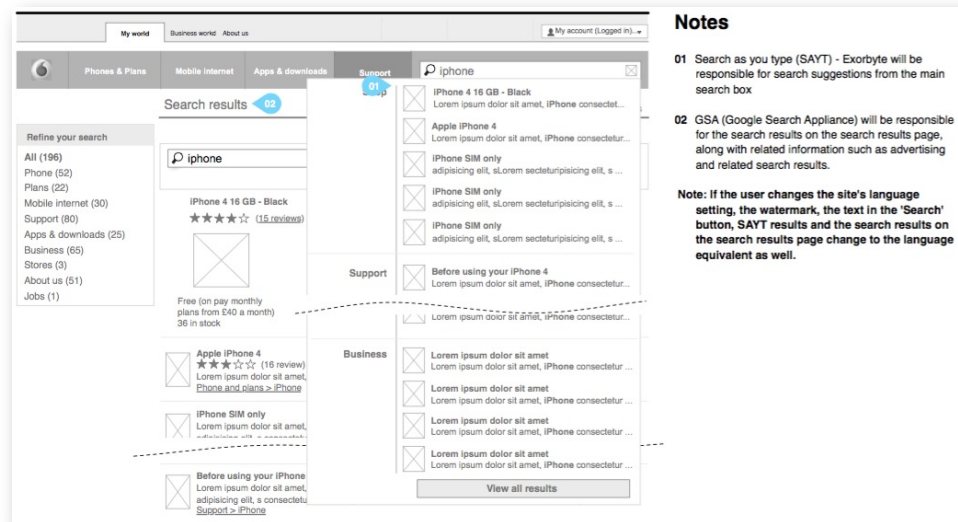
Video: <https://www.nngroup.com/videos/jakobs-law-internet-ux/>

6. Hi-Fi (High Fidelity) Design: Visual Design

- Application of the visual keys to the wireframes to create a high fidelity visual representation of the user interface design.
- Typically is the application of a Brand guidelines or Digital guidelines to the wireframes making decisions on colour, type-fonts, type-size, textures, images, forms, buttons, links and others visual shapes...



- Typical tools are (for validations) Sketch, Figma, Invision, Xperience Design, etc...

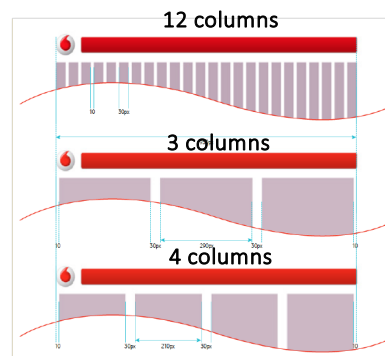


7. Deploy design: Visual Design Toolset (I)



The grid

Is the grid or template where all components have to fit. It helps to maintain symmetry, coherence and design integrity



Colour palette

Describes the approved set of colors and tones and how they are applied in the different visual components



Imaginery

Set of approved images aligned to the Brand values and tone

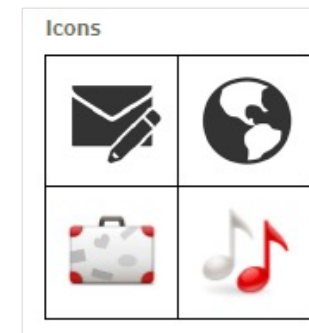
You need to have the right to use those images in your Digital product



Iconography

Set of approved icons aligned to the Brand values and tone

Gives consistency in the use of those icons in other touchpoints such as newsletters, emailings, magazines, etc...



7. Deploy design: Visual Design Toolset (I)

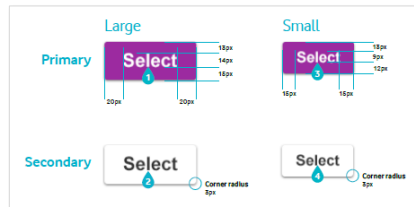
Font type

Set of approved fonts and sizes and how, where and when they have to be used (bold, italic, etc...) in the different areas of the Digital product

H1 Vodafone Rg 45pt 50px leading/ -10 Tracking colour:#660000	
H2 Vodafone Rg Bold 26pt 30px leading/ 0 Tracking colour:#333333	H2 Vodafone Lt 26pt 30px leading/ 0 Tracking colour:#333333
H3 Arial Bold 20pt 24px leading/ 0 Tracking colour:#333333	
H4 Arial Bold 16pt 20px leading/ 0 Tracking colour:#333333	
H5 Arial Bold 14pt 18px leading/ 0 Tracking colour:#333333	
Body Arial Regular 14pt 18px leading/ 0 Tracking colour:#333333	
Utility Arial Regular 12pt 18px leading/ 0 Tracking colour:#333333	

Buttons and text links

Set of approved buttons and text links to create primary and secondary CTA (Call to Actions)



Descúbrelo >



Forms

It describes the “look&feel” of the forms, including specifications of user feedback and entry masks



