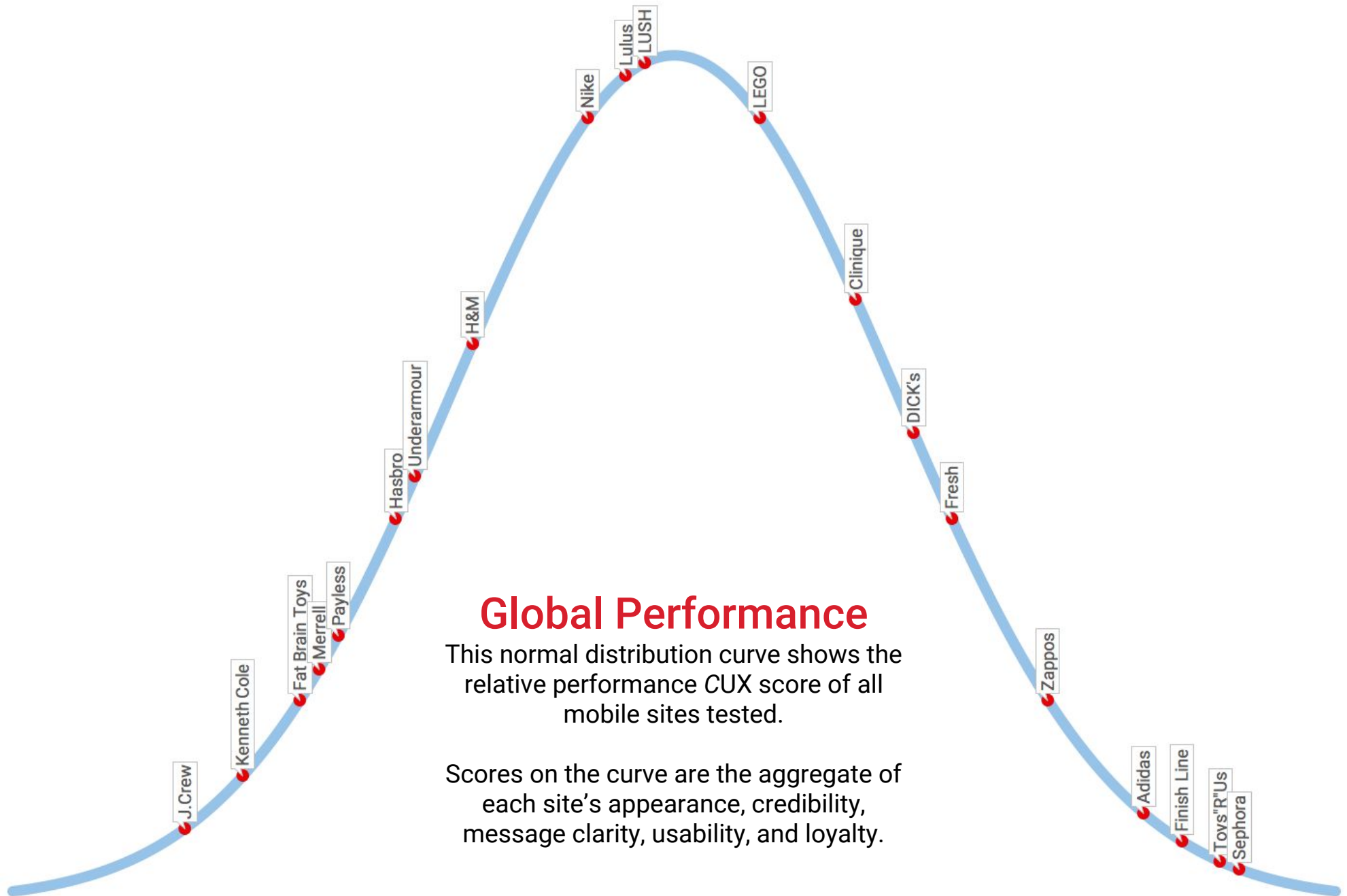# What Works Best Right Now[2018]

Conversion-Focused UX [CUX] Guidelines for Mobile Ecommerce

67 user-testing and custom research-derived guidelines all related to optimizing mobile ecommerce websites for higher conversions.

Bonus - **CUX benchmarking of 20 mobile ecommerce sites**

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Global Performance

This normal distribution curve shows the relative performance *CUX* score of all mobile sites tested.

Scores on the curve are the aggregate of each site's appearance, credibility, message clarity, usability, and loyalty.

LUSH
Lulus
Nike
LEGO
Clinique
H&M
DICK's
Underarmour
Hasbro
Fresh
Payless
Fat Brain Toys
Merrell
Zappos
Kenneth Cole
Adidas
Finish Line
Tovs"R"Us
J.Crew
Sephora

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Authors - Ben Labay, Maddie Sidoff, Peep Laja

Version 1.2 (check for updates)

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Executive Summary

This report provides conversion-focused UX insights for web designers, optimizers, business owners, entrepreneurs, product managers, digital marketers, and all other professionals interested in maintaining high-quality, modern mobile ecommerce websites.

The report shares 67 user-testing and custom research-derived guidelines all related to optimizing mobile ecommerce sites for a higher conversion rate. We organize the guidelines into sections related to the mobile ecommerce experience with special emphasis on homepage and sitewide guidelines that are organized into four main dimensions: appearance, message clarity, credibility, and usability. Examples of mobile sites adhering to and/or violating the guidelines are provided. Some guidelines are straightforward and do not require examples.

Complementary to the guidelines, we conducted a benchmarking study for 5 major commerce industries. 4 sites were tested within each industry, for a total of 20 sites studied. These sites are used as the guideline examples throughout the report. A condensed guideline checklist is also included.

Best practices & guidelines are starting points: It's not what you should end up with, but it's where you should start your optimization. Also, keep in mind that these are the *current* best practices. Trends are always changing, wins are always perishable. We recommend considering the guidelines of this benchmarking study with your specific website in mind.

Report Highlights:

1. **Conversion focused -** The guidelines are tagged under a 'conversion heuristic' mental model and categorized as Friction, Distraction and Focus, Motivation, and Clarity
2. **Includes quantitative metrics** for user perceptions of website quality under the dimensions of Appearance, Clarity (Value Prop), Credibility (Trust), Loyalty, and Usability
3. **mobile ecommerce subvertical benchmarking** - We quantify user perception differences among 4 sites for 5 commerce industries (clothing & apparel, beauty, sporting goods, footwear, and toys)

Introduction » Background

Remember the old marketing adage, "half the money I spend on advertising is wasted; the trouble is, I don't know which half"? Well, it's the same with best practices. They work for half the websites (or mobile sites), and you don't know which half your website belongs to.

Blindly copying and implementing "best practices" isn't intelligent nor is it resourceful. You're essentially using somebody else's solution to their problems for your (likely different) problems.

Best practices do have their place – as starting points. When in doubt about how to solve a particular design issue, draw from the experience of others and from usability research. Use these insights to form design hypotheses. The rest of your design choices should be driven by data.

It's critical to understand that there is no single best layout for a product page or checkout page. And, there are unlimited ways to execute a checkout page using the exact same principles. There's always a lot of room for interpretation as to how an idea should be implemented, and you need a great designer to pull it off.

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Introduction »
Our Goal With This Mobile Report

Remember, not all best practices are created equally. They're mere starting points. The goal of this guideline report is to provide a go-to reference for researched-backed mobile site best practices —or 'guidelines' as we'll call them— *for what is working right now.*

Further, we didn't want these guidelines to be the simple results of qualitative user testing. Our goal is to expand current knowledge and to validate best practices with quantitative data on how users *actually* perceive a mobile site in the specific dimensions of appearance, clarity, credibility, and usability. In other words, we want to benchmark the UX experience across the sites we do user testing on. This will allow each guideline to be placed into a perspective: not just on what a few people say they were frustrated with or enjoyed about a site, but also into a statistical model of how users perceived their experience.

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Introduction » Our Goal With This Report » How it helps you improve your mobile ecommerce sales

This report provides conversion-focused UX insights for people responsible for a mobile site's bottom line results: digital marketers, product managers, web designers, optimizers, entrepreneurs, product managers, and the like.

The report shares 67 user testing and custom research-derived guidelines for optimizing mobile websites, for a better customer experience and higher conversion rates.

These guidelines help you to:

- Know what website elements and practices affect the conversion heuristics of **Clarity, Friction, Motivation, Distraction** and **Focus**
- See how the websites studied implement guidelines to affect user perceptions of their site's **Appearance, Clarity, Credibility, Loyalty,** & **Usability**
- Learn how different mobile sites compare to one another within and among 6 major commerce industries
- Check your mobile website against our research-backed & conversion-focused list of best practice guidelines
- Get our top AB testing ideas to start with on your own site

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Introduction »

Research Summary

This report is the product of hundreds of hours of planning, recruiting, testing, analyzing, writing, and production. Here's a summary of the major sources of data that contribute to the findings. (***See methods appendix at the end of this report for more details***)

The foundation of the data used to inform this report involved our own client and industry research by the in-house research team at the CXL Institute and extensive remote user testing for 20 mobile ecommerce websites performed in two ways:

- The first method was with remote user testing with the tool TryMyUI, where we recruited 10 users to think aloud while performing tasks and answering questions about their experience (for all 20 mobile sites). We recorded the screen and voice of test participants as they used the site in their natural environment. (See method appendix at the end of this report for more details)
- The second major round of testing involved remote testing of all 20 mobile sites. Tasks, questions, and responses were recorded without screen or voice recordings. A much larger panel of participants (compared to the think aloud user-testing) completed task milestone objectives in these tests. Additionally, we utilized a recently developed —yet highly-vetted and standardized— questionnaire with psychometrically-validated metrics. The questionnaire allows us to quantify and benchmark user experiences for the dimensions of usability, clarity, credibility, loyalty, and appearance.

Introduction » Research Summary »
UX Benchmarking - Quantitative Insights

As a major component of this user-testing based report, we corroborate qualitative data from the user-testing with quantitative data from the standardized questionnaire on user perceptions of mobile website quality.

The features & benefits of this UX benchmarking approach:

- **Conversion Focused:** Developed with a UX dimension quantifying user perceptions of a mobile site's value proposition, or why to buy from a site compared to its competition.
- **Quantitative**: Based on 100+ user datapoints for each site.
- **Generalizable and Transferable**: It can describe the quality of any mobile website - so can be used for competitive benchmarking and is ideal for relative context, understand how scores relate to each other when measuring before and after a design change, or compared to a competitor.
- **Multidimensional**: This approach includes the main components for measuring user experience and the general quality of a website.
- **Standardized, Normalized, and Benchmarked**: It has been developed through extensive testing on a massive user-testing database (see the [peer-reviewed paper](#) on its foundation). The metrics produced for any one mobile site can be compared relatively to its competition *and* relative to itself if retested after website changes.
- **Repeatable:** Benchmarking is ideal for quantifying a baseline for comparison against mobile site design changes.
- **Ideal for Competitive Benchmarking**: Quickly and reliably know how your mobile website is perceived (in dimensions of appearance, clarity, usability, and credibility) relative to the competition. Comparisons against multiple sites reveal what's working —and not working— to make inspired, hypothesis-driven design decisions.
- **Ideal alongside User-Testing Results**: 5-10 user sessions provide qualitative, open-ended responses about UX dimensions, ultimately providing actionable direction for design improvements.

Introduction » Research Summary »
UX Benchmarking - Quantitative Insights

The UX benchmark metric is adapted from the [SUPR-Q: a comprehensive measure of the quality of the website user experience](#). Published in 2015 in the [Journal of Usability Statistics](#), Jeff Sauro presents this new standardized survey metric that has four subcomponents to measure perceptions of a website's usability, credibility, appearance and loyalty. We modified this metric by adding an additional subcomponent, clarity. Website clarity, or specifically, clarity of the value proposition a website offers on its homepage, is a primary driver for customer motivations and thus extremely important to conversion rates and general customer perceptions.

The five subcomponents and their associated survey questions presented in a likert-scale format
(strongly disagree - strongly agree):

USABILITY
This website is easy to use.
It is easy to navigate within the website.

CREDIBILITY (Trust)
I feel comfortable purchasing from this website.
I feel confident conducting business with this website.

LOYALTY
How likely are you to recommend this website to a friend or colleague?
I will likely visit this website in the future.

APPEARANCE
I found the website to be attractive.
The website has a clean and simple presentation.

CLARITY (our additional question, not part of SUPR-Q)
I clearly understand why I should buy from this website instead of its competitors.

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Introduction » Research Summary »
UX Benchmarking - Quantitative Insights

With the data from the survey questions across participants, we calculate percentile ranking for each mobile website on all five UX dimensions (appearance, clarity, credibility, loyalty, and usability) plus a global metric. We also calculated metrics for each industry (beauty, clothing & apparel, footwear, sports, and toys). The figures below are example visualizations of the data.

