

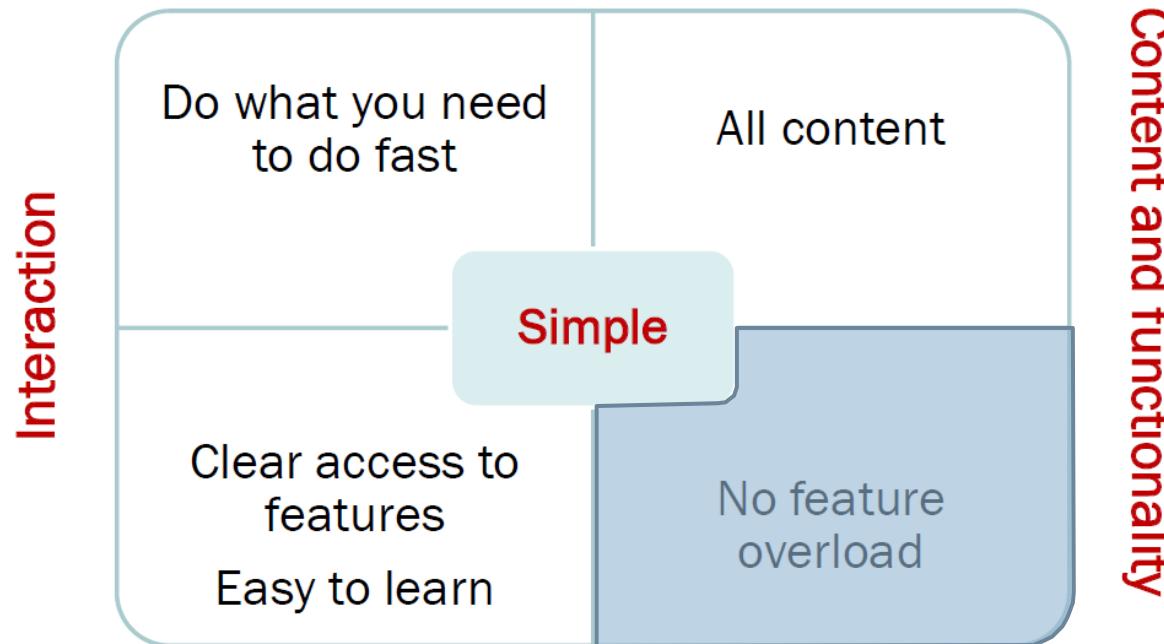
6MMCS001W MOBILE USER EXPERIENCE

What makes good MobUX



2/56

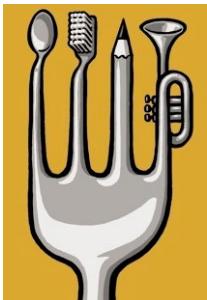
- Allow the users to quickly complete their tasks and achieve their goals



Key to success – step 1 – purpose

3/56

- Have a clear idea about the purpose of the app
 - Describe the app purpose in one sentence
- Simple is powerful
 - Over engineering and over complicating an app is called “**feature creep**”
 - 95% of users do not care for 80% of the options, menus and settings available in an average software package
- Touchscreen devices require economical design
- Every feature you add reduces the ease-of-use of the app
- Reduce the number of features in your app until the **single purpose is obvious**



What is the purpose of this app?

4/56

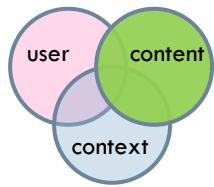


What is the purpose of this app?

5/56

The image shows the mobile application interface for easyJet. At the top, there is a promotional banner for a "SALE" ending at midnight on Thursday, 6th October. Below the banner, there are tabs for "Flights", "Hotels", "Cars", and "Holidays", with "Flights" being the active tab. Under the "Flights" tab, there is a checkbox for "One way". The search fields include "From: London Gatwick (LGW)" and "To: e.g. Paris". Below these are fields for "Departing..." and "Returning...". Under passenger selection, it shows "Adults (16+)" set to 1, "Children (2-15)" set to 0, and "Infants (< 2)" set to 0. At the bottom of the search form are buttons for "Show flights >" and "Special assistance >". At the very bottom, there are two small travel deals: one from Belfast Intl to Luxembourg starting at £22.49 (Jan 2017) and another from London Gatwick to Luxembourg starting at £28.49 (Oct 2016).



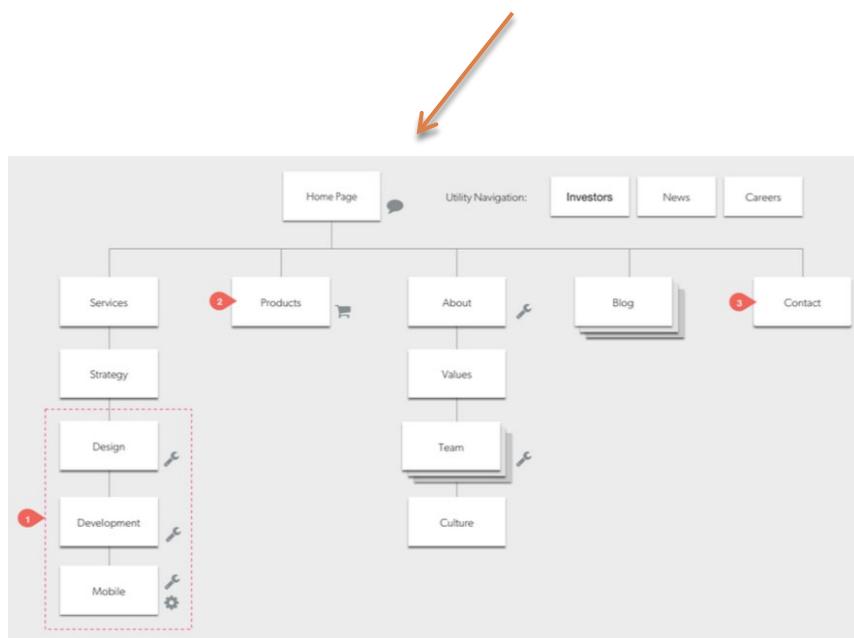


Key to success – step 2 – content

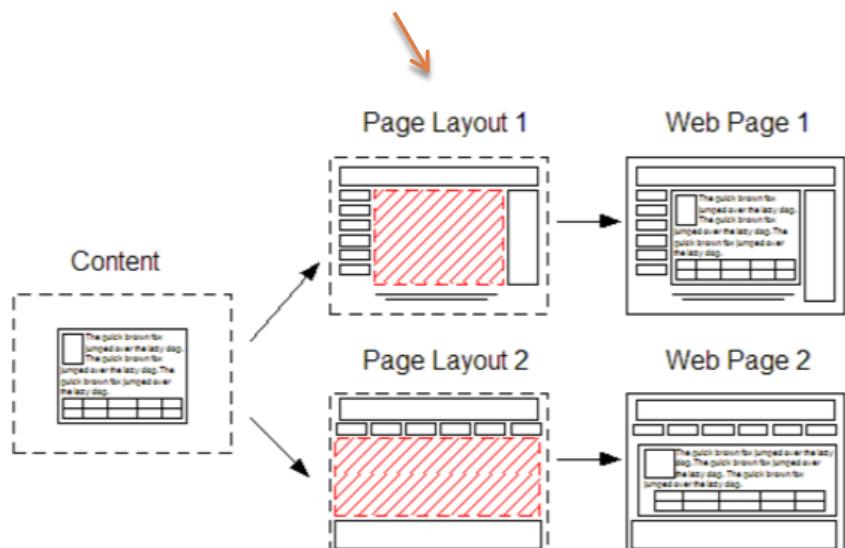
6/56

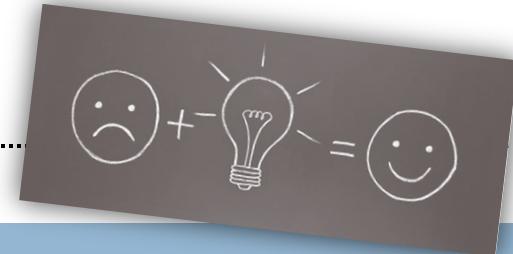
- Understand the data you are dealing with
- Cluster content
- Organise the content

Site structure and organisation



Front-end to provide access to content at page level & site level





The elements of UX

□ <http://www.jjg.net/elements/pdf/elements.pdf>



Web as software interface

Visual Design: graphic treatment of interface elements (the "look" in "look-and-feel")

Interface Design: as in traditional HCI: design of interface elements to facilitate user interaction with functionality

Information Design: in the Tuftean sense: designing the presentation of information to facilitate understanding

Interaction Design: development of application flows to facilitate user tasks, defining how the user interacts with site functionality

Functional Specifications: "feature set": detailed descriptions of functionality the site must include in order to meet user needs

User Needs: externally derived goals for the site; identified through user research, ethno/techno/psychographics, etc.

Site Objectives: business, creative, or other internally derived goals for the site

task-oriented

Concrete

Completion

Web as hypertext system

Visual Design: visual treatment of text, graphic page elements and navigational components

Navigation Design: design of interface elements to facilitate the user's movement through the information architecture

Information Design: in the Tuftean sense: designing the presentation of information to facilitate understanding

Information Architecture: structural design of the information space to facilitate intuitive access to content

Content Requirements: definition of content elements required in the site in order to meet user needs

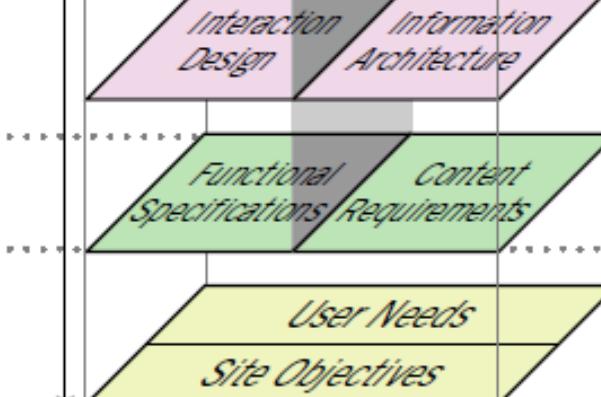
User Needs: externally derived goals for the site; identified through user research, ethno/techno/psychographics, etc.