Other elements

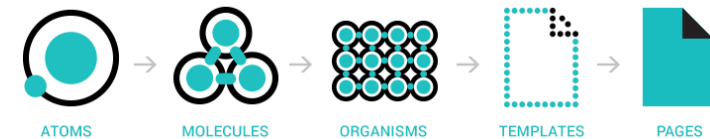
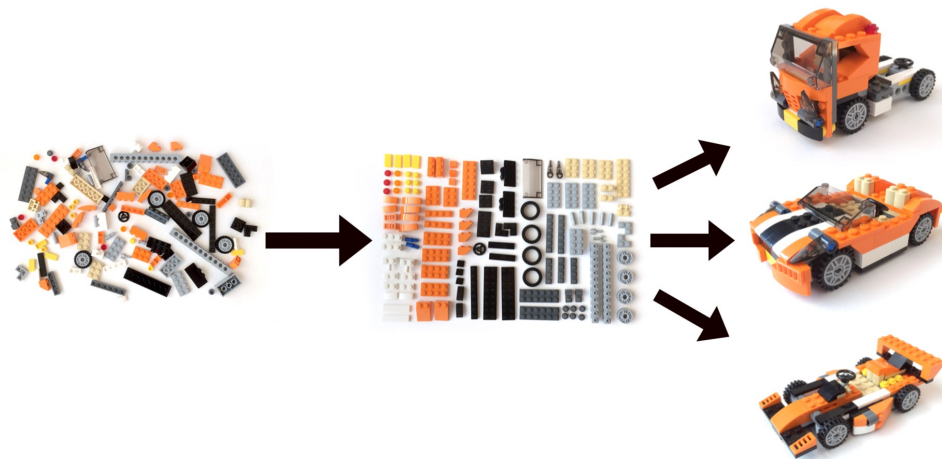
Menus, navigation tools, paragraph division lines, drop-down lists and other elements with a pre-defined visual design



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4. Mobile UX Design particularities

7. Deploy design: Design Systems DSL – Design System Language



BENEFITS:

- Common Language
- Consistency: process and end result=experience
- Speed: Time to market
- Cross-pollination of design innovation

DSL – Design System Language – Brad Frost – Atomic Design - <http://bradfrost.com/blog/post/atomic-web-design/>

Video Atomic Design: <https://www.youtube.com/watch?v=q5CB1zaONfA>

Definition of Design Systems. Nielsen & Norman: <https://www.nngroup.com/videos/design-systems/>

10 Best Design Systems: <https://designerup.co/blog/10-best-design-systems-and-how-to-learn-and-steal-from-them/>

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3. Wireframing (lo-fi), Visual Design (hi-fi) and prototyping tools exploration

- Balsamiq (Basic Wireframing) → <https://balsamiq.cloud/>
- Axure (Advanced Wireframing and prototyping) → <https://www.axure.com/>
- Invision (Visual prototyping) → <https://www.invisionapp.com/>
- Sketch (Advanced visual wireframing) → <https://www.sketchapp.com/>
- Figma → <https://www.figma.com/>
- Just in Mind (Free basic tool for web and App) → <https://www.justinmind.com/>
- Marvelapp (Visual App prototyping) → <https://marvelapp.com/>
- Zeplin (Visual requirements communication from Designers to Developers) → <https://zeplin.io/>

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Mobile UX Design particularities

The same process can be used to build PC and App Digital products
But in App and mobile Designer there are x3 key principles:

1. Provide the user with value based on CONTEXT try to use mobile technologies to deliver that value: geolocalization, NFC, iBeacons, etc...
2. Design for ultra-short attention moments (i.e. Design very short forms for data input)
3. Beware of response times – 57% of users abandon a mobile process after 3 seconds



Overall Design principles

- Clear page goals: Identify the clear goal of the page. More than one goal creates more complexity and risk of negative user experience. The first visual impact must show a clear value proposition.
- Hierarchy of messages: clear Information Architecture, prioritized based on size, contrast, colour, proximity, alignment and repetition
- Scalability: the Design solution has to be scalable, if we add more products to the site or app the design may work seamlessly
- Coherence: in the way we use resources and visual keys (buttons, links, text, icons, images, etc...), reducing friction
- Simplicity: by removing visual noise, superfluous text, shades, 3d volumes, etc...
- Communicate the competitive and differential value: not only descriptive messages... from “save 100€” to “have a memorable dinner with our partner”
- Navigation paths (fluidity): Clear CTAs (Call to Action), both primary and secondary CTAs. Give clear orientation to the user on where he is and where he is going (for instance “step 1 of 5” in a registration process)
- Be direct: clear and direct messages aligned with the page goals (avoid excess of information)
- Try to anticipate to the user behaviour: this is related to personalization. Understanding the user context and goals allows to prioritize actions. Based on “Customer life-cycle” or “Customer Journey”, for instance a customer with an open incident will not be willing to accept an up-sell offer so don’t prioritize those CTAs versus solving / informing about the incidence, or give the user information on form-fields validation before sending the form info to the server.
- Provide confidence to the users: in key moments of the truth (providing personal info, payment info, providing confirmation in every step of the registration or purchase process, sending a confirmation email or Text once the orders have been received, etc...ca

Key Takeaways from Session 2

1. The Design Process is a systematic way to design a Digital product ensuring we don't miss the customer needs during the process. Main steps are:
 - Conceptual Design and Business goals
 - Customer Personas
 - User stories: roles and tasks
 - Storyboards
 - Lo-Fi (Low Fidelity) Design: Information Architecture and Interaction Design (IxD)
 - Hi-Fi Design (High Fidelity) Visual Design
 - Deploy Design: visual design Toolsets and Design Systems (DSL: Design System Language)
2. Design Systems: provides common language, consistency and reusability to Design
3. Keys for Design for mobile: User context is key, reduced attention Span and very low Response times are very important while designing for mobile “moments”