Standalone rank figure

Percentile Rank - In this case, 43rd percentile, meaning out of full database of websites ranked, 57% rank higher

43rd
Percentile
*C*UX - Global

*C*UX dimension - indication of global metric or subcomponent (appearance, clarity, credibility, loyalty, usability)

Competitive rank figure

Normalized curve of all websites ranked across all industries. Each site is plotted relative to one another based upon the standard deviation of all sites in the sample. This curve evenly distributes sites along the x-axis in balance

swansonvitamin (41st)
gnc (59th)
vitaminshoppe (78th)
vitacost (84th)
bodybuilding (92nd)
fitnessfirst (11th)

CUX - Global

*C*UX dimension - indication of global metric or subcomponent (appearance, clarity, credibility, loyalty, usability)

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Introduction »
How to Use This Report

First - Best practices & guidelines are starting points: it's not what you should end up with, but it's where you should start your optimization. You should be at least as good as these guidelines.

Also keep in mind that these are the current best practices. What used to work 2 years ago might not work anymore. Tactic fatigue is real. People, web technologies and marketing trends are always changing, wins are always perishable.

We recommend considering these guidelines, but also considering how your specific website fits into (or differentiates from) this benchmarking study. You can apply these guidelines on your mobile site right away, although we recommend testing them. The guidelines won't apply in every case and there are likely unlimited ways to execute many of them, correctly or incorrectly.

Thus, the report is intended to be a benchmark list of user experience recommendations to consider as a foundation for a testing program. The real process of conversion optimization and user experience improvement comes after these low-hanging fruits.

Introduction »
How to Use This Report

This usability report has two primary components:

1. ACTIONABLE GUIDELINES based on user testing and custom research. Homepage & Sitewide guidelines can be categorized by four main areas of a mobile site: appearance, message clarity, credibility, and usability. Other sections are organized by relevant site component.

2. *CUX* COMPETITIVE BENCHMARKING from the results of our custom user perception survey - the benchmarking provides quantitative data to rank mobile websites UX generally (CUX Global) and within the UX subcomponents (Appearance, Message Clarity, Credibility, Loyalty, and Usability), and also serves to illustrate guideline adherence and provide examples throughout the report.

Appearance

Guideline #1
Guideline #2
Guideline #3
Guideline #4
Guideline #5
Guideline #6
and so on…

Clarity

Guideline #21
Guideline #22
Guideline #23
Guideline #24
Guideline #25
Guideline #26
and so on…

Credibility

Guideline #38
Guideline #39
Guideline #40
Guideline #41
Guideline #42
Guideline #43
and so on…

Usability

Guideline #51
Guideline #52
Guideline #53
Guideline #54
Guideline #55
Guideline #56
and so on…

Example: Clothing&Apparel - website 1 (www.Gap.com)

Standalone benchmark example - website 1
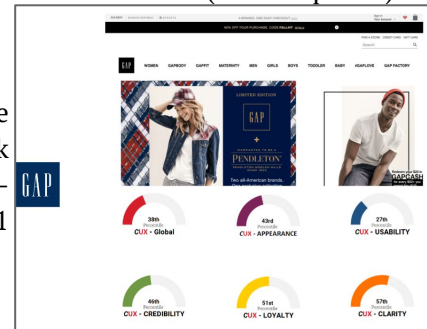
Example: Clothing&Apparel - CUX Appearance Dimension
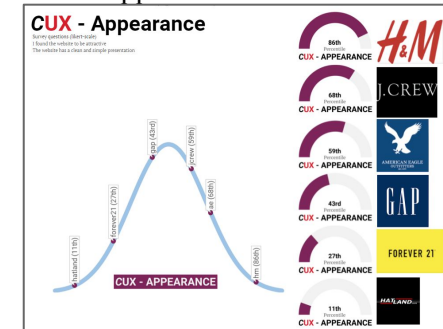
Competitive benchmark example – CUX Dimension of Appearance

Introduction > How to Use This Report >
Guideline Grouping Categories

We've organized and tagged the following guidelines to help create a mental model for how to group, apply, and generally think about usability best practices through a conversion optimization lens. This categorization comes from our modified list of the SUPR-Q survey (described above) and is the foundation of the guideline organization.

1. UX Dimension

There are four dimensions categories used for guideline grouping on the Homepage & Sitewide section:

- **Appearance** - General appearance and feel of a website
- **Usability** - Ease of use of a website
- **Credibility** - Trust and confidence in purchasing from a site
- **Clarity** - How clearly does a website communicate the value to purchase from them and not a competitor

2. Site Component

Used to organized guidelines within sections other than Homepage & Sitewide and within each UX dimension described above, we group the guidelines into subcategories. The subcategories are relative to common website components or UX principles. Examples include but are not limited to:

- **Mobile UX**
- **Mobile UX - Interaction**
- **Navigation & Search**
- **Filters & Sorting**
- **Lists & Products**
- **Ads & Popups**

3. Conversion Heuristic

To help place each guideline into a mental model of conversion optimization theory we tag each guideline with a 'Conversion Heuristic':

- **Motivation** - User-centric factors which speak to the desire or need to purchase
- **Clarity** - The coherence of messaging and copy
- **Friction** - Usability and trust factors, including mental and user-interface factors
- **Distraction & Focus** - Elements that sidetrack a user's attention from the goal of the page

*C*UX Mobile Guideline Sections

Mobile Ecommerce Guideline Sections

- Mobile UX
- Mobile UX - Interaction
- Navigation & Search
- Filters & Sorting
- Lists & Products
- Forms & Buttons
- Ads & Popups

Mobile Guidelines (Continued)

Mobile UX

1. If possible, design your mobile site first (before designing the desktop site)
2. Automatically redirect mobile users to mobile site, and have all pages mobile optimized
3. Maintain consistent design across platforms to create a smooth user experience
4. When designing your mobile site, use analytics to decide which devices to prioritize
5. Test mobile versions of your site
6. Make layouts are flexible and fluid
7. Create separate URLs in order to maintain consistency when not using responsive design
8. Use "viewport meta tag" to fit pages to mobile screens
9. When beginning mobile design, determine the "core" of your website
10. Use simple forms and input fields
11. Use large font size
12. Include a "desktop version" link
13. Allow users to continue tasks on different devices
14. Consider adding "microcopy" to header icons for commonly used path
15. Images should adjust correctly when switching between portrait and landscape view

Mobile UX > Interaction

16. All icons should be clickable
17. Design sliders with touch screen in mind
18. Avoid auto-rotating carousels
19. Use "native technologies" whenever possible
20. Support correct use of native back button
21. Support both pinch and double-tap zoom functions to zoom into product pictures
22. Product pictures should be high resolution to complement zoom actions
23. Use slideover onscreen filtering to give context to search results
24. Navigation design should be responsive, but considered carefully

Navigation and Search

25. Use the word "MENU" instead of or in addition to the hamburger icon
26. The search bar should be the most prominent feature of the top menu
27. Search results should be relevant
28. Navigation menu should follow conventional placement, and should dropdown or slideover

Mobile Guidelines (Continued)

Navigation and Search (Continued)

29.   Avoid multi-level navigation whenever possible, keep menus short and clear
30.   Consider testing a sticky navigation bar
31.   Provide clear breadcrumbs when on product page for navigation and clear 'exit strategies'
32.   During search, autosuggest various categories and subcategories where products can be found

Filters and Sorting

33.   Offer universal and category-specific filters
34.   Filters should be applied immediately (without having to tap an 'apply' button)
35.   Appropriately label and position the sorting and filtering features
36.   If there are many filters (6 or more) consider using a lightbox or full-screen filtering

Lists and Products

37.   Use visual cues to indicate where to click
38.   List items should contain only the most relevant information
39.   Display multiple product thumbnails on the product list
40.   Each product list item should take up about one-third of the screen
41.   Use "load more" scrolling on product lists
42.   Product page content should all be on one single page
43.   Showcase recommended products and/or compatible accessories and keep visually separate from primary products
44.   Each product list item should take up about one-third of the screen
45.   Call to actions (CTAs) need to be front and center
46.   Facilitate easy scanning by "chunking" blocks of copy

Forms and Buttons

47.   Minimize mobile form length
48.   Clickable elements (like buttons) should have strong affordance
49.   Forms and buttons need to be large enough to click with proper spacing between links
50.   Clickable element hit areas should not overlap
51.   Use a progress bar for users to track form completion
52.   Form field labels should be top aligned
53.   Form field input should remain entirely visible while being filled out
54.   Use a visual calendar for date form field (instead of user having to type date in)

Mobile Guidelines (Continued)

Forms and Buttons

55. Provide dropdown boxes whenever possible
56. Do not use native dropdowns, implement custom dropdowns
57. Offer optimized keyboards
58. If using an accordion style design, allow users to collapse it using the back button
59. Make sure 'add-to-cart' cta isn't confused with the cart icon - (product pages should have 2 buttons)
60. Auto-populate form fields based on IP address
61. Consider replacing long dropdowns with auto-complete fields
62. Design and enforce a 'click-to-call' button on key areas where customers might have FUDs
63. Use real-time validation for presenting form errors
64. Auto advance through form fields as users complete a form field entries

Ads and Popups

65. Keep popups to a minimum
66. Avoid placing ads in the middle of content, this can create false floors/bottoms
67. If you must display ads, display them intelligently

Guideline Chapter:
Mobile UX

Guideline #1. If possible, design your mobile site first (before designing the desktop site)

Mobile first design (also known as progressive enhancement) is the foundation that supports solid responsive design. While designing a mobile site first is neither fun nor easy, it's usually the smartest way to begin designing your site. Here's why:

Mobile devices have more restrictions than any other platform. Small screens, low bandwidth, the list goes on. By starting from the ground up with the mobile site, complications that come with graceful degradation (like functions that don't translate across platforms or unwanted data that slows load times) are avoided.

Next, a usable mobile site must be clean, intuitive, and fast. This requirement forces designers to really think about why users are visiting their site, and more specifically, which content and functions are essential.

A superior user experience on mobile platforms happens when the user finds everything they're looking for and nothing more. As an added bonus, developing a clear framework for prioritized content makes the workload for designing the desktop site that much lighter.

Site Component - Mobile UX
Conversion Heuristic - Friction

User quote - When asked what frustrated them the most about the Merrell mobile site: "*The mobile site was awful, everything was too big and my screen was cluttered. I have a smartphone with a large screen so there's no excuse for such a poor interface. The site also crashed on me once.*"

Guideline #2. Automatically redirect mobile users to mobile site, and have all pages mobile optimized

62% of smartphone users have made a purchase on their phone within the last 6 months (*source*). And, as of March 2017, 80% of the top sites on Alexa were adaptive (*source*). This means that people shop on their phones, and they expect it to be easy. If you're not keeping up, you're falling behind.

To 'keep up', your site should be optimized for all devices. Provide a pleasant mobile experience by offering an optimized, mobile site. The most common way to do this is through an adaptive or responsive site.

Responsive design is a development method that adjusts a web page to the screen it's being viewed on. The content of the page is designed to automatically adapt to different screens: laptops, smartphones, tablets, etc. All core content and functionalities remain available across platforms (screens) with this approach.

When a site is responsive, the same URL corresponds with all platforms. This means that users don't have to wait to be redirected to the mobile URL (or hunt down the mobile URL on their own). Less load time = better user experience. Additionally, all SEO goes to one URL.

An adaptive site is a bit like a responsive site. However, instead of one layout adjusting for any screen size, there are multiple layouts. The site detects which device is being used and displays the corresponding layout. More on responsive vs adaptive design here.

If you have a responsive or adaptive site, accomplishing this guideline is easy. Just be sure to test your site across platforms to make sure everything looks right.

If your site isn't responsive or adaptive, you can automatically redirect users via a few different methods. A few ways to do this.