Site Objectives: business, creative, or other internally derived goals for the site

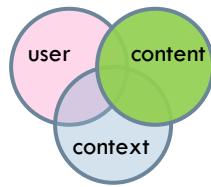
information-oriented

Abstract

Conception



User Experience vs Information Architecture



8/56

USER EXPERIENCE (UX)

The way people feel about using a product, system or service. This includes a person's perceptions of practical aspects such as utility, ease of use and efficiency of the system.

EMOTION

VS

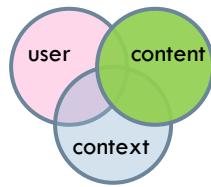
INFORMATION ARCHITECTURE (IA)

The art and science of organizing, structuring, and labelling content in an effective and sustainable way

STRUCTURE



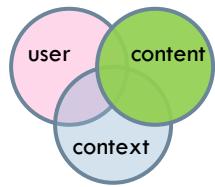
Information Architecture



9/56

What is it about?

- It focuses on the **organization and structure** of content in a manner in which a user can **navigate** through it.
- The goal is to help users **find** information and complete tasks.
- To do this, you need to understand **how the pieces fit together** to create the larger picture, how items relate to each other within the system.
- The purpose of your IA is to help users understand where they are, what they've found, what's around, and what to expect.



Information Architecture

10/56

What is it about?

by sorting out things like this:



CLASSIFICATION
and HIERARCHY



LABELS and
TAGGING



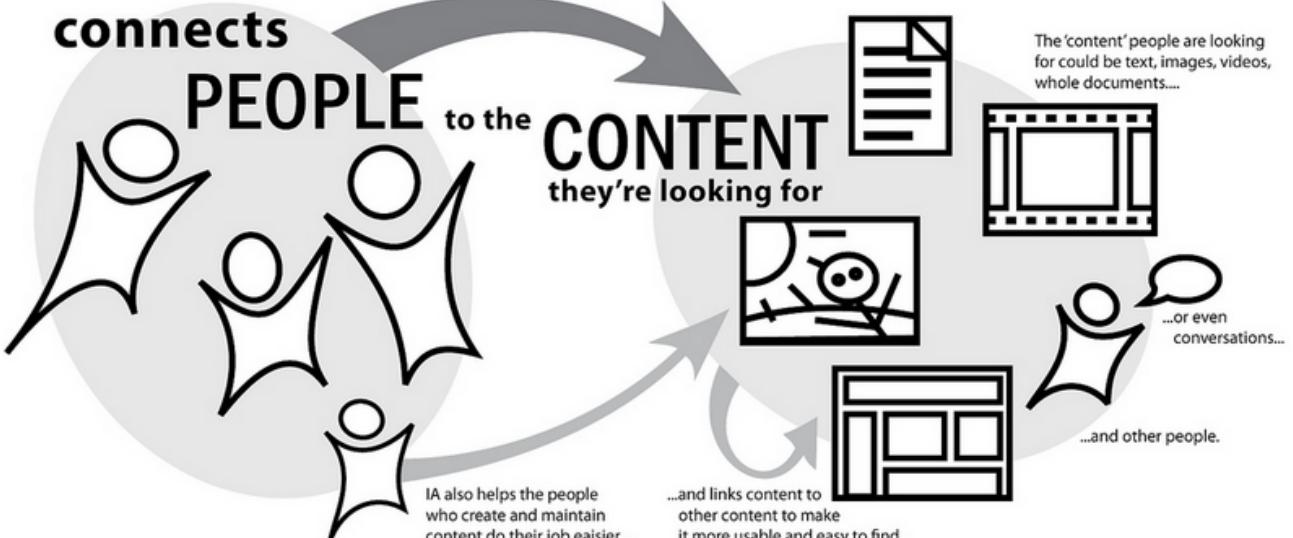
NAVIGATION and
WAYFINDING



SEARCH

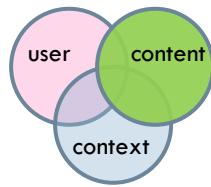
INFORMATION ARCHITECTURE

(IA for short)



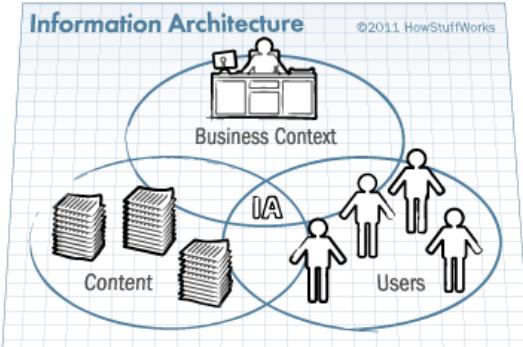


Information Architecture



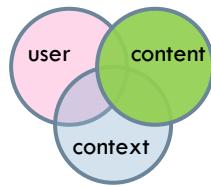
11/56

How to create systems of information



This Venn diagram demonstrates the three conceptual circles of information architecture. By Morville and Rosenfeld, 2006, *Information Architecture for the World Wide Web: Designing Large-Scale Web Sites*, 3rd Edition, O'Reilly.

- You need to understand the interdependent nature of users, content, and context. Each circle refers to:
 - **Context:** business goals, funding, politics, culture, technology, resources, constraints
 - **Content:** content objectives, document and data types, volume, existing structure, governance and ownership
 - **Users:** audience, tasks, needs, information-seeking behaviour, experience



Information Architecture

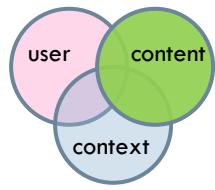
12/56

What do you
need to know?

- To be successful, you need a diverse understanding of industry standards for creating, storing, accessing and presenting information.
- According to P. Morville and L. Rosenfeld, 2006, *Information Architecture for the World Wide Web: Designing Large-Scale Web Sites*, 3rd Edition, O'Reilly, the main components of IA are:
 - **Organization Schemes and Structures:** How you categorize and structure information
 - **Labelling Systems:** How you represent information
 - **Navigation Systems:** How users browse or move through information
 - **Search Systems:** How users look for information



Information Architecture



13/56

Schemes & Structures:

Alphabetic

Geographical

Format

Organizational

Tasks

Audience

Subject/Topic

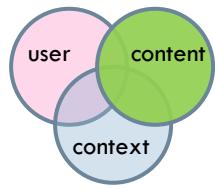
- **Alphabetic schemes** can be used for **any type of information** as long as you can give an item a name, you can include it in an A-Z scheme.
- Alphabetic schemes work best when people know **what they're looking for** and the item labelling matches the words that they're looking for.

The screenshot shows the BBC's 'Explore the BBC' page. At the top, there are links for 'BBC Home', 'Accessibility help', 'Search', and 'Explore the BBC'. Below that is a 'Text Only' link. The main heading is 'Explore the BBC' in a large, light blue font. Underneath it is a section titled 'Full A-Z' with a dropdown menu 'Show me links from:' and a 'Go' button. Below this is a grid of letters from A to Z, with 'D' highlighted in yellow. To the right of the grid, there's a list of items starting with 'D', each preceded by a small icon (TV, RADIO, etc.). A sidebar on the right lists 'Most popular pages under D' with 'Dragons' Den' at the top. The date 'Sunday 18th April 2010' is visible at the bottom left of the page.

- Dagenham and Redbridge (BBC Sport)
- Dagestan (Region Profile)
- TV** Daily Politics, The
- RADIO** Daily Service
- Dance & Electronica (Music)
- RADIO** Dance (School Radio)
- Dance and Electronica (Music)
- RADIO** Dance Charts (Radio 1)
- Dance Music (Radio 1)
- Darts
- RADIO** David Jacobs Collection, The
- RADIO** Dead Ringers
- TV** Delicious Miss Dahl, The
- Democratic Republic of Congo (Country Profile)
- Denmark (Country Profile)
- Derby
- Derby County (BBC Sport)
- Derbyshire (BBC Sport)
- RADIO** Dermot O'Leary
- RADIO** Desert Island Discs
- Desi (Music)



Information Architecture



14/56

Schemes & Structures:

Alphabetic

Geographical

Format

Organizational

Tasks

Audience

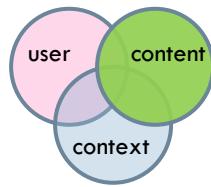
Subject/Topic

- Geographical scheme can be used for any content with some sort of **geography as a key attribute**.
- Two criteria for a successful geographical scheme are:
 - the audience must want to access information in that way
 - the audience must understand the geography used
- A thing to consider when using a geographic scheme is the *difference* between using a map to **display information** and using a map to **navigate to it**:
 - are you trying to show **precisely** where various objects are in the world?
 - are you trying to help people get to content about **a particular area**?
- A map for navigation doesn't need to be particularly accurate, but a map for displaying information *certainly* does.

The screenshot shows the Airbnb mobile application's search interface. At the top, there is a header with the Airbnb logo and the text "Find homes on Airbnb". Below the header, there are input fields for "WHERE" (set to "London"), "CHECK IN" (set to "Thu, 4th Oct"), "CHECK OUT" (set to "Fri, 5th Oct"), "ADULTS" (set to "2 adults"), and "CHILDREN" (set to "3 children"). A large red "Search" button is located below these fields. Below the search bar, there is a section titled "What guests are saying about homes in United Kingdom" which includes a rating of "4.7 out of 5 stars with 6,500,000+ reviews". At the bottom of the screenshot, there is a thumbnail image of a bedroom interior with a double bed, patterned bedding, and purple walls.



