Demystifying Mobile: Designing with Accessibility in Mind

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Mobile has changed the way people are consuming content

- In noisy, public spaces
- Using touch screens
- Using one handed
- Out in bright light
- Motion to perform actions
- Voice interactions
Behind every great site or app lies thought, empathy and inclusion. This doesn’t happen by accident, it happens by design.

- Henny Swan
Inclusive Design Principles

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The PACIELLO GROUP

These Inclusive Design Principles are about putting people first. It's about designing for the needs of people with permanent, temporary, situational, or changing disabilities — all of us really.

They are intended to give anyone involved in the design and development of websites and applications - designers, user experience professionals, developers, product owners, idea makers, innovators, artists and thinkers - a broad approach to inclusive design.
Diverse Personas: People First, Disability Second

Mitsuko
Age: 50, Male, Personal Care

Bio: Mitsuko has been a diabetic personal care customer since the age of 50. He finds websites that are difficult to use and navigate frustrating. He feels that websites should be designed with ease of use in mind, allowing him to access information quickly and efficiently. Mitsuko also enjoys music and frequently listens to streaming services.

Goals: Mitsuko wants websites to be easy to use, with clear navigation and user-friendly features. He values sites that allow him to quickly access information and complete tasks.

Frustrations: Mitsuko is frustrated by sites that are not user-friendly, have unclear navigation, or require him to click through multiple pages to find what he needs.

Knowledge: Experience: High

Help needed: Medium

Device Usage: Mobile, Tablet

Top Tips: 
- Accessibility is very important to him. He looks for sites that are easy to navigate and have clear, concise language.
- Mitsuko values sites that are visually appealing and provide a good user experience.
- He recommends sites that allow for easy navigation and provide clear, concise information.

Current Banking Products: 
- Barclays Mobile Banking

Nola
Age: 30, Female, Online Retailer

Bio: Nola is a young woman who enjoys online shopping and is particularly interested in websites that provide personalized recommendations. Nola values sites that are visually appealing and provide a seamless shopping experience.

Goals: Nola wants websites to be visually appealing, with personalized recommendations and quick checkout processes.

Frustrations: Nola is frustrated by sites that are slow to load or have a confusing checkout process.

Knowledge: Experience: High

Help needed: Low

Device Usage: Desktop, Mobile

Top Tips: 
- Accessibility is important to her. She looks for sites that are easy to navigate and provide clear, concise language.
- Nola values sites that are visually appealing and provide a seamless shopping experience.
- She recommends sites that allow for easy navigation and provide clear, concise information.

Current Banking Products: 
- Barclays Online Banking

Klaus
Age: 40, Male, Craft Brewery

Bio: Klaus works in a small craft brewery and enjoys websites that provide detailed information about products and services. Klaus values sites that are easy to navigate and provide clear, concise language.

Goals: Klaus wants websites to be easy to navigate, with clear information about products and services.

Frustrations: Klaus is frustrated by sites that are not user-friendly, have unclear navigation, or require him to click through multiple pages to find what he needs.

Knowledge: Experience: High

Help needed: None

Device Usage: Desktop, Mobile

Top Tips: 
- Accessibility is important to him. He looks for sites that are easy to navigate and have clear, concise language.
- Klaus values sites that are visually appealing and provide a seamless shopping experience.
- He recommends sites that allow for easy navigation and provide clear, concise information.

Current Banking Products: 
- Barclays Business Banking

BARCLAYS
1. **Provide comparable experience**
   Ensure your interface provides a comparable experience for all so people can accomplish tasks in a way that suits their needs without undermining the quality of the content.

2. **Give control**
   People should be able to access and interact with content in their preferred way.

3. **Offer choice**
   Consider providing different ways for people to complete tasks, especially those that are complex or non-standard.

4. **Consider situation**
   Make sure your interface delivers a valuable experience to people regardless of their circumstances.

5. **Be consistent**
   Use familiar conventions and apply them consistently.

6. **Prioritise content**
   Help users focus on core tasks, features and information by prioritising them within the content and layout.

7. **Add value**
   Consider the value of features and how they improve the experience for different users.

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For more information go to barclayscorporate.com/accessibility
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Prioritize Content

Help users focus on core tasks, features, and information by prioritizing them within the content and layout.
Prioritize Core Tasks
Intuitive Navigation

Help users navigate with clear pathways and without requiring explanations.
Make Navigation Self-Evident

- Place in a consistent place
- Don’t move the navigation controls to a new location or hide them on different pages
- Communicate the current location

Redbooth’s move from a hamburger menu to a bottom tab bar resulted in increased user sessions. Image: Luke W

number of sessions more than doubled; session time increased 70%; 65% increase in daily active users.
Be Finger Friendly

- Interface controls need to be big enough to capture actions on touch screens
- Controls that are 7–10 mm can be accurately tapped with a finger
- Provide spacing between controls to prevent accidental activation of the wrong control

Create Reachable Controls

- Steven Hoober found that 49% of people rely on a one thumb to get things done on their phones.
- Not all users will hold the device the same way or use their fingers.

*Comfort zones for a person’s one-handed reach on a smartphone. Source: uxmatters*
Consider Situation

People use your interface in different situations. Make sure your interface delivers a valuable experience to people regardless of their circumstances.
Provide Sufficient Color Contrast

- The *minimum* color contrast is 4.5
- Inclusive contrast ratios should exceed this.
Make Text Legible

- Ensure users can read your content
- Text should be legible at a typical viewing distance without zooming

Be Consistent

Be consistent with conventions and with their application throughout your interface.
Create a Seamless Experience

Ultimate goal is to create a seamless experience across desktop, tablet, mobile, and more

- Discrete interactions beginning and ending on single session
- Continuous interactions moving from one device to another
- Sequential interactions that evolve from one device to another

Source: https://uxplanet.org/mobile-ux-design-key-principles-dee1a632f9e6
Consistency Across Platforms
Consistent Structure Across Pages
Consistent Editorial

- Link text
- Alternative text
- Headings

Make this consistent across platforms where appropriate
Give control

Ensure people always have control over content and presentation. People should be able to access and interact with content in their preferred way.
Honor Device Settings

- Inverted colors
- Larger Text
- Bold Text
- Auto Play Audio Descriptions
- Subtitles & Captions
Offer choice

Consider providing different ways for people to complete tasks, especially those that are complex or non standard.
Multiple Ways to Complete an Action

- Swipe to delete
- Tap to delete
- Shake
Comparable Experience

Ensure your interface provides a comparable experience for all users, so people can accomplish tasks in a way that suits their needs without undermining the quality of the content.
Comparable Experience

WCAG compliance is providing synchronized closed captions.

A comparable experience is:

- Color coded speakers
- Readable fonts
- Sufficient contrast
Add Value

Consider the value of features and how they improve the experience for different users.
Beyond Compliance

Even WCAG compliant forms are a challenge due to issues with:

- Dexterity
- Comprehension
- Recall
- Accuracy
Platform Settings

Use features and platform settings to add value:

- Autofill
- Voice search
- Camera integration
- Touch ID
Accessible Design

Behind every great site or app lies thought, empathy and inclusion. This doesn’t happen by accident, **it happens by design**.

- Visual design
- Interaction design
- Non visual design
Thank You & Questions

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