Again, check all pages on your site to make sure they're mobile optimized. The key here is to offer an optimal user experience for mobile users.
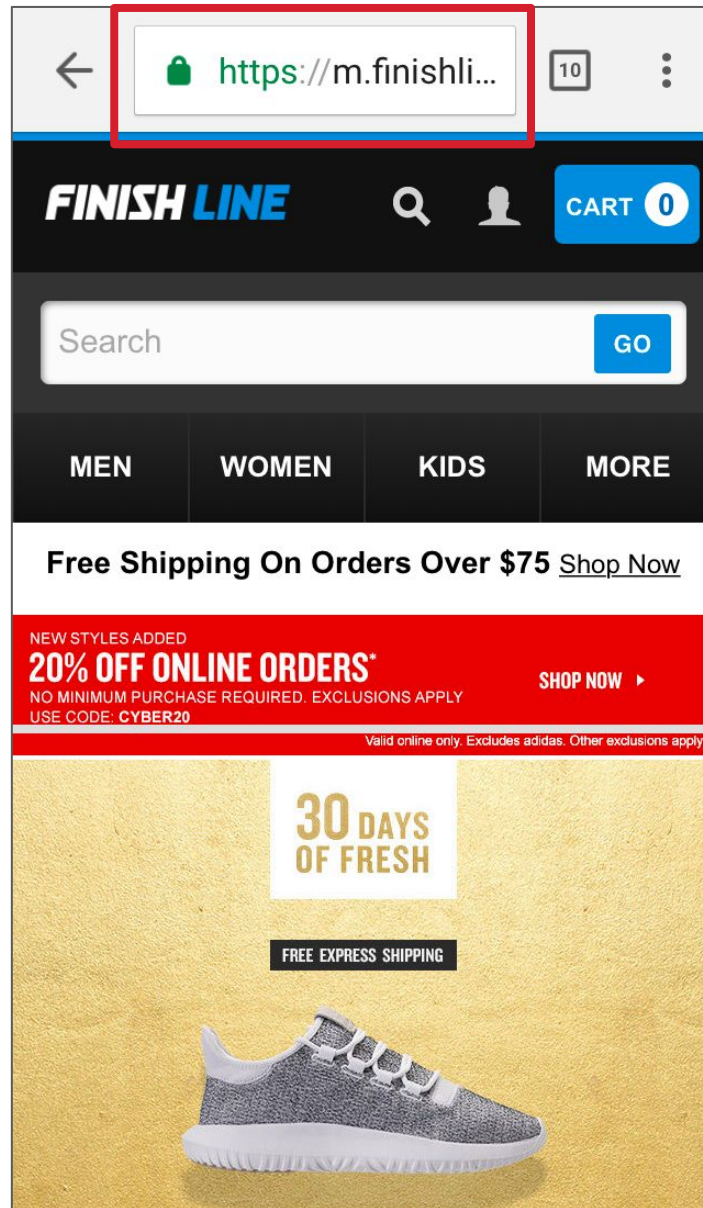
Site Component - Mobile UX
Conversion Heuristic - Friction

Adherence example

Finish Line: When mobile users type 'finishline.com' into the URL bar, they're automatically redirected to the mobile site ('m.finishline.com')

89th Percentile
CUX - USABILITY

Guideline #3 Maintain consistent design across platforms to create a smooth user experience

Maintaining consistency and standards is one of the most important ways to ensure usability. Maintaining consistency and standards means that users interact with the same visuals, patterns, and flows across platforms. In other words, consistency means that a user can access an application on a mobile device or a desktop browser and still have the same experience.

Differences in screen size may require different layouts, but in a consistently designed experience, users will recognize familiar functionalities.

Some companies make the mistake of treating the web and mobile versions of their applications as different products. Approaching platforms in this way can create a lack of consistency, which in turn causes a poor user experience, and a potential misunderstanding of the company's brand.

To avoid this problem, we recommend the following:

- **Visual identity**: use the same colors, appearance, typography, visual elements, illustrations
- **Consistent iconography**: web icons should represent exactly the same functionality as the app icons
- **Wording:** keep the same names for action buttons, links, and menu options
- **Interactions and flow**: ensure that the step-by-step process is the same for each action (e.g. customer checkout)
- **Coordination between designers, developers, and testers:** For each new feature and update, teams should make sure everyone has the same understanding of how each component will be deployed on each platform.

Applying these basic concepts ensures that users feel comfortable using both web and mobile services without difficulty.

Site Component - Mobile UX
Conversion Heuristic - Friction

Adherence example

Desktop version

Mobile version

Lulus: Notice the consistent design, and that essential elements like the navigation bar, live chat remain high on the page's visual hierarchy. This is an example of adaptive design, as some elements (promotions on the top banner) are missing from the mobile site.

85th Percentile

CUX - APPEARANCE
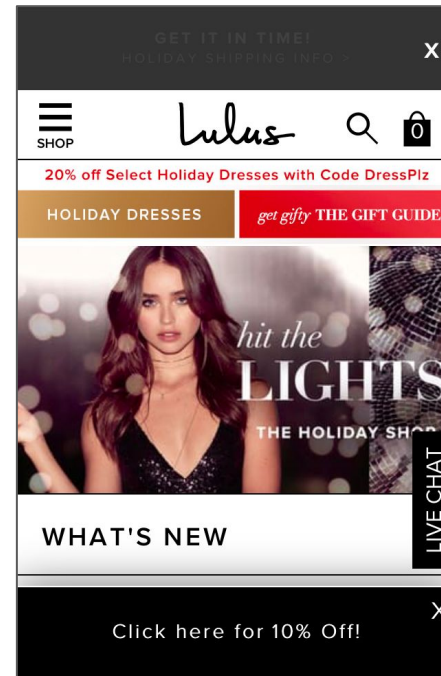
Adherence example

Guideline #3. Maintain consistent design across platforms to create a smooth user experience

Desktop version
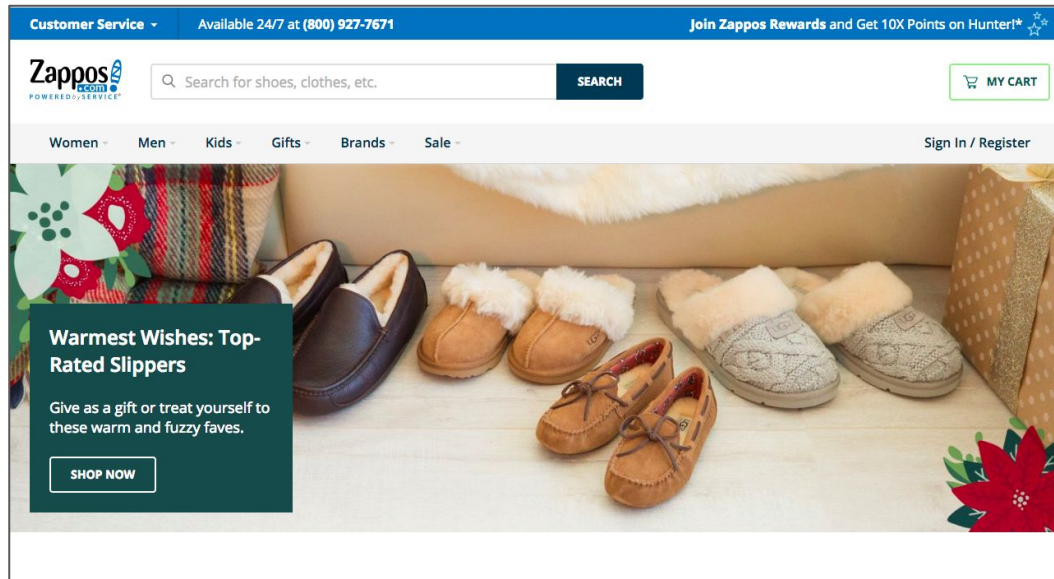
Zappos: This design also seems to be adaptive, as a few items on the navigation bar (Gifts, Brands, and Sale) aren't displayed on the mobile screen.

Mobile version

86th Percentile
CUX - APPEARANCE
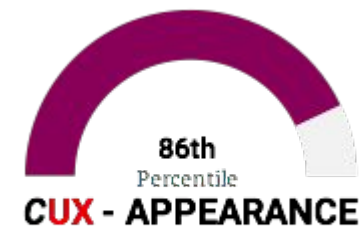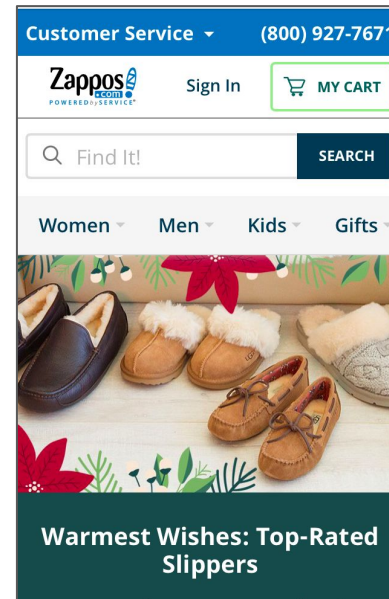
Guideline #4 When designing your mobile site, use analytics to decide which devices to prioritize

According to Smart Insights Company, more and more users are accessing websites through their mobile devices. .

Tools like Google Analytics allow an efficient and quick way to find out exactly how a user accessed a website. Google Analytics provides companies with answers to the questions below:

- How many people visited a website iOS? Android?
- What percentage of overall website visitors are using devices with a low resolution screen?
- Is there a difference in the number of page visits from users using Android 7.0 and Android 5.2 ?
- How long are iOS mobile visitors spending on the website compared to Android users?
- What type of connection was used? Wifi or data?

Data like this is extraordinarily valuable for product strategy, as it allows companies to identify and focus on their target audience. Companies can create products that suit the real needs of their users.

For example: A company has a web app with lots of images, content, and a listing that requires scrolling on the screen. After realizing that most users access the site but only stay for a few seconds before exiting, the company can check the profile of the devices that have accessed their site. When they find that most users have visited their site via devices with small screens and low resolutions, the company can conclude that people are leaving the site because they have had a poor user experience. In other words, the user's expectations were not met by the site when it was accessed on a mobile device.

To summarize: the more we know about our users, the more we can ensure an accessible, efficient, and enjoyable product.

Site Component - Mobile UX
Conversion Heuristic - Distraction and Focus

Guideline #5 Test mobile versions of your site

The best way to learn how your website works on a mobile device is to test it. The following tools can help you test your site:

1. **Google's Mobile-Friendly:** This is a simple tool. All you need to do is enter the URL of the website you want to check. Google will generate a "user-friendly" review. A review might say:

   "*This page is easy to use on a mobile device.*"

   OR

   "*Page is not mobile friendly--this page can be difficult to use on a mobile device. Fix the following 4 issues: 1. Text too small to read 2. Viewport not set 3. Clickable elements too close together 4. Uses incompatible plugins* "

2. **Mobiletest.me**: Enter the URL of the website you want to check, and select the device and operational system.

   From there, you can have a complete view of your website on any mobile device. A complete view allows you to fix errors before your launch. Basic problems can be solved before a poor user experience is created. For example:

   - **Website Layout:** You can ensure that icons, menus, and tables are displayed at the right viewing size for each device
   - **Forms and Data Entry:** Avoid making users type in tiny text fields or press small buttons with their fingers (the well-known "fat-finger syndrome")

Site Component - Mobile UX
Conversion Heuristic - Distraction and Focus

User quote - When asked how they would improve the Fat Brain Toys mobile site: "*Fix the overlapping text at the top where it said toy experts are standing by. There was $3.99 overlapping that text*"

User quote - When asked what frustrated them the most about the Sephora mobile site: "*This website would not open on my mobile phone. I tested other websites to make sure it wasn't an internet problem, but other websites opened.*"

User quote - When asked what frustrated them the most about the Lulus mobile site: "*It's laggy as heck! Buttons aren't working well either*"

Guideline #6 Make layouts are flexible and fluid

In today's market, there are many different kinds of resolutions and screen patterns for which designers must design.

Many devices have varying densities. From low density screens up to the highest density (4k), here are some common ways in which density is described:

- ldpi (low density)
- mdpi (medium density)
- hdpi (high density)
- xhdpi (extra-high density)
- xxhdpi (extra-extra-high density)
- xxxhdpi (extra-extra-extra-high density)

Below is a simple dictionary of terms related to density (according to Google):

A. **Resolution**: The total number of physical pixels on a screen.
B. **Density-Independent Pixel (DP)**: A virtual pixel unit that is used to define a UI layout. A DP expresses layout dimensions or position in a density-independent way. The DP is equivalent to 1 physical pixel on a 160 dpi screen, which is the baseline density assumed by a system on a "medium" density screen.
C. **Screen Size**: The actual physical size, measured as the screen's diagonal.
D. **Screen Density:** The quantity of pixels within a physical area of the screen; usually referred to as dpi (dots per inch). For example, a "low" density screen has fewer pixels within a given physical area, compared to a "normal" or "high" density screen.

These concepts can be applied to the development of a mobile app. They ensure that interfaces are easily adaptable across devices. This is what is known as a "fluid interface." In other words, a fluid interface is one in which dimensions are defined in percentage. This way, designers use percentages to determine how much space each part of the interfaces takes up on the screen. This method makes interfaces easily adaptable to different devices.

Site Component - Mobile UX
Conversion Heuristic - Friction

User quote - When asked what frustrated them the most about the Fresh mobile site: "*I kept clicking things that weren't properly formatted for mobile and I would have to start all over*"

User quote - When asked what frustrated them the most about the LUSH mobile site: "*The whole website didn't fit on my phone's screen. I had to scroll over to the right to see the button for my cart*"

Guideline #7. Create separate URLs in order to maintain consistency when not using responsive design

When designing the user interface (UI) of a website, designers must think about how content will be displayed and accessed by people using devices with varying proportions and resolutions. Oftentimes the proportion and layout of visual elements differs greatly from original design specifications. When websites are not designed to fit on multiple devices, they are not "responsive."