Information Architecture



15/56

Schemes & Structures:

Alphabetic

Geographical

Format

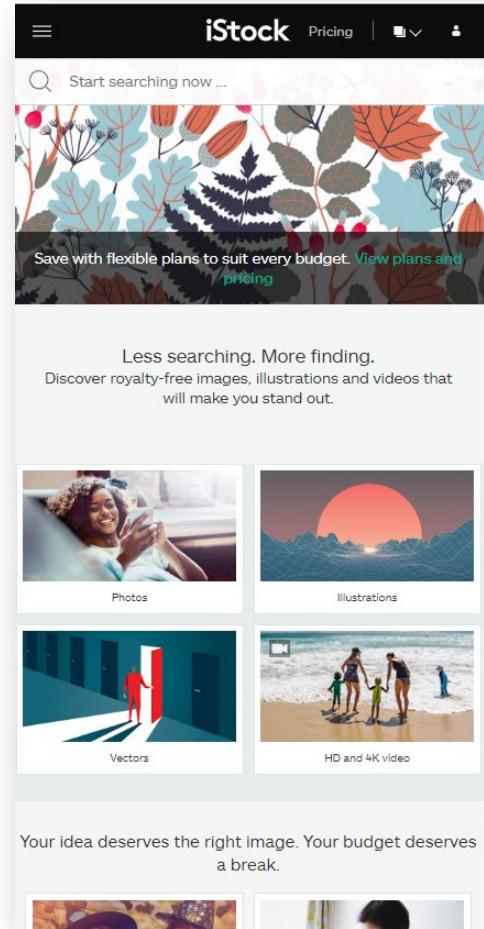
Organizational

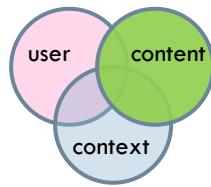
Tasks

Audience

Subject/Topic

- A format schema organizes content around **file formats**. This is particularly common on sites such as instructional websites (where they group videos, articles and tutorials) and article websites (where they group articles, interviews and tools).
- Make sure **your audience expects and wants** to find the content like that.
- Format is a great way to show people the different types of information available once they've found the topic.





Information Architecture

16/56

Schemes & Structures:

Alphabetic

Geographical

Format

Organizational

Tasks

Audience

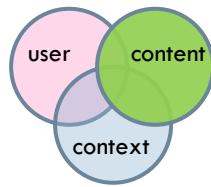
Subject/Topic

- **Structure of the organization** you're working with.
- This scheme comes about because authors can prepare information and put it in 'their' part of the site and also others can see not only where their stuff is, but also the stuff for their and other sections.

The screenshot shows the GOV.UK homepage with a black header containing the GOV.UK logo and the text "Welcome to GOV.UK". Below the header, there's a search bar with the placeholder "Search GOV.UK" and a magnifying glass icon. A blue sidebar on the left lists popular services: "Find a job", "Renew vehicle tax", "Log in to student finance", "Book your theory test", and "Personal tax account". The main content area features several categories with sub-links: "Benefits" (including eligibility, appeals, tax credits and Universal Credit); "Births, deaths, marriages and care" (including Parenting, civil partnerships, divorce and Lasting Power of Attorney); "Business and self-employed" (including Tools and guidance for businesses); "Childcare and parenting" (including giving birth, fostering, adopting, benefits for children, childcare and schools); "Citizenship and living in the UK" (including Voting, community participation, life in the UK, international projects); and "Crime, justice and the law" (including Legal processes, courts and the police).



Information Architecture



17/56

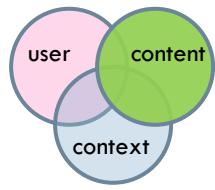
- Schemes & Structures:
- Alphabetic
- Geographical
- Format
- Organizational
- Tasks
- Audience
- Subject/Topic

- Task-based schemes **organize the content around the main tasks** that people do.
- Task-based schemes work best when:
 - there are only a **small set of tasks**;
 - the main tasks have quite **clear boundaries**;
 - your content is **easy to allocate** to the task groups.
- When you're looking for tasks in your user research, keep an eye out for phrases like "**I need to**" or "**I do**". Whatever follows is **usually a task**.

The screenshot shows a portion of the Barclays website's interface. At the top, there is a navigation bar with links for Personal, Premier, Business, Wealth Management, and Corporate. Below this is a search bar with a 'Log In' button and a 'Close' link. The main content area displays a sidebar menu with categories: Bank, Borrow, Credit cards, Save and invest, Mortgage, Insure, Service and support, Security and privacy, and Moments. To the right of the sidebar, there is a colorful illustration titled 'STUDENT HUB' featuring various university students in a study environment. Below the hub, there is a 'I NEED HELP WITH...' button. Further down, there is a yellow sidebar with icons and links for Blackboard, My Student Record, Gmail and Google Apps, Timetables, and Print Portal. A URL 'https://www.barclays.co.uk/#' is visible at the bottom of the page.



Information Architecture

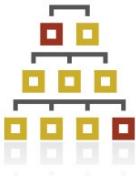


18/56

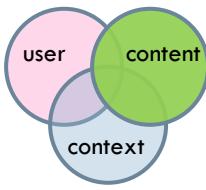
- Schemes & Structures:
- Alphabetic
- Geographical
- Format
- Organizational
- Tasks
- Audience
- Subject/Topic

- Audience schemes are suitable, and only work when:
 - you can split your audience into groups, with very clear boundaries
 - at any point in time, a user can identify which group they belong to (they may switch groups for different tasks—this is okay as long as they know where they fit each time)
 - your content assigns across audience groups without too much overlap
- If you decide an audience scheme is best for your content:
 - make sure the boundaries are clear
 - label the groups in the same way that your users will talk about them.
- When creating audience schemes you can potentially limit access to information by audience, or at least make it hard for them to find a full range of information. If your audience groups are sensitive, or it looks like you're **restricting** access by audience, make sure this is what you intended.

The screenshot shows the Debenhams website's main navigation bar at the top, featuring links for Store Finder, Create Account/Sign In, My Beauty Club, and a UK flag. Below the navigation is the Debenhams logo. The main content area has a dark background with autumn leaves and promotional text for a sale. On the left, there's a sidebar with a list of categories: Women, Lingerie, Beauty, Home, Furniture, Men, Kids, Gifts & Toys, Electricals, Christmas, Weddings, and Sale. Each category has a green arrow icon to its right. Promotional banners for "FREE Next Day Click & Collect on orders £30 or over" and "International Delivery find out more" are also visible.



Information Architecture



19/56

Schemes & Structures:

Alphabetic

Geographical

Format

Organizational

Tasks

Audience

Subject/Topic

- A subject scheme groups **similar things together** based on what they're about.
- This type of classification scheme **works well for most content**. And as long as you can do it in a way that makes sense for your audience, it will be suitable for them.

The Guardian logo at the top right. Navigation links include 'Sign in', 'Subscribe →', 'News', 'Opinion', 'Sport', 'Culture', 'Lifestyle', and a menu icon. Below the navigation is a news banner for 'UK news' featuring a photo of Boris Johnson speaking at a podium with the Conservative Party logo.

UK ► UK politics Education Media Society Law More

UK news



Brexit / Boris Johnson unveils plan for alternative to backstop

'Disastrous' Northern Irish leaders dismiss Johnson's plan

Brexit Johnson gives EU hope he will rethink Irish plan

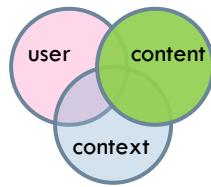
Live Juncker: PM's plan has 'some problematic points'



Peter Sissons / Former newsreader dies aged 77



Immigration / NHS doctor faces deportation over visa application error



Information Architecture

20/56

Schemes & Structures:

Alphabetic

Geographical

Format

Organizational

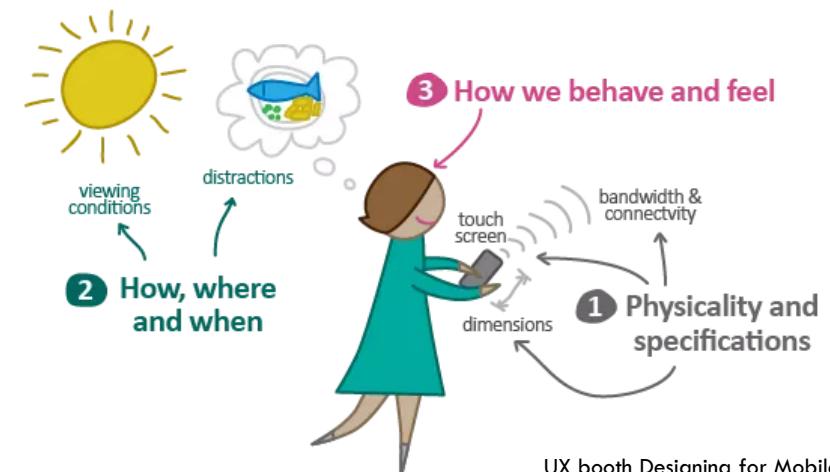
Tasks

Audience

Subject/Topic

- **Schemes and Structures are not independent, they are used in combination:**
 - mix up types at each level
 - start with one type and use a different type at the next level
 - use more than one approach for your whole content set

- Main differentiation of mobile information architecture to desktop information architecture is due to the following challenges:
 - context
 - needing to display in a smaller screen as much information as we would on a desktop
 - added technical constraints
 - mobile delivery methods:
 - mobile specific
 - responsive



Mobile information architecture

22/56

ONLINE SHOP HOSPITALITY STADIUM TOURS ARSENAL PLAYER JUNIOR GUNNERS SEARCH

ONLINE SHOP SEARCH

HOME NEWS TEAMS FIXTURES & RESULTS

VIDEO: Irresistible Arsenal down United

See the very best of the action from Sunday's thrilling 3-0 victory against Manchester United from a fresh angle

The Breakdown: Manchester United (h)

Cech - Alexis' energy is so important

FIRST TEAM

DON'T MISS

CLUB NEWS

THE ARSENAL DIGITAL MATCHDAY PROGRAMME

Man Utd Digital Programme

Get your matchday programme!

Last chance to win signed PUMA boots

Arsenal 3-0 Man United - Highlights

LISTEN NOW ARSENAL WEEKLY

VIDEO: Irresistible Arsenal down United

See the very best of the action from Sunday's thrilling 3-0 victory against Manchester United from a fresh angle

The Breakdown: Manchester United (h)

Cech - Alexis' energy is so important

FIRST TEAM

Latest news

Arsenal 3-0 Man United - Highlights

Extended, bitesize clips from the win at the Emirates available on Arsenal Player now

Coquelin - We've proved people wrong

Mobile Information Architecture (MIA)

23/56

- Mobile devices have their own set of Information Architecture patterns.
- While the structure of a **responsive** site may follow more “standard” patterns, **native apps** often employ navigational structures that are tab-based.
- There’s no “right “way to architect a mobile site or application.