According to Nielsen/Norman Group, the concept of responsive design is "a development technique that detects the client type and dynamically adjusts the layout of a site according to the size of the screen on which it is displayed. Thus, the same content may be displayed in a three-column format on a desktop, two-column format on a tablet, and one-column format on a smartphone."

Unresponsive design can create a variety of usability problems: font sizes are incorrect, buttons are not clickable, etc.

Not all teams can create responsive web applications. However, there are established techniques for developers and designers looking for responsive web design workarounds. One main techniques is to generate URLs that automatically recognize (through HTML tags) the type of device being used. When the device is detected, content can be displayed in the optimal way:

Examples of generated URLs:

- www.website.com (desktop access)
- m.website.com (mobile access)
- www.website.com (lighter version with basic HTML) (feature phone access)

Site Component - Mobile UX
Conversion Heuristic -
Distraction and Focus

Guideline #8 Use "viewport meta tag" to fit pages to mobile screens

According to Google, "a viewport controls how a web page is displayed on a mobile device." In other words, if designers don't take the viewport into account, the visual interface will appear as if it were designed for a desktop screen. When this happens, the system will attempt to adapt the screen for mobile use, but this does not usually work. In most cases, this causes images to be distorted and creates a poor user experience. By applying the viewport, designers can control the display mode and create excellent user experiences across devices.

Site Component - Mobile UX
Conversion Heuristic -
Distraction and Focus

How to Take the Viewport Into Account

There is a CSS tag called "viewport meta tag," which is included in the CSS Device Adaptation specification.

This tag has the following syntax: *<meta name = "viewport" content = "width = device-width, initial-scale = 1">* , where :

content = width=device-width: instructs the page to match the screen's width in device independent pixels. This parameter allows content to be organized in order to fit to different screen sizes.

initial-scale=1: some browsers (including iOS and Windows Phone) will keep the page's width constant when rotating to landscape mode, and zoom rather than reflow to fill the screen. When setting the initial-scale = 1 attribute, we are telling the browser to maintain the 1: 1 pixel ratio so that the image and content are displayed correctly, regardless of device and screen orientation (portrait / landscape).
Browsers will expand the viewport width if necessary to render the screen at the requested scale.

Note: Keep in mind that when the viewport is not specified and a site is accessed via a mobile device, the browser tries to render the content to fit a screen that is 800x1024 pixels (which isn't the default for most screens).

Guideline #9. When beginning mobile design, determine the "core" of your website

When designing mobile versions of websites, designers must develop a strategy to ensure that the site's main features will be presented in a simple and clear way. In other words, mobile websites should allow complete functionality.

It is perhaps most important to make sure the "call to action" is highly visible in any website designed for mobile devices.

But how do you determine which other features should be included when you have a complex site and limited screen size? Think about your system's "core." What are the main pillars of your website? Which features make up the main actions of your website? Which features are minor, but allow for easy use (e.g. search fields, filters, etc.)?

Here is an example of apply the "core" concept to a food delivery ecommerce site: The mobile version must contain these "pillars" that make the site's main function possible:

1. Login / Registration (simple)
2. Product Search
3. Product Listing
4. Add to cart
5. Checkout

Even though the desktop version has more features, the most essential ones can be filtered to create a mobile product that meets user needs. This strategy also limits the possibility that the user will feel overwhelmed by too many options on a small screen.

Site Component - Mobile UX
Conversion Heuristic - Motivation

User quote - When asked what frustrated them the most about the Adidas mobile site: "*This site was too cluttered with large pictures of people wearing adidas clothing, and the menu had no listings of products, just vague references to gender or other non descriptive words*"

User quote - When asked what frustrated them the most about the Sephora mobile site: "*For a mobile website, I felt it was a bit too cluttered. A lot going on while trying to navigate on my phone*"

Adherence example
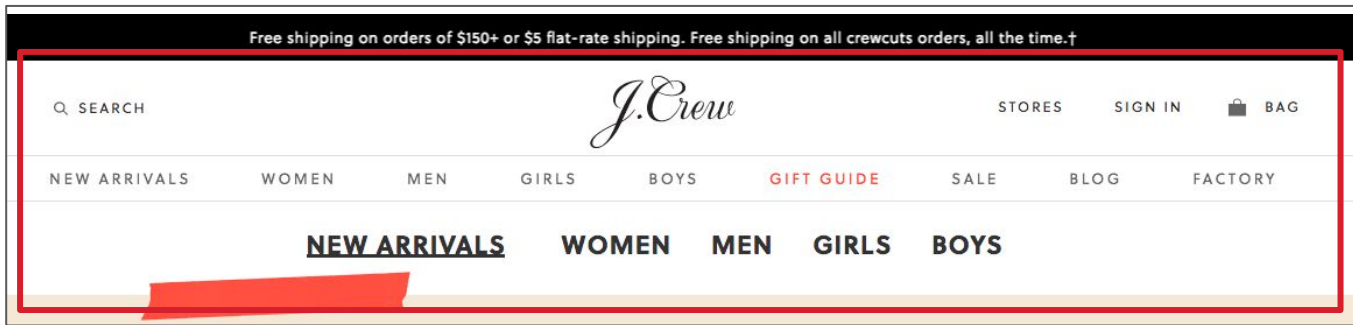
Desktop version

J.Crew: Only the most essential tools are shown on the mobile site: menu, search, sign in, and bag (mobile version a). The Menu hamburger button leads to less essential elements that are found on the desktop homepage (mobile version b).
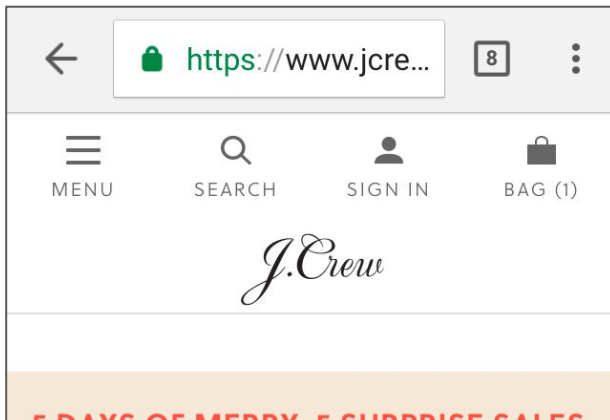
Mobile version a

Mobile version b

14th Percentile
CUX - USABILITY
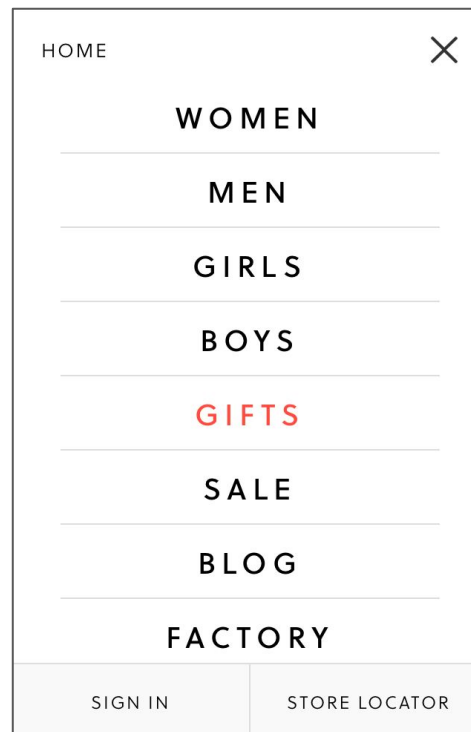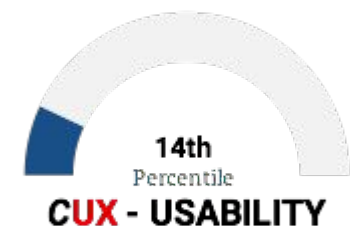
Guideline #10 Use simple forms and input fields

Most web services have some form of user registration or profile creation. Forms and text fields are typically used to collect this information.

For users who access sites through mobile devices, these forms can be a huge problem if they are not well designed. The longer and more complex the form, the more difficult it is for users to input information.

How Can Forms Be Optimized for Mobile Devices?

- Make only the most essential information mandatory for the user to input. If too many fields of entry are mandatory, it is likely that the user will abandon the registration process.
- Avoid splitting information into too many fields. For example, First Name / Last Name can be condensed into simply Name
- Ensure the numeric keyboard is automatically activated when numerical input is required.
- Make error messages short and concise
- Fill fields as quickly and efficiently as possible. For example, when requesting a user's address, try to locate as much information via GPS as possible in order to pre-fill fields (always leaving the option to edit, of course).

Applying these basic concepts will ensure an efficient and positive mobile user experience. Most importantly, applying these principles will limit the chance that users will abandon their interactions on your site.

Conversion Heuristic - Friction
UX Dimension - Usability

User quote - When asked what they liked most about the Adidas mobile site: *"number pad for digit entry made checkout easier"*

Adherence example

DICK'S Sporting Goods: This form only asks for essential information, and allows users to checkout as guests. The numeric keyboard is automatically displayed when entering a ZIP code or phone number (middle photo), and detectable errors are shown in real time (right photo). It could be better with just one field for the billing name.

72nd Percentile
CUX - USABILITY
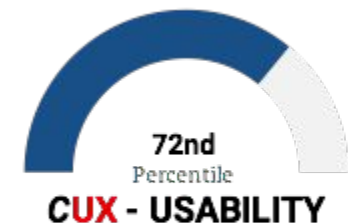
Guideline #11 Use large font size

The way users / customers interact with a website is essential to the success of any service. This means that the website's content must be displayed in a way that is easy for users to access.

Can you imagine a user trying to access an ecommerce site and not understanding the results of a search because the font is too small? Can you imagine what this situation means for this site's conversion rate (i.e. the number of people who will stop buying a product because they can not read the specifications)?

Font size is one of the most important components of designing a mobile site. It is the key accessibility factor for people of different levels of visual ability.

Paying attention to details like font size can make a huge difference in how diverse groups of users will access your product/service.

Site Component - Mobile UX
Conversion Heuristic - Friction

Adherence example

Adidas: Two different shots from the Adidas mobile site, both showing font that is large and readable. Some copy, such as the "FREE SHIPPING AND FREE RETURNS" header on the right screengrab, could benefit from being larger but is easily legible on a screen as it is.

92nd
Percentile
CUX - APPEARANCE
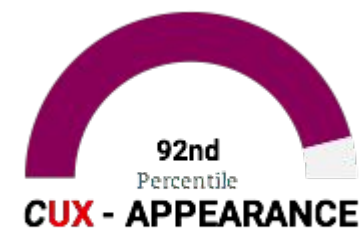
Guideline #12. Include a "desktop version" link

The content of a website viewed on a mobile device is sometimes different than the content viewed on a desktop. This is a common occurrence.

In order to ensure simplicity and ease of use, design menus, listings, and navigations that make scrolling on a small screen easy.

Sometimes designing for smaller screens means features that users expect and rely on have to be removed. In order to keep your users happy, allow users to have a shortcut to the desktop version of the website.

Pro Tip: Language Matters

However, offering access to the "full version," may cause users to infer that the mobile version is inefficient and inferior, which can decrease engagement and access. Instead of describing the "full version," use the phrase **"desktop version."** "Desktop version" is a more accurate description, and it will not decrease user trust in your mobile product.

"Desktop version" allows users to naturally infer that the mobile version provides access to the main features, and the desktop version makes the more complex interactions available. Overall, providing two different versions of your website on a mobile device increases clarity and user freedom.