Most popular patterns of MA

24/56

Hierarchy

Hub & spoke

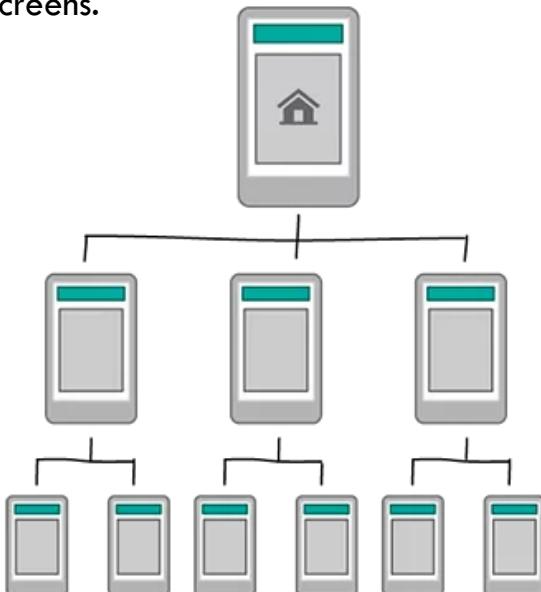
Nested doll

Tabbed view

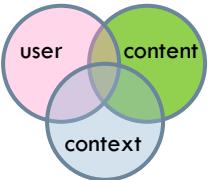
Bento box

Filtered view

- Standard site structure with an index page and a series of sub pages
- **Good for**
 - Organising complicated site structures that need to follow a desktop site's structure.
- **Watch for**
 - Navigation. Multi-faceted navigation structures can present a problem to people using small screens.



UX booth Designing for Mobile,
Part 1: Information Architecture
By Elaine McVicar



Most popular patterns of MA

25/56

Hierarchy

Hub & spoke

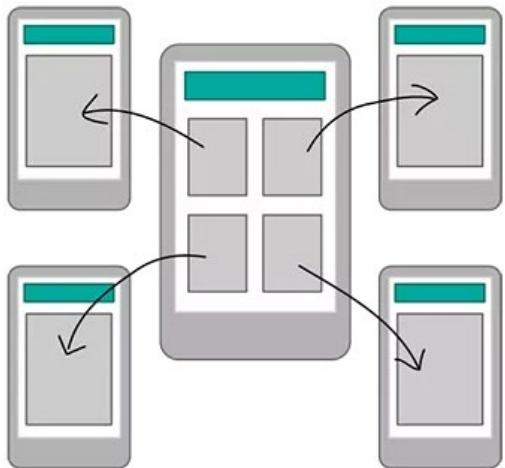
Nested doll

Tabbed view

Bento box

Filtered view

- Central index from which users will navigate out
- Default pattern on Apple's iPhone
- **Good for**
 - Multi-functional tools, each with a distinct internal navigation and purpose.
- **Watch for**
 - Users that want to multi-task.



UX booth Designing for Mobile,
Part 1: Information Architecture
By Elaine McVicar

Most popular patterns of MA

26/56

Hierarchy

Hub & spoke

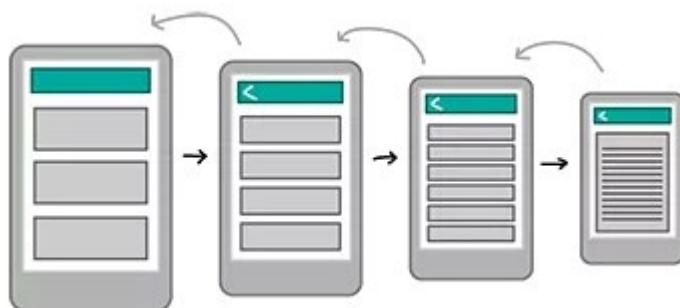
Nested doll

Tabbed view

Bento box

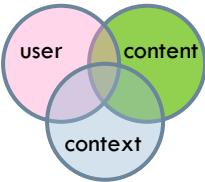
Filtered view

- The nested doll pattern leads users in a **linear** fashion to more detailed content.
- It also gives the user a strong sense of where they are in the structure of the content due to the perception of moving forward and then back.
- **Good for**
 - Apps or sites with singular or closely related topics. This can also be used as a sub section pattern inside other parent patterns, such as the standard hierarchy pattern or hub and spoke.
- **Watch for**
 - Users won't be able to quickly switch between sections so consider whether this will be suitable, rather than a barrier to exploring content.



UX booth Designing for Mobile,
Part 1: Information Architecture
By Elaine McVicar





Most popular patterns of MA

27/56

Hierarchy

Hub & spoke

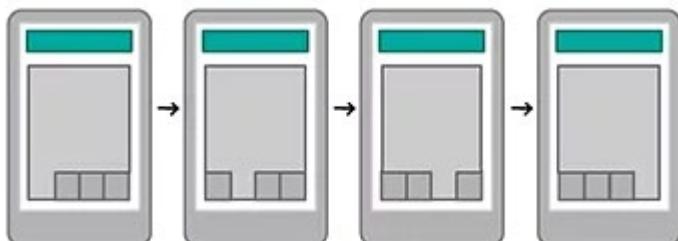
Nested doll

Tabbed view

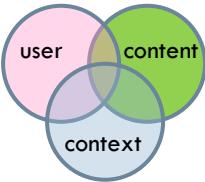
Bento box

Filtered view

- It's a collection of sections tied together by a toolbar menu. This allows the user to quickly **scan and understand the complete functionality of the app** when it's first opened.
- It also gives the user a strong sense of **where they are in the structure of the content** due to the perception of moving forward and then back.
- **Good for**
 - Tools based apps with a similar theme. Multi-tasking.
- **Watch for**
 - Complexity. This pattern is best suited to very simple content structures.



UX booth Designing for Mobile,
Part 1: Information Architecture
By Elaine McVicar



Most popular patterns of MA

28/56

Hierarchy

Hub & spoke

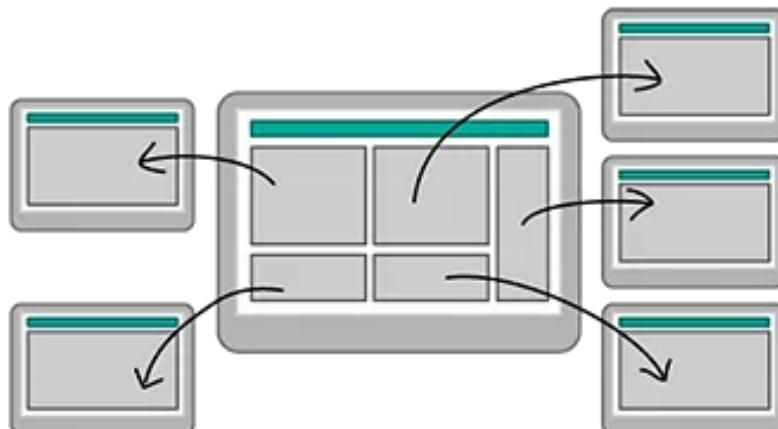
Nested doll

Tabbed view

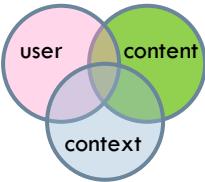
Bento box

Filtered view

- The bento box or **dashboard pattern** brings more detailed content directly to the index screen by using components to display portions of related tools or content.
- This pattern is more suited to tablet than mobile due to its complexity.
- It can be really powerful as it allows the user to comprehend key information at a glance, but does heavily rely on having a well-designed interface with information presented clearly.
- **Good for**
 - Multi-functional tools and content-based tablet apps that have a similar theme.
- **Watch for**
 - The tablet screen gives you more space to utilize this pattern well, however it becomes especially important to understand how a user will interact with and between each piece of content, to ensure that app is easy, efficient and enjoyable to use.



UX booth Designing for Mobile,
Part 1: Information Architecture
By Elaine McVicar

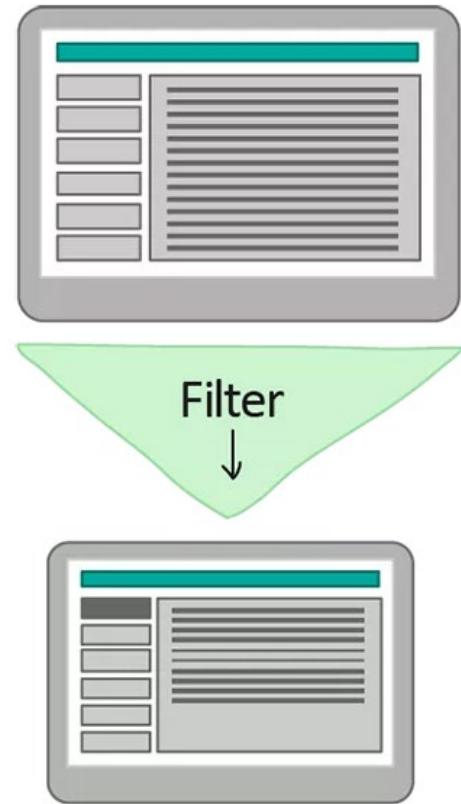


Most popular patterns of MA

29/56

- Hierarchy
- Hub & spoke
- Nested doll
- Tabbed view
- Bento box
- Filtered view**

- A filtered view pattern allows the user to navigate within a set of data by selecting **filter options** to create an alternative view. Filtering, as well as using faceted search methods, can be an excellent way to allow users to explore content in a way that suits them.
- **Good for**
 - Apps or sites with large quantities of content, such as articles, images and videos. Can be a good basis for magazine style apps or sites, or as a sub pattern within another navigational pattern.
- **Watch for**
 - Mobile. Filters and faceted search can be difficult to display on a smaller screen due to their complexity.



UX booth Designing for Mobile,
Part 1: Information Architecture
By Elaine McVicar

Try the following

30/56

- What site is this? (site ID)
- What page am I on? (Page name)
- What are the major sections of this site? (Sections)
- What are my options at this level? (Local navigation)
- Where am I in the scheme of things? (You are here indications)
- How can I search?

Mobile IA

31/56

- Follow up from previous - tasks for mobile information architect to transfer from a web to a mobile design:
 - Can I use the same structure or sections?
 - Do I present the same information above the fold?
 - If so how this would be prioritised
 - How does the user navigates to other areas
 - Do I use the same visual and interaction paradigms, or invent new ones
 - If you invent new paradigms will I loose the visual characteristics of what the users expect?

What makes good MobUX

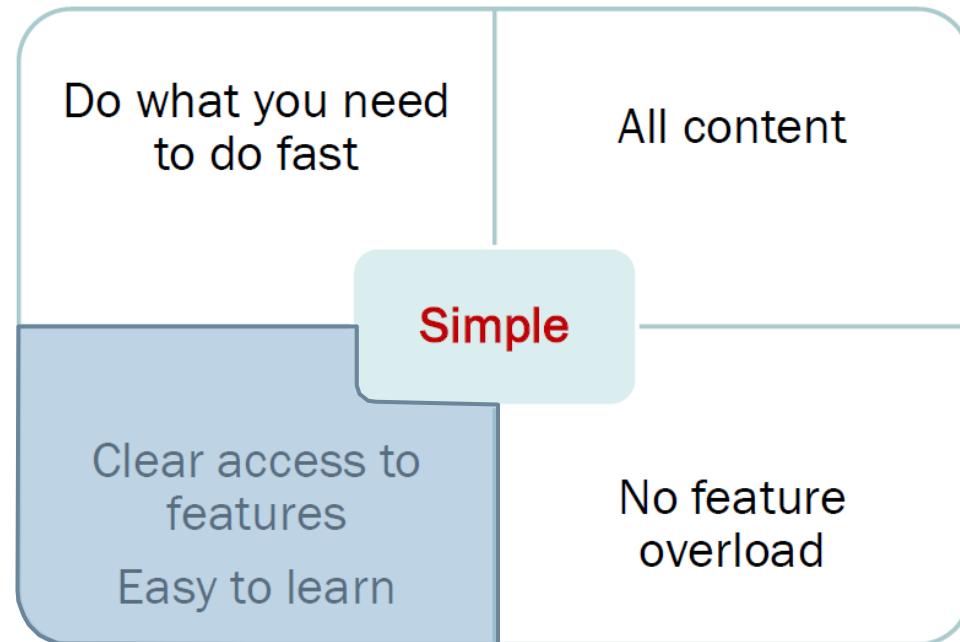


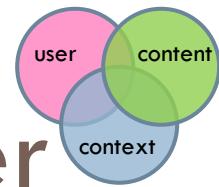
32/56

- Allow the users to quickly complete their tasks and achieve their goals



Interaction



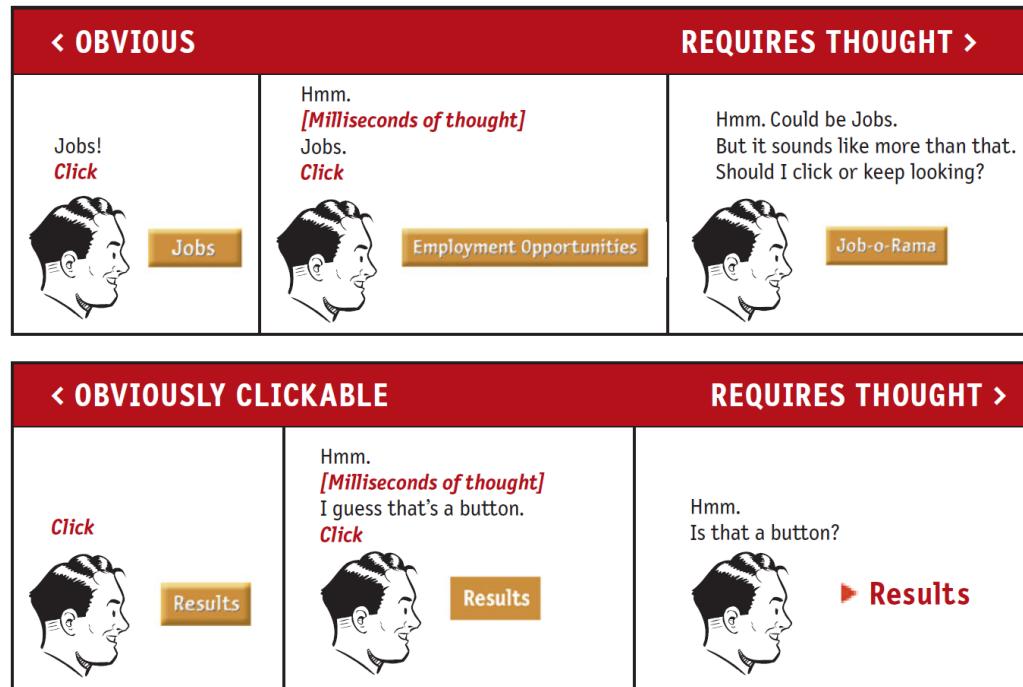


Tools to communicate with the user

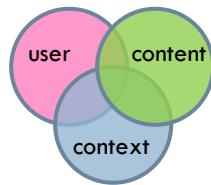
33/56

Visual design

- Language
- Visual design: layout; UI elements

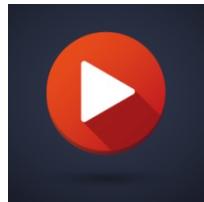


Steve Krug (2014) *Don't Make Me Think!: A Common Sense Approach to Web Usability*, New Riders, page 14, 15.



Navigation

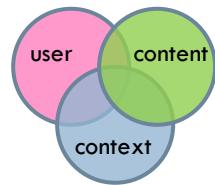
34/56



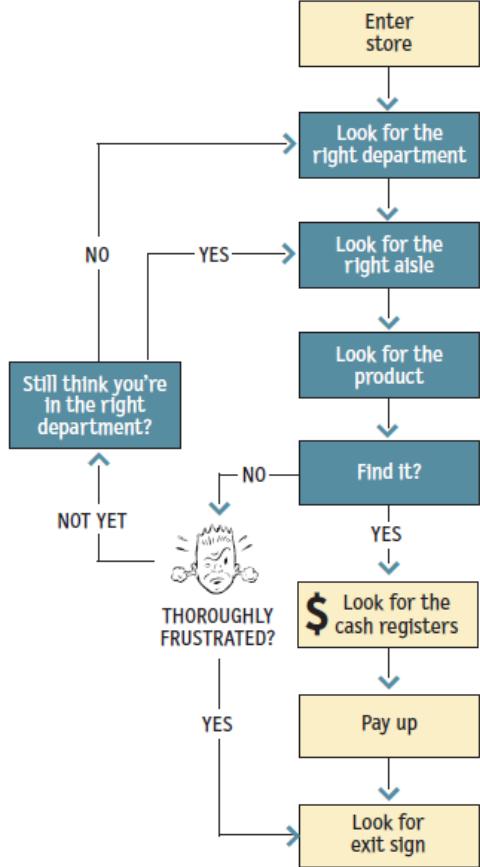
And you may find yourself | ...
And you may ask yourself | Well... | **How
did I get here?!**
Talking Heads, “Once in a lifetime”.

- People won't use your web site/app if they can't find their way around it.
- So how do we create the proverbial “clear, simple, and consistent” navigation?

So how do we create “clear, simple, and consistent” navigation?



35/56



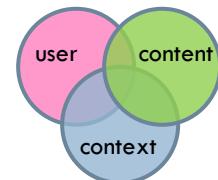
Shop metaphor

- You are looking for a product
- You go to the right department
- You are looking for the right aisle
- You are looking at the selves
- You are looking for the specific product
- You do lots of thinking
- You make decisions depending on various facts:
 - Time
 - Familiarity
 - Personality



Steve Krug (2014) *Don't Make Me Think!: A Common Sense Approach to Web Usability*, New Riders, page 56.

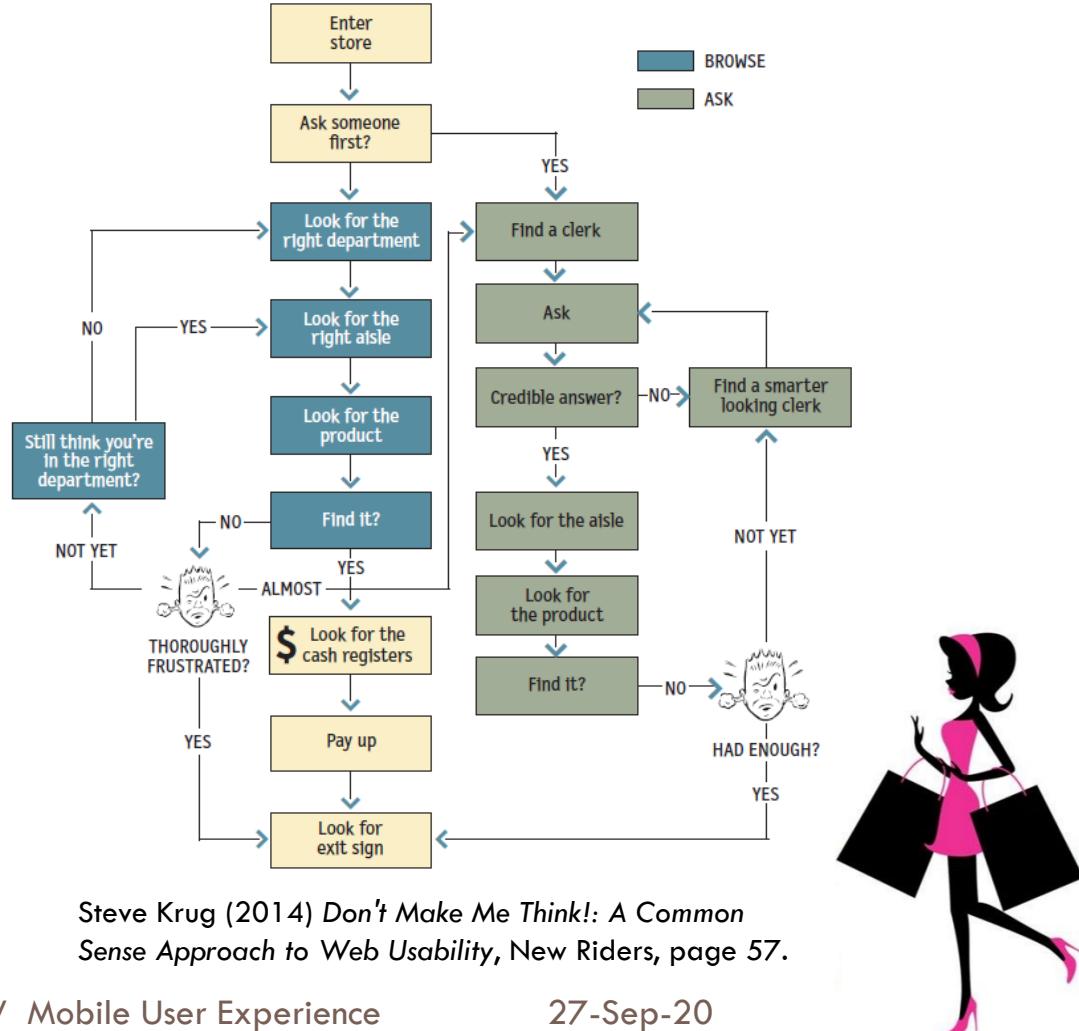
What is the process we take to navigate through the web?