Site Component - Mobile UX
Conversion Heuristic - Friction

Adherence example

Merrell: Offers a link to view the desktop site in the footer

20th
Percentile
CUX - USABILITY
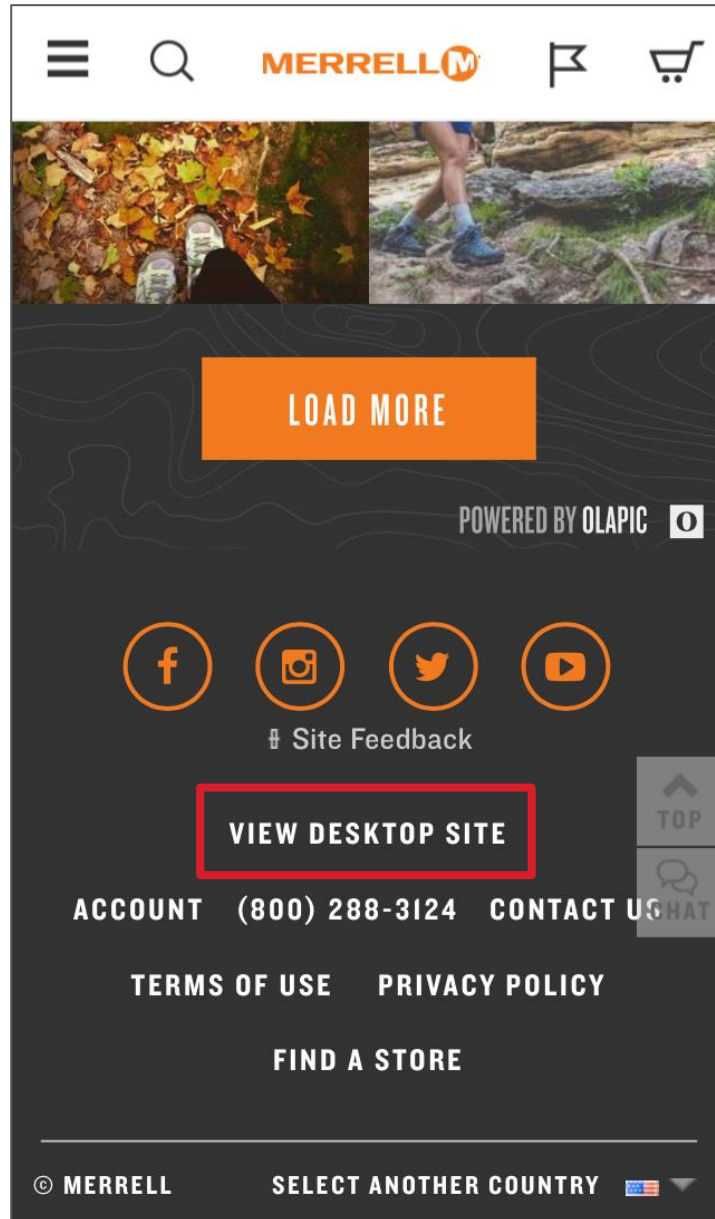
Guideline #13. Allow users to continue tasks on different devices

User-centered design allows designers to "put themselves into the shoes" of others in order to understand user needs, pain points, and goals.

Data synchronization (wish lists, tasks, calendars, etc.) allows users to start a task on one device and finish on another. Most people have multiple devices, so they they can start a task on one device and finalize on another. This is a design component that prioritizes the users' needs--since most people have multiple devices, being able to complete tasks across devices is a great benefit to the user.

Now imagine a scenario in which this feature is not enabled: An ecommerce site allows users to add items to their shopping cart on a desktop, but when the user attempts to complete the checkout process on their phone, their data is lost. This creates a poor user experience and will create a high bounce rate for your product.

Allowing the user to "communicate" with all their devices makes everything more efficient. Other examples of data synchronization across devices are:

- Apple Notes
- Google Keep
- List of "Favorites," "Wish List," and "Add to Cart" on ecommerce sites

All of these services and features provide flexibility, freedom and efficiency for users. These are important components of good usability practices.

Site Component - Mobile UX
Conversion Heuristic - Friction

Adherence example
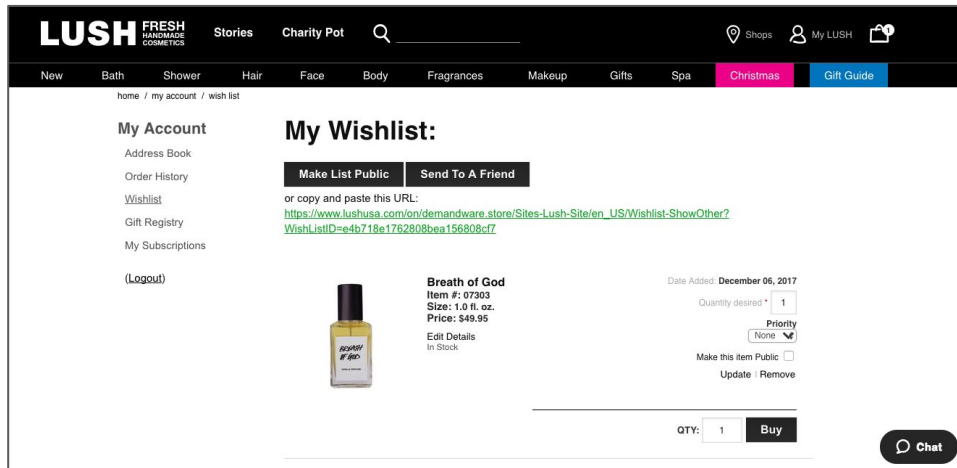
Desktop

LUSH: All users' items remain visible in their wishlists and carts, regardless of which device is used (when logged into their LUSH account).

Mobile

35th
Percentile
CUX - USABILITY
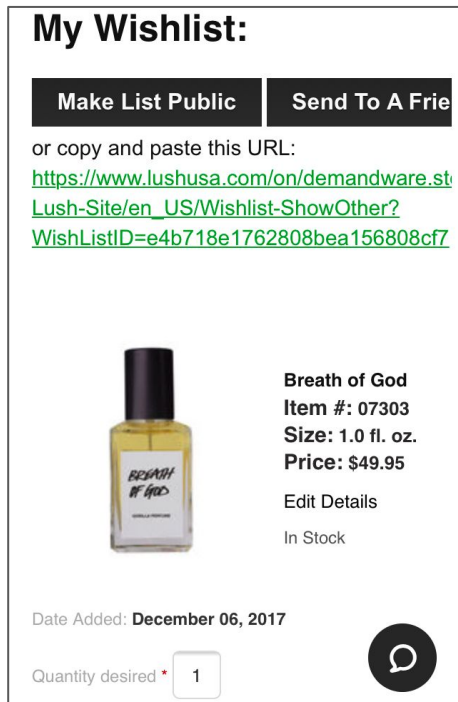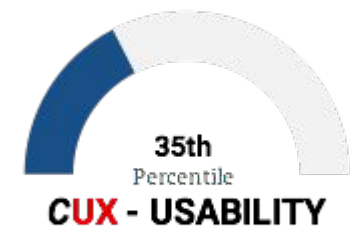
Guideline #14. Consider adding "microcopy" to header icons for commonly used path

A recent study conducted by the Nielsen/Norman Group showed that confusing menus with unclear options has an overall negative impact on the user experience of a digital product. One confusing menu experience can cause users to distrust menu functionalities in general.

Site Component - Mobile UX
Conversion Heuristic -
Clarity

Why Does This Happen?

Each web interface has different characteristics depending on the device being used. Generally, the menus and navigation used for mobile websites do not work well for desktop/laptop projects.

An example of this is the navigation drawer (also known as the "hamburger"--the standard menu interface created by Google). In the beginning, the hamburger was a good way of navigating menus with many items. But as Google's design guidelines changed, so did their approach to designing menus. Now, instead of hamburgers, Google designs bottom navigation bars. Bottom navigation bars clearly display icons, making it easier to explore and switch between top-level views in a single tap.

Bottom navigation is for mobile use. The same effect can be designed for a desktop by employing "side navigation."

Similarly, when we adapt a desktop website for mobile use, the main icons and actions must be clearly displayed, in order to ensure they are used in a quick and efficient way. Examples of components that should be easy for users to access are search options (magnifying glass icon), menus, filters and sorting.

Putting these principles into practice allows users to migrate from one environment to another without encountering difficulties or errors.

Adherence example

Guideline #13. Consider adding "microcopy" to header icons for commonly used path

Zappos: Microcopy is added in addition to, or replacing, icons on this homepage.
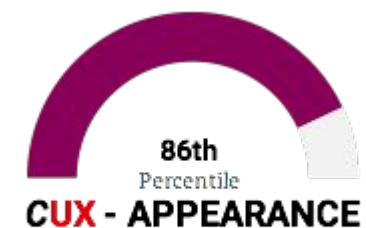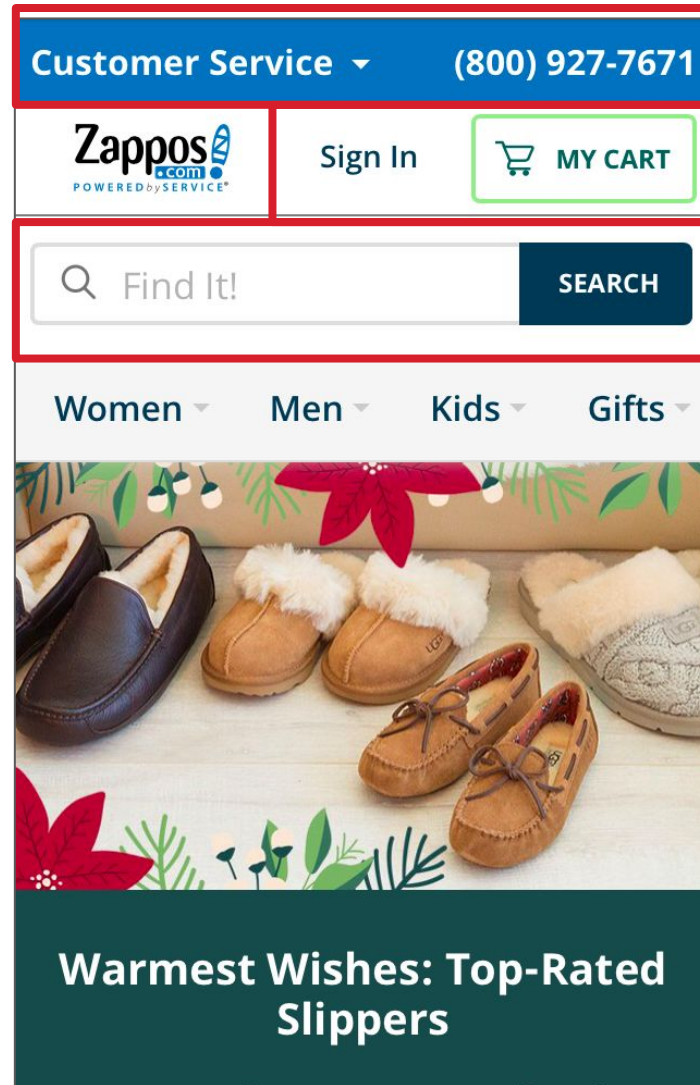
86th
Percentile
CUX - APPEARANCE

Adherence example

Guideline #13. Consider adding "microcopy" to header icons for commonly used path

J. Crew: Microcopy complements each icon here
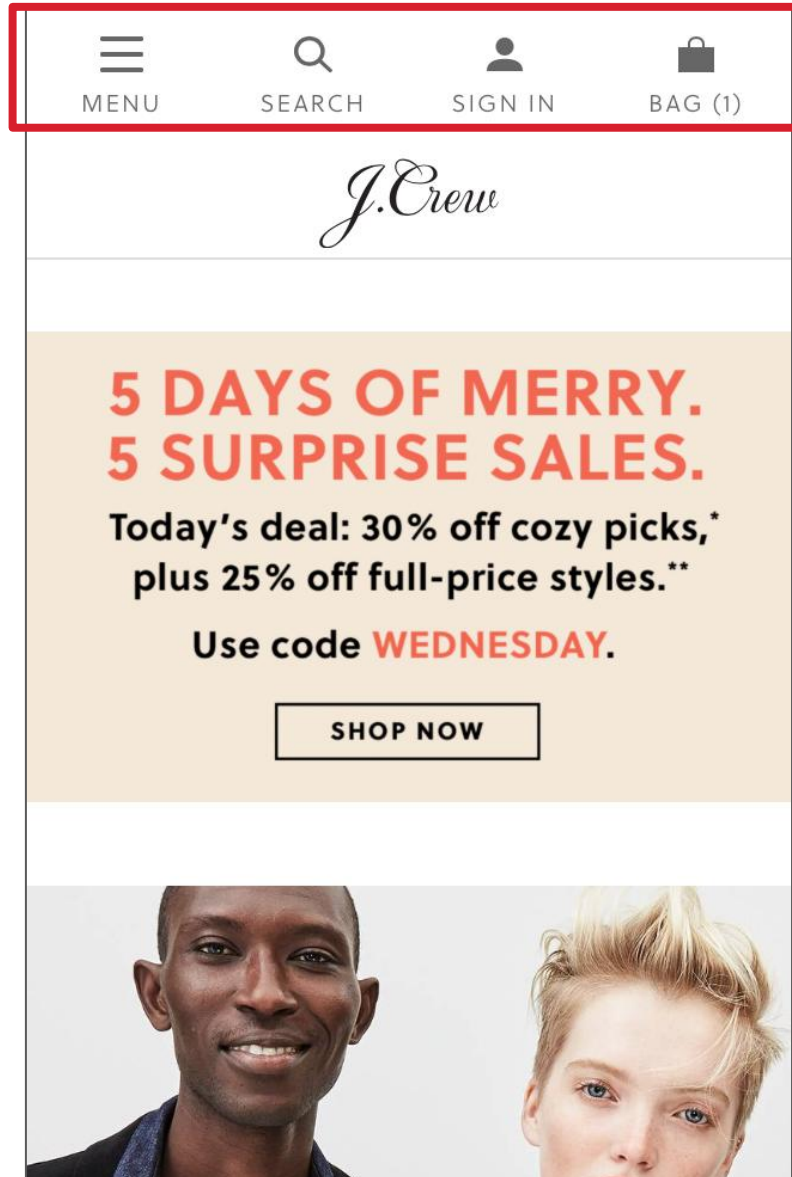
Guideline #15. Images should adjust correctly when switching between portrait and landscape view

Imagine this situation: "*A user accesses a website using his smartphone in portrait mode, and the content is displayed normally. Then the user tilts his smartphone into landscape mode and realizes that all the content (buttons/ menus / images) are distorted or even half-cropped.*"

Why would this occur? Because the interface was not designed to fit landscape orientation.