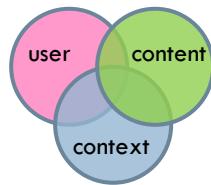
36/56

Shop metaphor

- When you factor your decision, the process looks something like this:

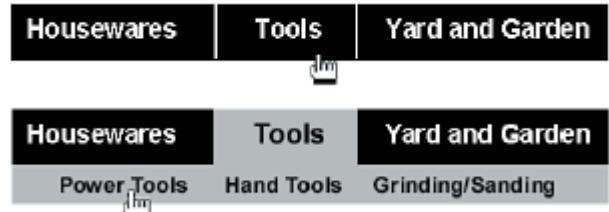


What is the process we take to navigate through the web?



37/56

- We usually try to find something
- We decide to ask or browse first
- If we choose to browse we make our way through a **hierarchy**, using **signs** to guide us
- Eventually if we won't find what we are looking for we leave

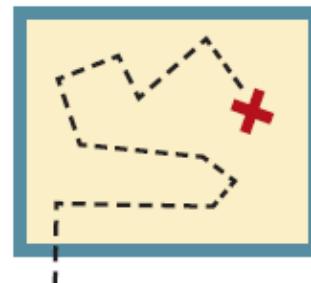


Navigate through the Web vs ‘real’ life

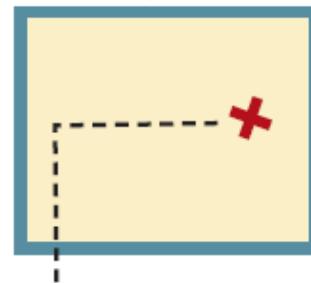
38/56

- No sense of scale
- No sense of direction
- No sense of location
- Navigation isn't just a feature of a Web site/app, it is the Web site/app.**

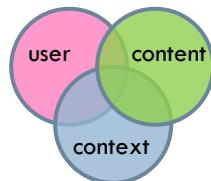
FIRST TIME



SUBSEQUENT VISITS



On the Web to return to a place you have to remember the conceptual hierarchy to retrace your steps
NAVIGATION



Navigation on mobile

39/56

- Two Principles for Navigation and Search on Mobile:
 - take little screen space
 - accessible & discoverable



Chrome

40/56

- **Definition:** Chrome is the **visual design elements that give users information about or commands to operate on the screen's content** (as opposed to being part of that content). These design elements are provided by the underlying system — whether it be an operating system, a website, or an application — and surround the user's data.
- "Chrome" is also the name of Google's web browser, though we do not use the term in that sense in UX.

More on chrome: <http://www.nngroup.com/articles/browser-and-gui-chrome/>

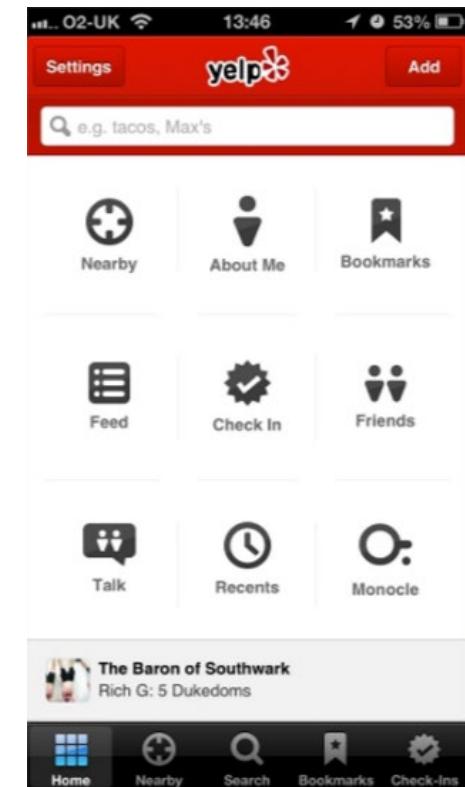
More on content-to-chrome ratio: <http://www.nngroup.com/articles/content-chrome-ratio/>

Chrome - mobile app

41/56

mobile app

- In a **mobile app**, the chrome often includes a status bar across the top of the screen and a tab bar with command icons across the bottom.
Sometimes, there's also a navigation bar below the status bar.

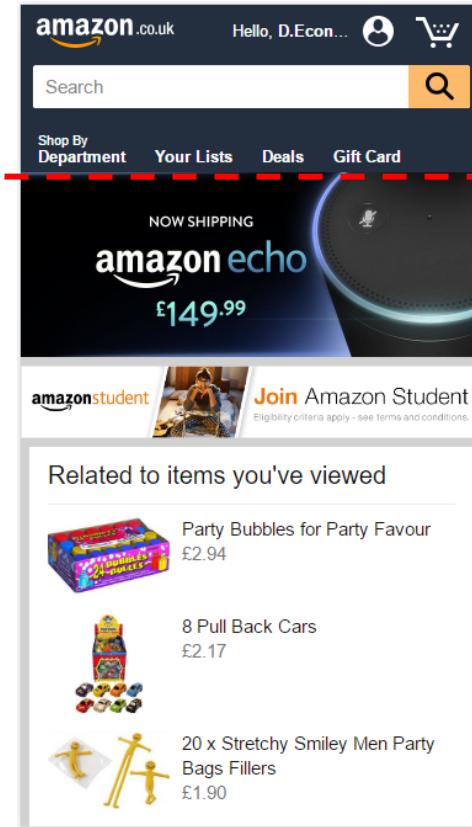


Chrome – web app

42/56

Web app

- On a **website**, the chrome includes navigation bars, footers, logos, branding, the search box, and so forth.



Navigation & search. Utility navigation, shopping cart, logo
UI elements

Content

Navigation on mobile – navigation bar

43/56

Navigation Bar

Navigation Tab Bar

Navigation hub

Navigation menus

Hidden menus

- Usually at top of the page
- Works best for a small number of navigation items (otherwise they take up too much space)

The Washington Post

Campaign 2016

Trump campaign reels from reports that he may have avoided paying taxes



(PennLive.com via AP)

Capping a tough week for the GOP nominee, he was revealed to have declared a \$916 million loss on his 1995 returns, which could have allowed him to not pay federal taxes for 18 years. Top surrogates called him "a genius" with taxes, though no one — including the campaign — disputed the tax disclosures.

By Philip Rucker and Jenna Johnson • 29 minutes ago

As news of Trump's taxes

95% of clients rated our service as good or excellent



Navigation on mobile – tab bar

44/56

Navigation
Bar

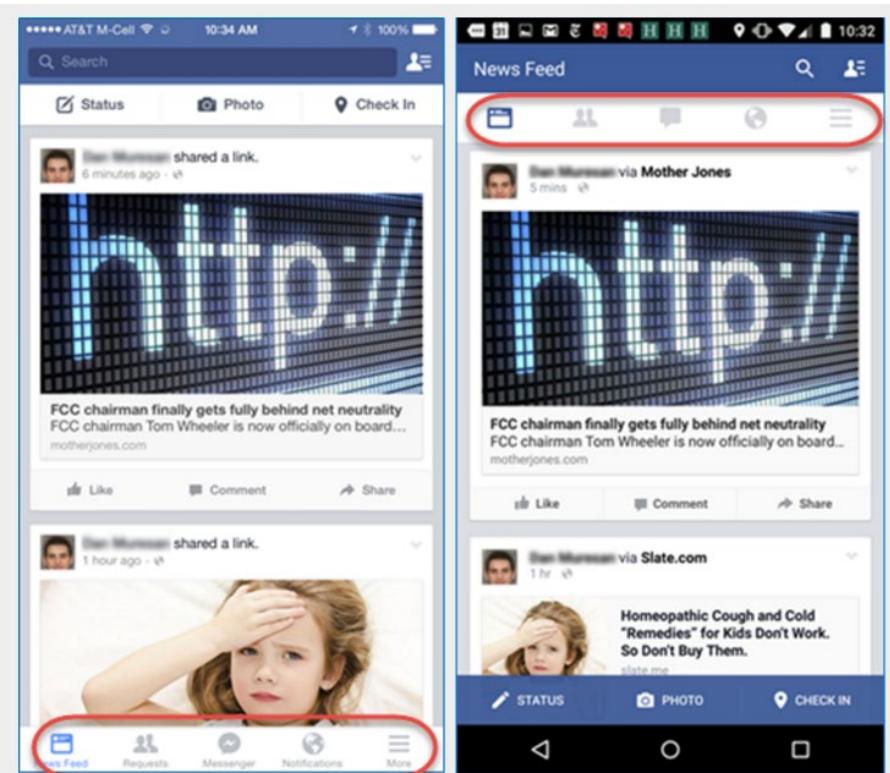
Navigation
Tab Bar

Navigation
hub

Navigation
menus

Hidden menus

- Tabs are self evident
- They are hard to miss
- They are slick



Navigation on mobile – navigation hub

45/56

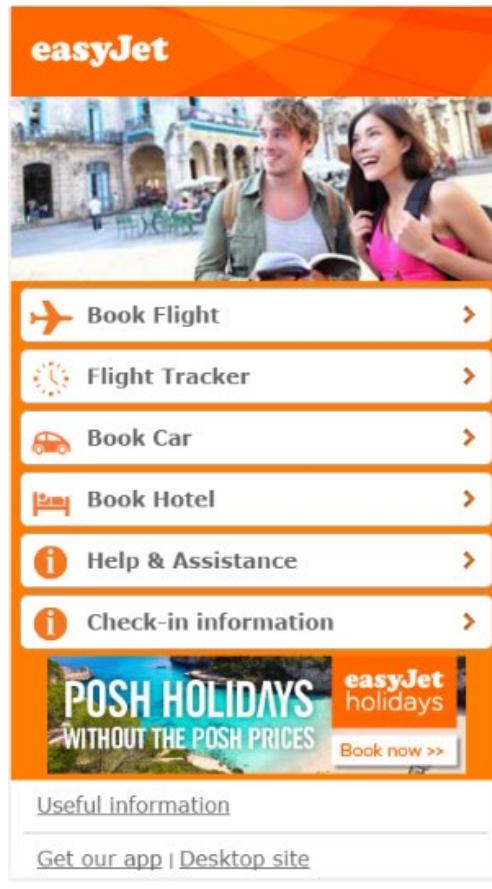
Navigation Bar

Navigation Tab Bar

Navigation hub

Navigation menus

Hidden menus



All the navigation has to go through the hub page, which can be tedious.

Navigation on mobile – menus

46/56

Navigation Bar

Navigation Tab Bar

Navigation hub

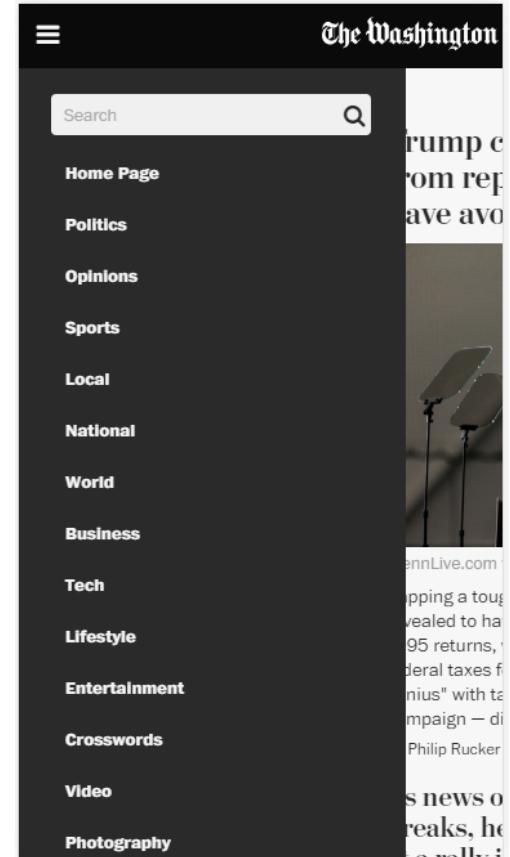
Navigation menus

Hidden menus

Less salient
low info scent

Small can
accommodate
many choices

The majority of
mobile users are
familiar with the
hamburger icon,
yet they may
forget to check it



Navigation on mobile – menus

47/56

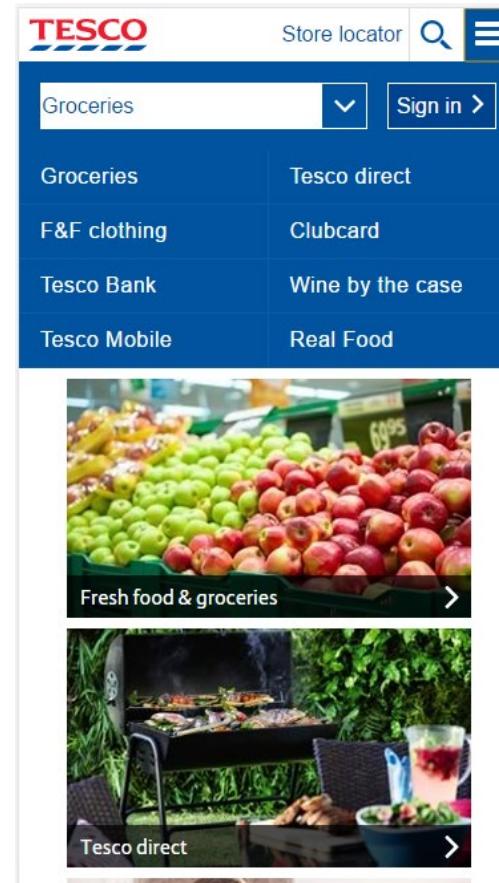
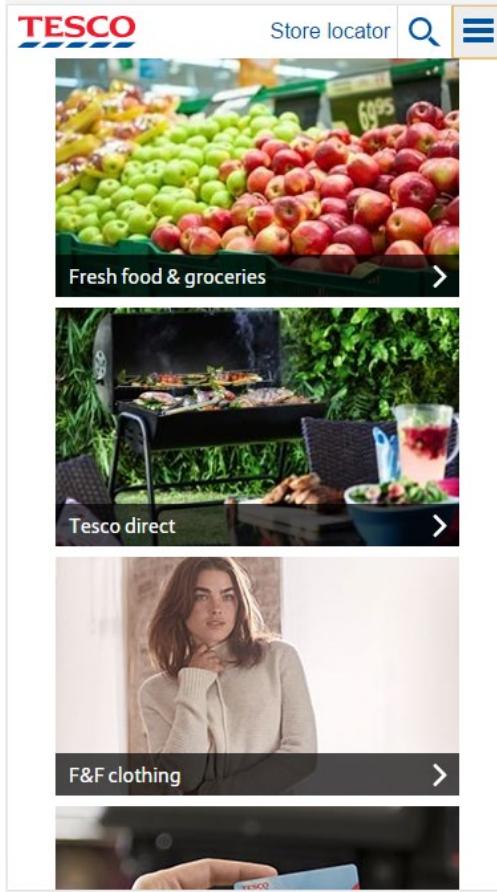
Navigation
Bar

Navigation
Tab Bar

Navigation
hub

Navigation
menus

Hidden
menus



Navigation on mobile

48/56

Navigation icons

Variation 1

Bordered list icon (hamburger).



1/2 test on 240,000 visitors

Variation 2

Bordered word menu.

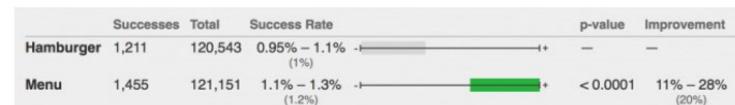


2 preferred more by 20% more visitors

Results

240,000 unique mobile visitors were served the A/B test.

Variation	Unique Visitors	Unique Clicks
Hamburger	120,543	1,211
Menu	121,152	1,455



Find more about this study



Navigation on mobile – hidden menus

49/56

Navigation Bar

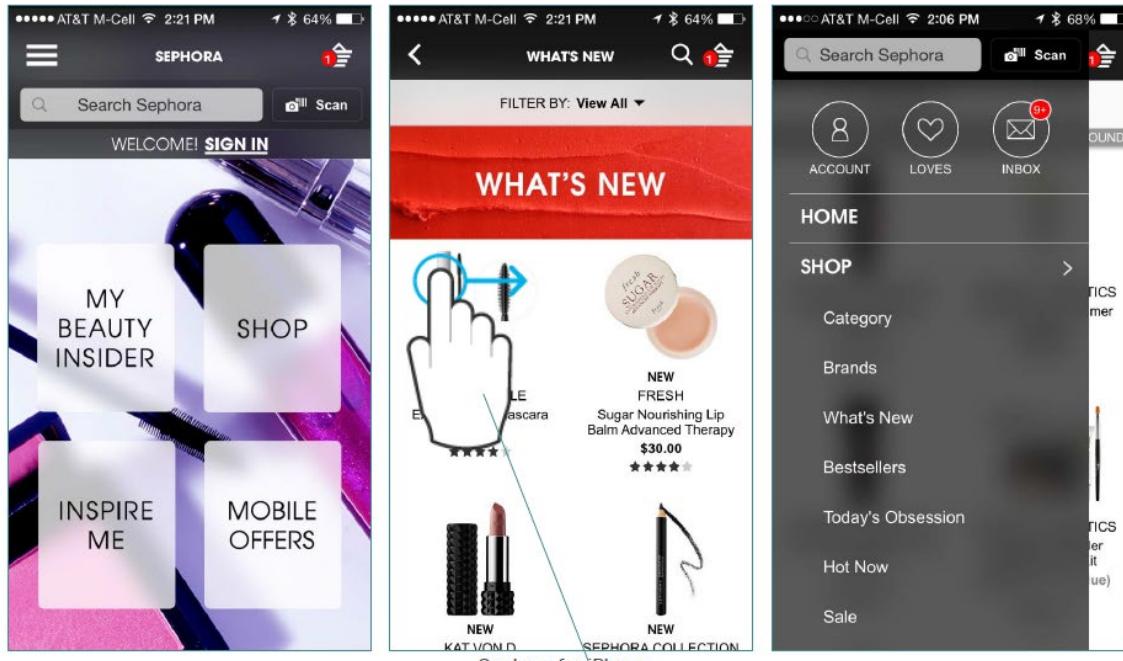
Navigation Tab Bar

Navigation hub

Navigation menus

Hidden menus

□ Low discoverability

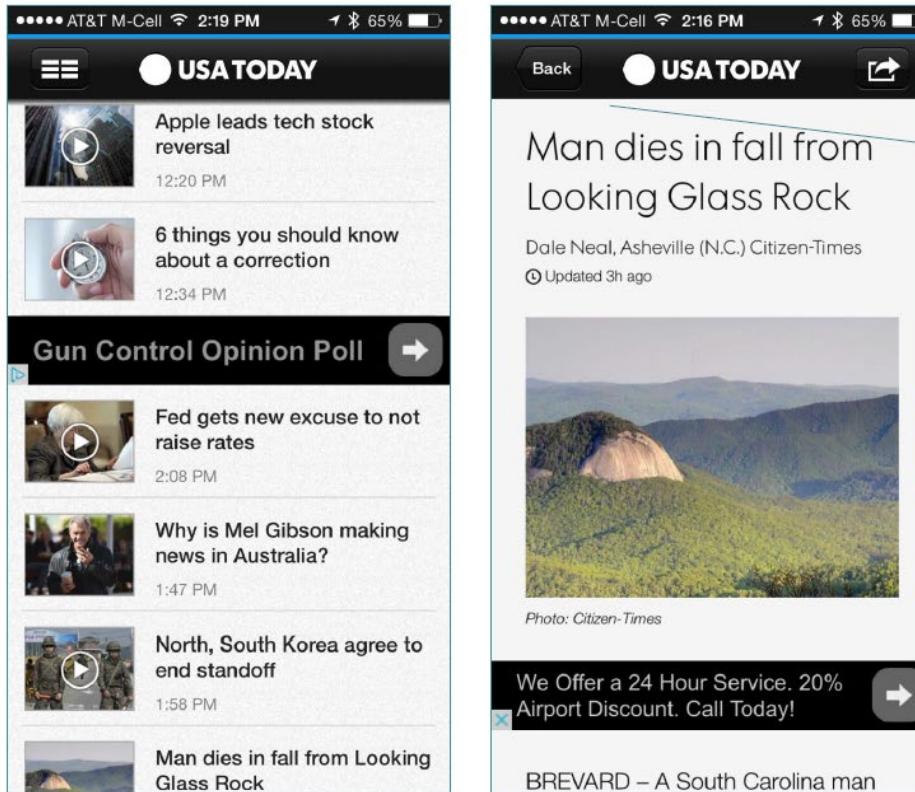


Navigation on mobile – menus

50/56

Deep layer of navigation

Menu only on homepage?