For the concept of "orientation design" to become clearer, we can cite a few examples:

- **YouTube's mobile application**: In portrait mode there are the video drivers, account information and some additional features. When viewing in landscape mode, the video drivers are reset on screen to provide a better experience. Most importantly, the main focus--watching a video--is not impaired.
- **Skype mobile application:** The icons change position when the screen moves from portrait to landscape. The icons are adapted to ensure a better use of space and information organization.

When designing an application for mobile devices, it is important to research the target audience and usage behavior (environment, type of connection, period of use) to ensure that the interface and orientation are designed to meet users' needs.

Site Component - Mobile UX
Conversion Heuristic - Friction

User quote - When asked what frustrated them the most about the Fresh mobile site: "*When I looked at the website using landscape mode, I only saw lip exfoliator under lip care and I thought I was on the wrong page for lipsticks*"

User quote - When asked what frustrated them the most about the Kenneth Cole mobile site: "*Works in portrait but not when I turn my phone (buttons disappear)*"

Adherence example

Guideline #14. Images should adjust correctly when switching between portrait and landscape view
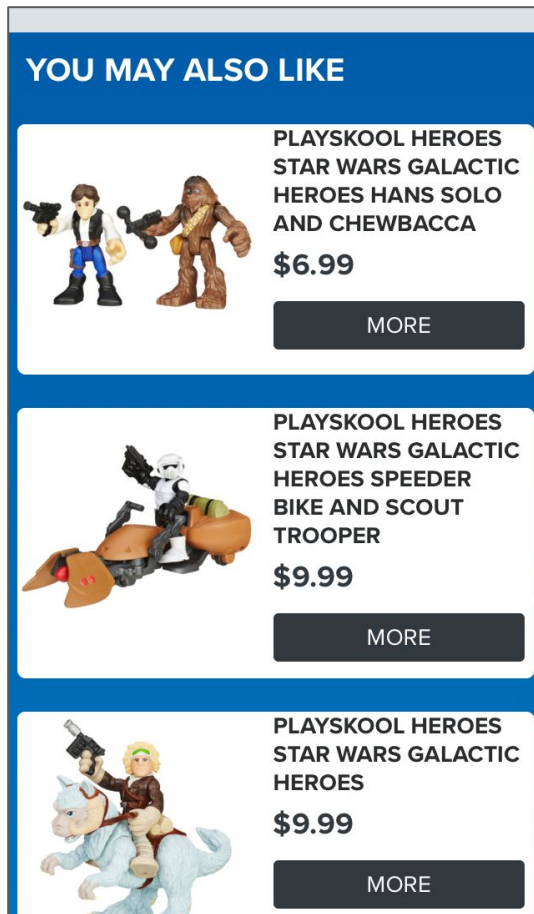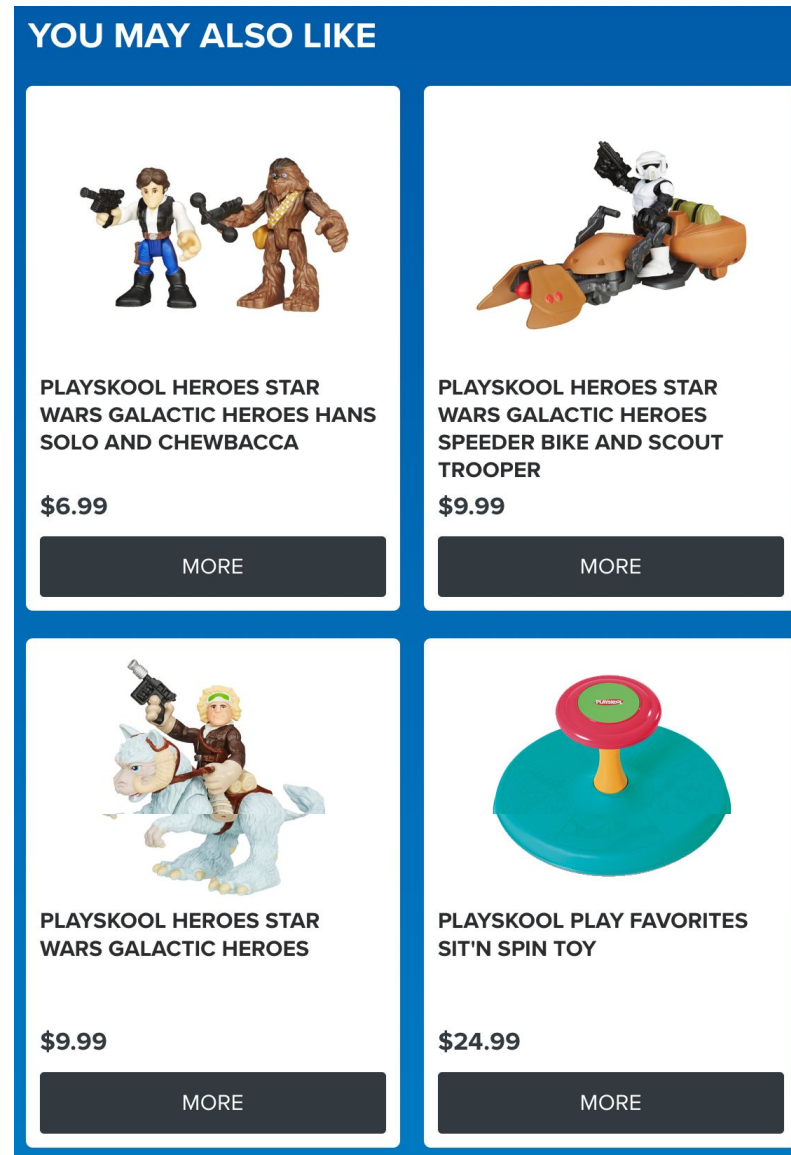
Hasbro: When switched to landscape mode, the images and buttons on this page reformat for a better user experience.

YOU MAY ALSO LIKE

PLAYSKOOL HEROES STAR WARS GALACTIC HEROES HANS SOLO AND CHEWBACCA

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Portrait mode

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MORE

PLAYSKOOL PLAY FAVORITES SIT'N SPIN TOY

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MORE

Landscape mode

34th
Percentile
CUX - APPEARANCE

Guideline Chapter:
Mobile UX - Interaction

Guideline #16. **All icons should be clickable**

Maintaining "**consistency and standards**" is one of the most important factors of usability. According to Jakob Nielsen, maintaining consistency and standards means that "*users should not have to wonder whether different words, situations, or actions mean the same thing.*" In other words, this means that interface elements must be easily interpreted without difficulty or misunderstanding by the user.

For example, an application that has several icons--some of which are purely visual, and some of which are actionable--is not consistent. In this example, the icons have the same look, style, and color, but they do not always do the same thing. When a user expects an icon to be clickable and it isn't, this causes frustration. It makes users think that the site is not working or that they are doing something wrong.

People tend to relate visual elements to the same patterns of behavior. Ensure consistency by meeting the expectations of the user with elements of your site.

Site Component - Mobile UX - Interaction
Conversion Heuristic - Friction

User quote - When asked what they liked most about the Underarmour mobile site: *"The actions did what they were suppose to whenever I tapped on something which made it all the more an enjoyable buying experience"*

Adherence example

DICK's Sporting Goods: All icons are clickable

72nd Percentile

CUX - USABILITY
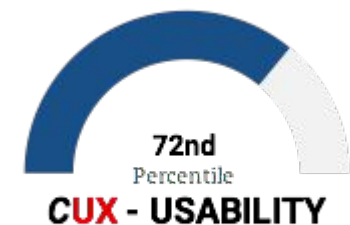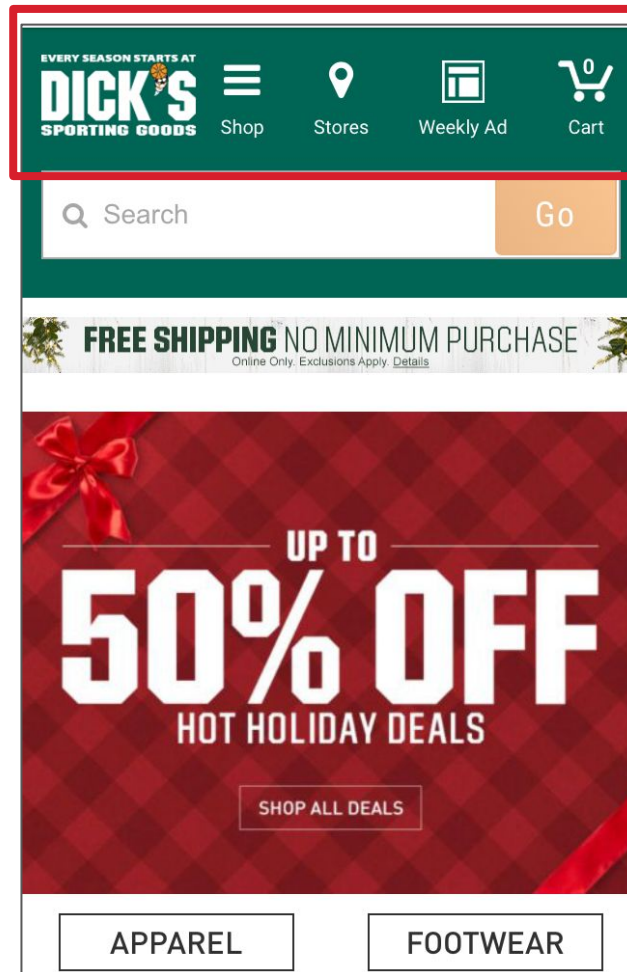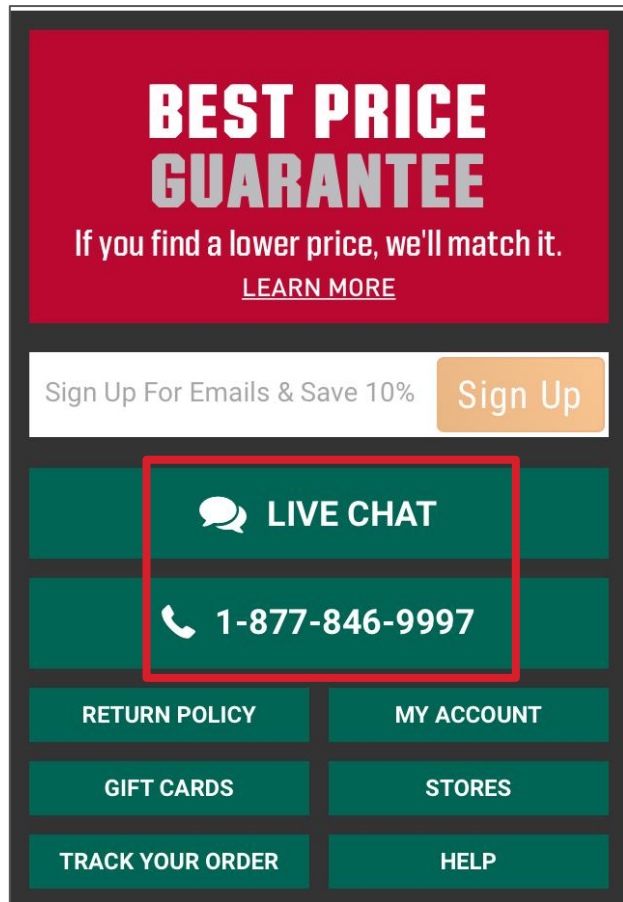
Adherence example

Sephora: All icons are clickable, and each social icon leads to the corresponding social media account.