USA Today for iPhone

Navigation on mobile – menus

51/56

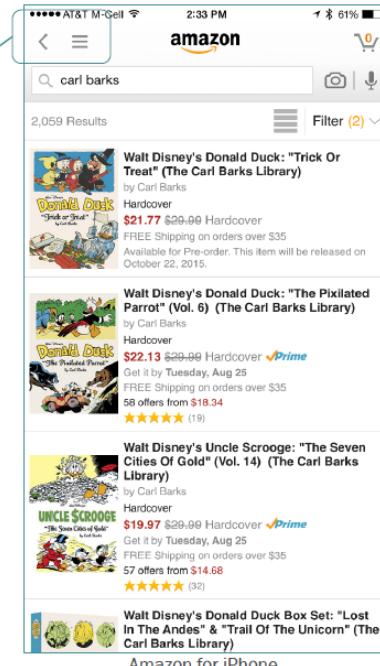
Back + menu

☐ Accommodate both Back and Menu



Nonstandard position for menu makes it less discoverable.

Both Back and Menu are included.

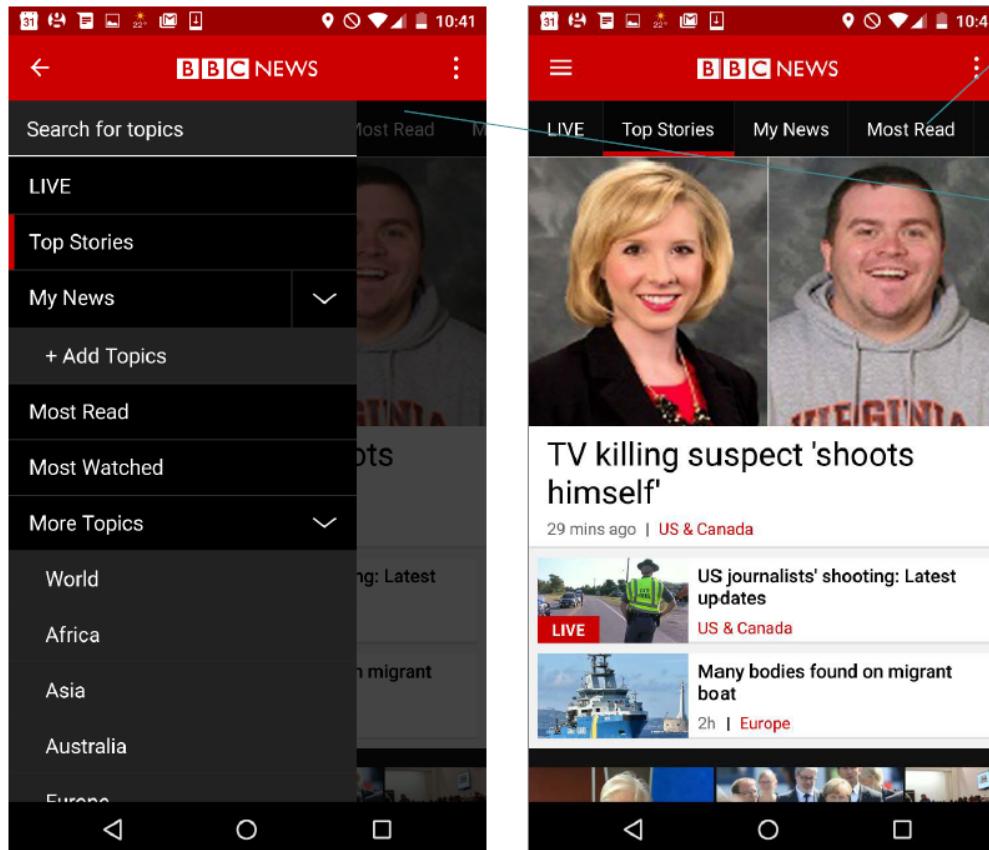


Amazon for iPhone

Navigation on mobile – menus

52/56

Navigation
bar +
hamburger



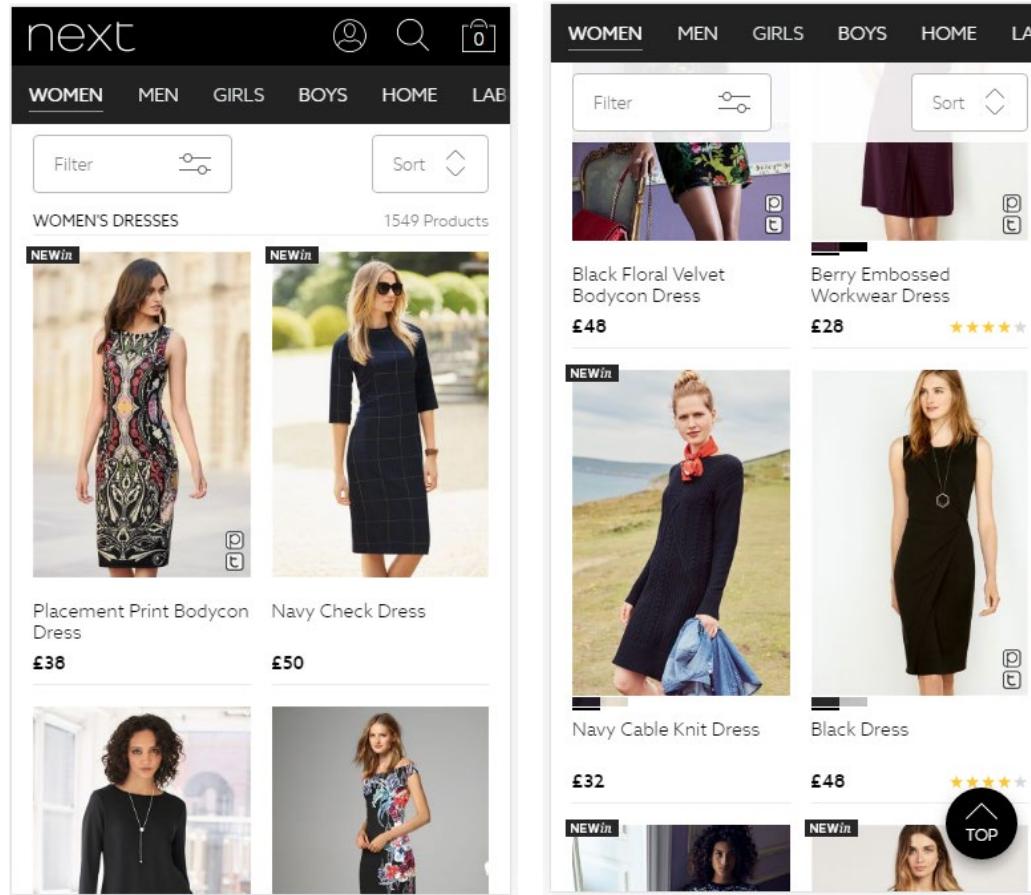
Main sections are easily accessible.

People may ignore the hamburger even more.

Navigation on mobile – sticky

53/56

Sticky
navigation



Sticky
navigation
works well
for long
pages



Good
colour
contrast

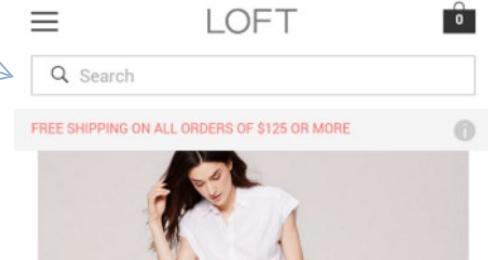
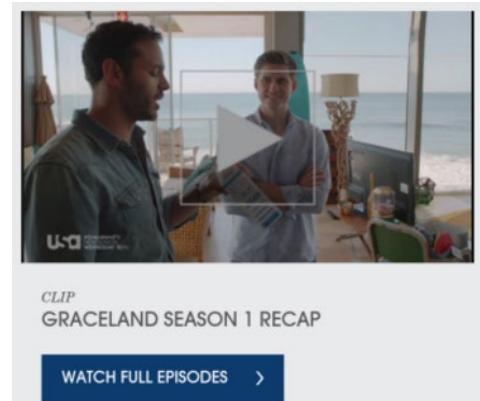
Support mobile navigation

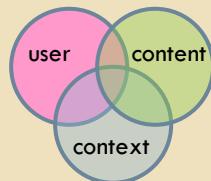
54/56

Enable navigation in site content

- on the homepage – should reflect the key content and functionality
- on interior pages - interior pages can provide navigation other than the main hamburger navigation leading to additional or related resources or other important areas of content
 - in-line links
 - related links
 - highly visible search
- Bottom of the page – footer can give immediate access to key content to those that scroll to the bottom of the page

exercising. This is called exercise-induced bronchoconstriction (EIB), or exercise-induced





Web conventions

55/56



□ Tips and tricks

□ Take advantage of conventions

- Signs
- Where things are located on a page (e.g. logo on the top-left corner, primary navigation across the top or down the left side)
- How things work (e.g. all selling sites use shopping cart metaphor, and similar methods of payment, shipping address etc.)
- How things look, many elements are standardised (e.g. icons for video, social network etc.)

□ Create effective visual hierarchies

□ Break pages up into clearly defined areas

□ Make it obvious what's clickable

□ Eliminate distractions

□ Format content to support scanning

Reading

56/56

- **Chapters 1-7**, Steve Krug (2014) *Don't Make Me Think!: A Common Sense Approach to Web Usability*, New Riders, page 60.
- **Chapters 7**: Mobile Information Architecture, Brian Fling (2009) *Mobile Design and Development: Practical concepts and techniques for creating mobile sites and web apps*, O'Reilly.
- Elaine McVicar (2012) *Designing for Mobile, Part 1: Information Architecture*, Information Architecture.

<http://www.uxbooth.com/articles/designing-for-mobile-part-1-information-architecture/>
[last accessed 03/10/2018]

NNG Nielsen Norman Group / Articles

<https://www.nngroup.com/articles/>