66th
Percentile
CUX - USABILITY
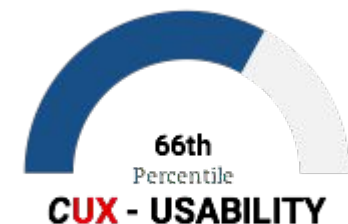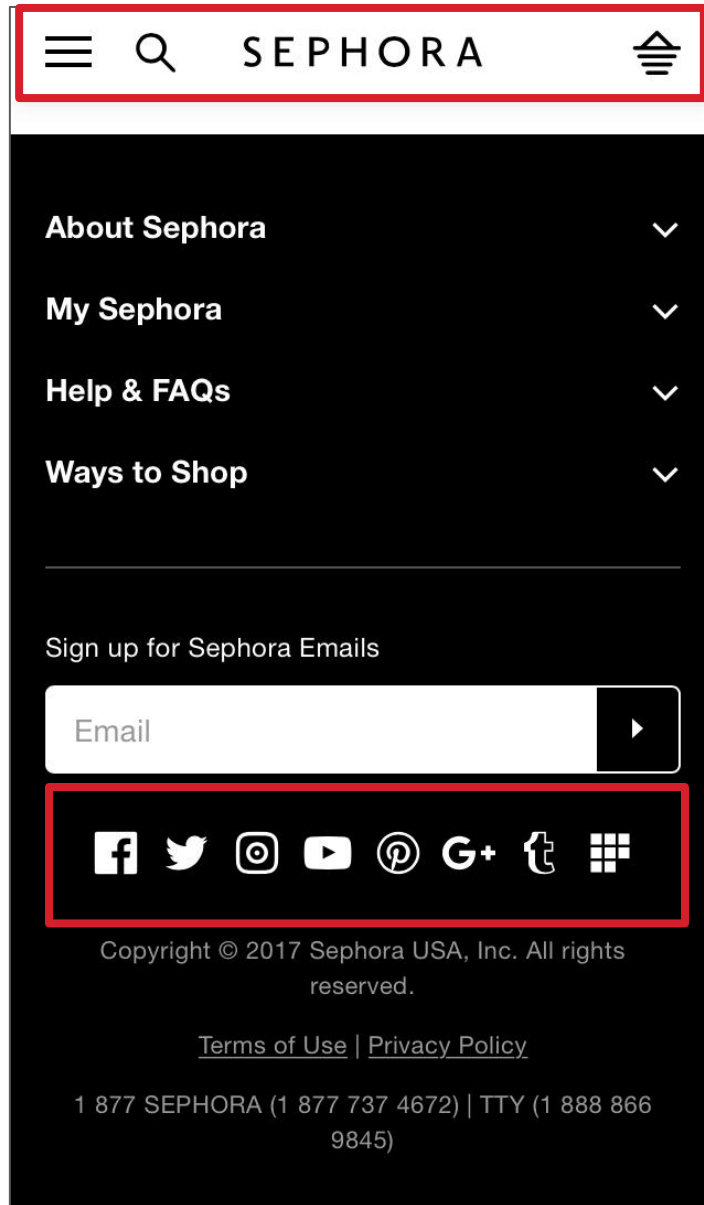
Guideline #17. Design sliders with touch screen in mind

It's common knowledge that smartphones are small and operated with just one hand. Keep in mind the small size of phone screens when designing interface elements on mobile pages: buttons, selectors, icons, etc. Ask yourself specifically how each of these interface elements (and the way they're designed) increases/decreases usability.

A popular interface element is the slider, often found among sites in which the user must select a range of amounts to pay, number of rooms, age, area, and other scales of measurement. Sliders are an intuitive tool: Their appearance clearly indicates their purpose.

Sliders are especially handy for mobile screens. They take up a small amount of space, while completing the often arduous task of narrowing down search results. Using a slider on a tiny screen, however, has its challenges.

Some common issues: The slider moves a bit when you take your finger off the screen. It's difficult to select a precise value. Sliders require a relatively high amount of concentration. Your finger can cover the slider or the labels.

Some common solutions: Consider a "tap" UI rather than "drag and slide" to avoid the slider accidentally shifting. Use sliders when exact values aren't important, or when the range is small (but not smaller than five, use radio buttons for this small of a range). Labels should be displayed above or below the slider, so the user's finger isn't covering it.

Site Component - Mobile UX - Interaction
Conversion Heuristic - Friction

User quote - When asked what frustrated them the most about the Sephora mobile site: "*Was confused when sliding the price bar in filters*" (the labels are positioned under the slider and were likely blocked by the user's finger)

CXL institute

Adherence example
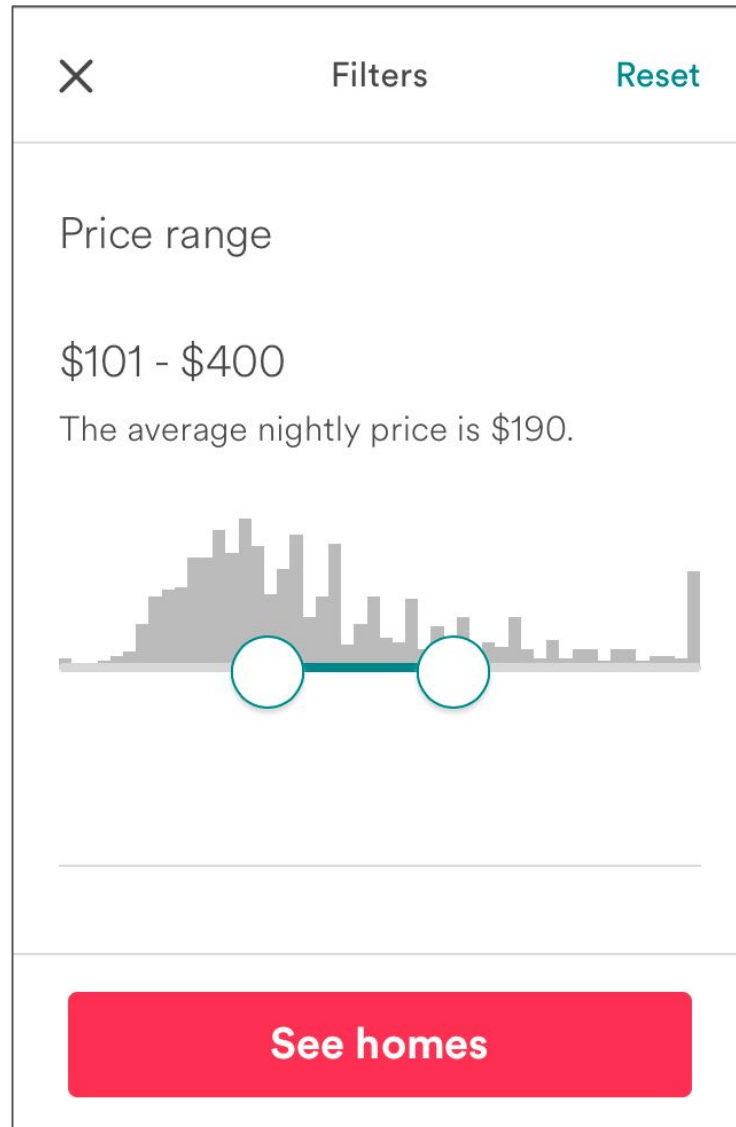
Airbnb: This slider is especially usable as the upper and lower values update in real-time, so users know when they've selected the desired value. The values are shown above the slider in a way that users won't cover them with their fingers while using the slider. Tap UI is also available on this slider.

Note: We used Airbnb for an example here, as the sites we studied did not have any features in which sliders would've been necessary or helpful.

Guideline #18. Avoid auto-rotating carousels

Auto-rotating carousels are trendy in current ecommerce designs, serving as a single alternative to multiple photos. When implementing this trend in mobile design, the effect is largely negative for usability, interaction, and ultimately conversions.

Auto-rotating carousels are just that: automatic. So users have neither knowledge nor control over when the image rotates. They could be in the middle of reading the copy on the image or getting ready to tap the screen, when it rotates. All of a sudden they're confused, frustrated, and on a page where they don't want to be.

A recent study found that only 1% of visitors clicked on the carousel. Considering the large size of an auto-rotating carousel on a small phone screen, it's just not worth the required real estate.

Another known effect of these carousels is banner blindness, which occurs when users mistake graphics (like product pictures or special sales announcements) for advertisements and completely ignore them.

According to a Baymard study, users tend to spend minimal time on a mobile home page. Instead, they quickly navigate elsewhere.

Solution: Replace the auto-rotating carousel with static images.

Site Component - Mobile UX - Interaction
Conversion Heuristic - Distraction and Focus

User quote - When asked what frustrated them the most about the Clinique mobile site: "*The website has too many banners that move and change. Makes navigating on a mobile frustrating*"

User quote - When asked what frustrated them the most about the Fresh mobile site: "*Constant sliding graphics that I had to scroll to exit*"

User quote - When asked what frustrated them the most about the Lulus mobile site: "*The constant photographs changing around made phone slow*"

Guideline #19. Use "native technologies" whenever possible

First, let's clarify the concept of *native technology*.

Simply put, platforms that have their own conventions, symbologies, visual and interaction patterns, such as Android (Google) and iOS (Apple). Think about what an iPhone or Galaxy keyboard looks like. You're picturing the phone's native technology. Native technologies apply to phone apps and mobile websites. The following focuses on the latter.

How is this helpful?
Android and iOS users are familiar with the standardized versions these platforms, such as the position of menus, back buttons, and gestures to perform actions. By implementing native technologies for each of the different platforms, friction decreases and user experience increases.

Each platform has well-defined characteristics in its guidelines, such as:
  Android : menu at the top of the screen/tabs , physical back button, action float button, long press gesture
  iOS: menu at the bottom of the screen, option to return as an interface element, left/right swipe, four- and five-finger gestures

In addition, native systems can use the specific device features such as camera, GPS, contacts, etc, making your site more efficient and able to offer more functionalities and utilities.

Site Component - Mobile UX - Interaction
Conversion Heuristic - Friction

Adherence example

Guideline #19. Use "native technologies" whenever possible

Payless: Both of these screengrabs show Payless' implementation of native iOS technologies, which ultimately increase the usability of the site.
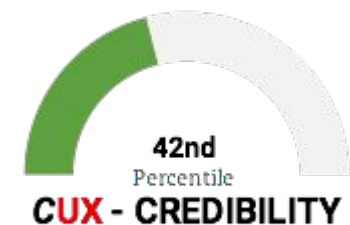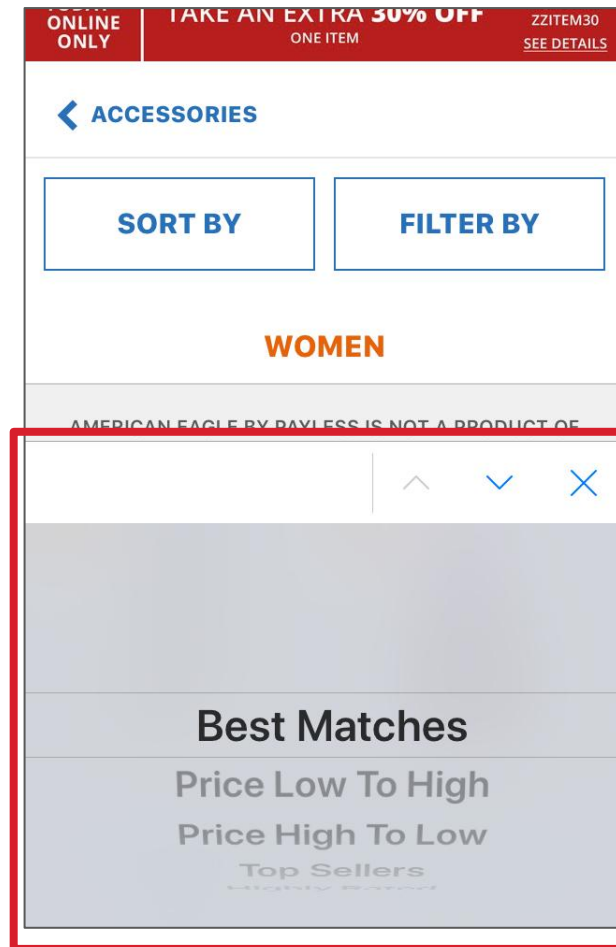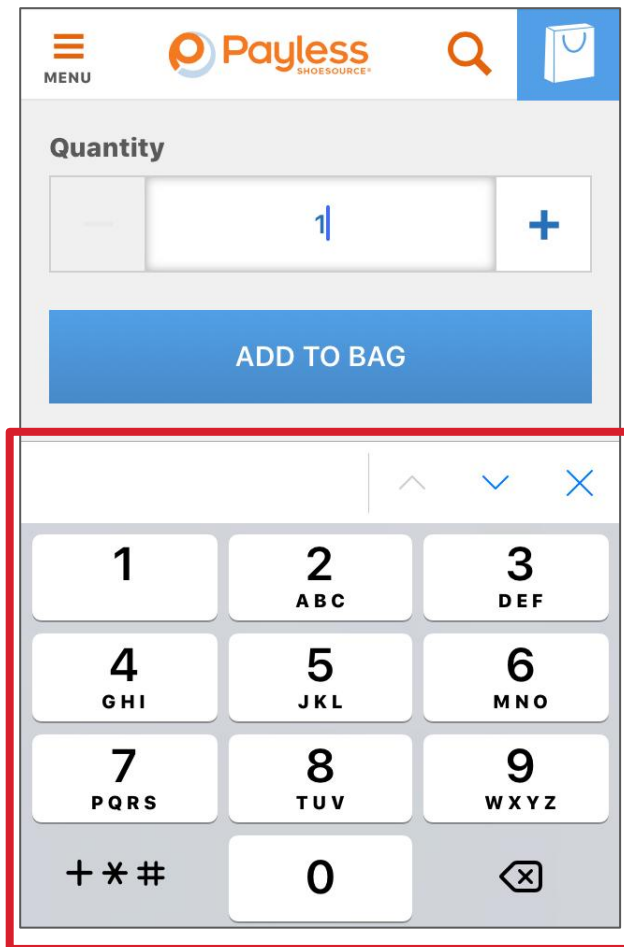
Guideline #20. Support correct use of native back button

The native back button is probably the most used interaction when browsing a mobile site.

In a usability study, participants would sometimes click the native back button over five times in a row to return to a specific page (after browsing several others).

Imagine a user is in the last phase of a 5-stage checkout process. They're getting ready to click the "place order" button when they realize they want to change their shipping address and click the native back button to return to step 3 of the checkout. Unfortunately, the site doesn't support the native back button, and the user is redirected to the site's homepage.

Another example: A user is filling out a form and presses the native back button in hopes of returning to the previous form field- it would be a terrible experience if the already filled data were lost. This happens often.

This dissonance between user expectation and actual outcome can greatly hurt usability, causing the user to abandon a site instead of buying.

To ensure that users receive the outcome they're expecting, incorporate the native back button, and allow them to use it everywhere on the site without compromising any already-entered data.

Site Component - Mobile UX - Interaction
Conversion Heuristic - Friction

User quote - When asked what frustrated them the most about the Fat Brain Toys mobile site: "*It seems like I had to hit the back arrow a couple of times (sometimes) to get back to a prior page and then once I hit it twice and it took me all the way back to the home page*"

User quote - When asked what frustrated them the most about the Hasbro mobile site: "*The back button did not work correctly*"

Adherence example

Guideline #20. Support correct use of native back button

Adidas: Information from previous pages of the checkout process remain intact when a user returns to them by clicking the native back button.
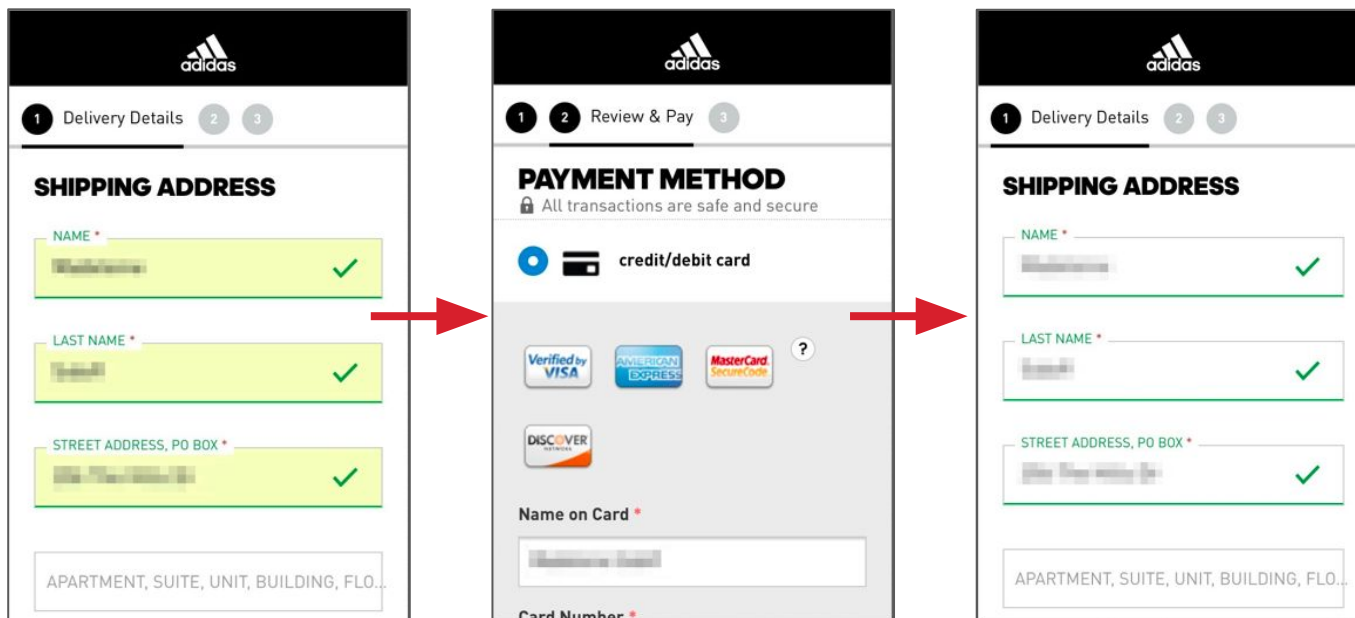
Guideline #21. Support both pinch and double-tap zoom functions to zoom into product pictures

Product pages are just as important as any other page on a mobile site, if not more important. This is a critical stage for making a purchase decision.

Especially on smaller screens, users often try to use known gestures to zoom in on product pictures to verify product authenticity and details. The two predominant gestures for zooming in are to pinch or double-tap the image. Surprisingly, 40% of mobile sites in a recent study don't support zoom interactions on product pictures.

Imagine a potential customer is browsing your site, and a product catches their eye. Upon attempting to learn more about it, they try to zoom in on the product picture but are unable to. They can't see any details of the product. Be it a patterned dress, a laptop, or anything else really, this roadblock leads to site abandonment. Users go on to find a similar - or the exact same - product on a site where they can actually understand exactly what it is they're looking at.

So, allowing users to zoom is essential for getting them to buy. We recommend that you allow both pinch *and* double-tap gestures, not one or the other. There's no convention for when to use double-tap versus pinch yet, and some users may only try one of these gestures before giving up.

It is also beneficial to encourage and remind users that they can zoom in on your pictures. Include a "zoom" icon, +/- tools, or a phrase like "tap to zoom". Some good examples:

Site Component - Mobile UX - Interaction
Conversion Heuristic - Friction

Adherence example

DICK'S Sporting Goods: This pinch icon hovers for several seconds when opening a product page, suggesting that users should pinch the screen to zoom in on the photo. Users are able to both pinch and double-tap to zoom, however.

72nd
Percentile
CUX - USABILITY
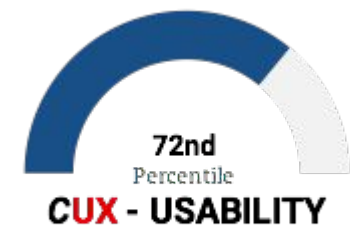
Guideline #22. Product pictures should be high resolution to complement zoom actions

When shopping online, users are unable to hold, touch, and tangibly assess a product like they would in an actual store. Product pictures need to compensate for this significant disadvantage.

Users should be able to perceive all the visual details of a product just by looking at a few photos on a phone screen. Not only should they be able to zoom in on product pictures, but when they zoom in the details of the photo should actually become more clear (rather than becoming grainy).

Take high-quality product pictures, and display them at a high resolution.

Make sure that the images have been imported onto the page properly to maintain resolution on different sizes of screens and platforms (iOS/Android) to prevent pixelation.

To avoid image distortion, display product images in their original aspect ratio.

Site Component - Mobile UX - Interaction
Conversion Heuristic - Clarity

User quote - When asked what they liked most about the J.Crew mobile site: *"Nice large images"*

User quote - When asked what they liked most about the Kenneth Cole mobile site: *"High quality photos"*

User quote - *"I love to have the images changed for each color and zoomed into all the features of the backpacks"*

Adherence example

H&M: Users are able to see the fine details of this sweater when they zoom in.

69th
Percentile
CUX - APPEARANCE
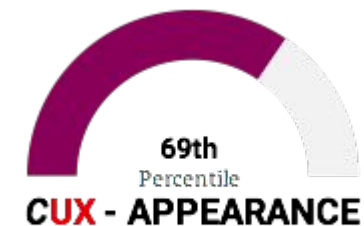
Guideline #23. Use slideover onscreen filtering to give context to search results

Filtering is a great strategy for quickly and easily narrowing down a long list of search results.

However, any tool becomes a barrier when it doesn't work well. Specifically, if a user spends time carefully applying the perfect set of filters only to then see that 0 results match their search, chances are they're *not* going to take the time to remove filters one by one until they get some search results. They're going to jump ship.

This is where slideover onscreen filters come into play. Users can watch their search results narrow down as they apply more filters. They're continuously aware of the products that remain available, no unwanted surprises.

Note: Slideover onscreen filters are not recommended for filters with a lot of data. This can mean many different filters, or many different choices for one filter. For these scenarios, fullscreen filtering works better and allows the user to focus on the task at hand.

Site Component - Mobile UX - Interaction
Conversion Heuristic - Distraction and Focus

Adherence example

Nike: This slideover filtering screen blocks too much of the product list to provide context to the search results, but does make up for this with the "Apply" button that actively updates the number of search results available every time another filter is applied.

44th
Percentile
CUX - USABILITY

Adherence example

Zappos takes the same approach as Nike, but adds the feature next to each possible filter and filter category

Guideline #24. Navigation design should be responsive, but considered carefully

A mobile site's main navigation menu should be a marriage between the desktop navigation design that users expect, and a navigation design that is conducive to shopping on a mobile device.

And, again, a mobile-first design approach here is advantageous. Strong, well-thought out information architecture lays the foundation for good mobile navigation.

A preliminary best practice: *If* you can show the original navigation, show it.

What if you can't do nothing and maintain the desktop navigation design? Consider which of the following designs is most appropriate for the nature of your services/offers:

Multi-level toggle: multiple level dropdown or slideover navigation menu. Good for navigation menus with a lot to offer.
Simple toggle: Use when there are too many menu items to maintain the desktop navigation, but not enough for multi-level toggle to make sense. Again, a dropdown or slideover works well for this design.

This brings us to the contentious issue of the hamburger icon, and whether you should use it.

It's becoming common knowledge that this symbol indicates "there's more here". The icon can lead to multi-level or simple toggle navigation menus, allowing you to show many categories - and even subcategories - without taking up much space at all.

While a helpful go-to tool, it's also extremely ambiguous. If you're considering implementing the hamburger icon, first ask yourself if using a label (like "Menu") in its place, or adding that label next to the icon, would make it less ambiguous.

Site Component - Mobile UX - Interaction
Conversion Heuristic - Friction

Adherence example

Desktop

Mobile

Finishline: The key navigational buttons (men, women, and kids product categories plus the search bar and shopping cart) remain on the mobile page. The less important product categories (sale, fan gear, brands, and gift guide) are moved to a "more" button. The "my account" button is replaced with the conventional account logo to save space. Other navigational buttons on the desktop, like help, gift cards, track your order, store locator, and winner's circle, are removed from the mobile menu altogether.

89th
Percentile
CUX - USABILITY

Guideline Chapter:
Navigation and Search

Guideline #25. Use the word "MENU" instead of or in addition to the hamburger icon

This guideline elaborates on the last point of the previous guideline.

The hamburger icon is present in many apps, mobile sites, and desktop sites.

The big question is this: **Do people *really* not understand this icon?**
If you're reading this, you're probably intimate with web design, and naturally the hamburger icon. Assuming your site visitors are on the same page can be a costly mistake.

In a way, the advantage of this icon is also its disadvantage: It implies many things.

Using the hamburger, you can combine many different, unrelated categories of information in one place while occupying little screen space.

If you're going to use it, include a label like "MENU" next to - or even replacing - it. We tested these variations on a client's site and found both to bring in more revenue that the hamburger icon alone.

Site Component - Navigation and Search
Conversion Heuristic - Clarity

Adherence example

Fat Brain Toys uses the word "menu", a color contrasting red button, and a downward arrow to clearly communicate where the menu is and how it works (as a dropdown).

13th
Percentile
CUX - APPEARANCE

Adherence example

Payless simply adds "MENU" to the hamburger button
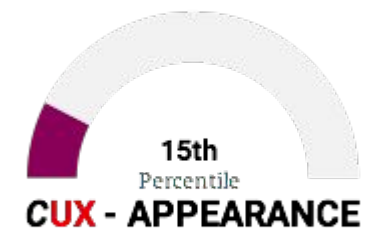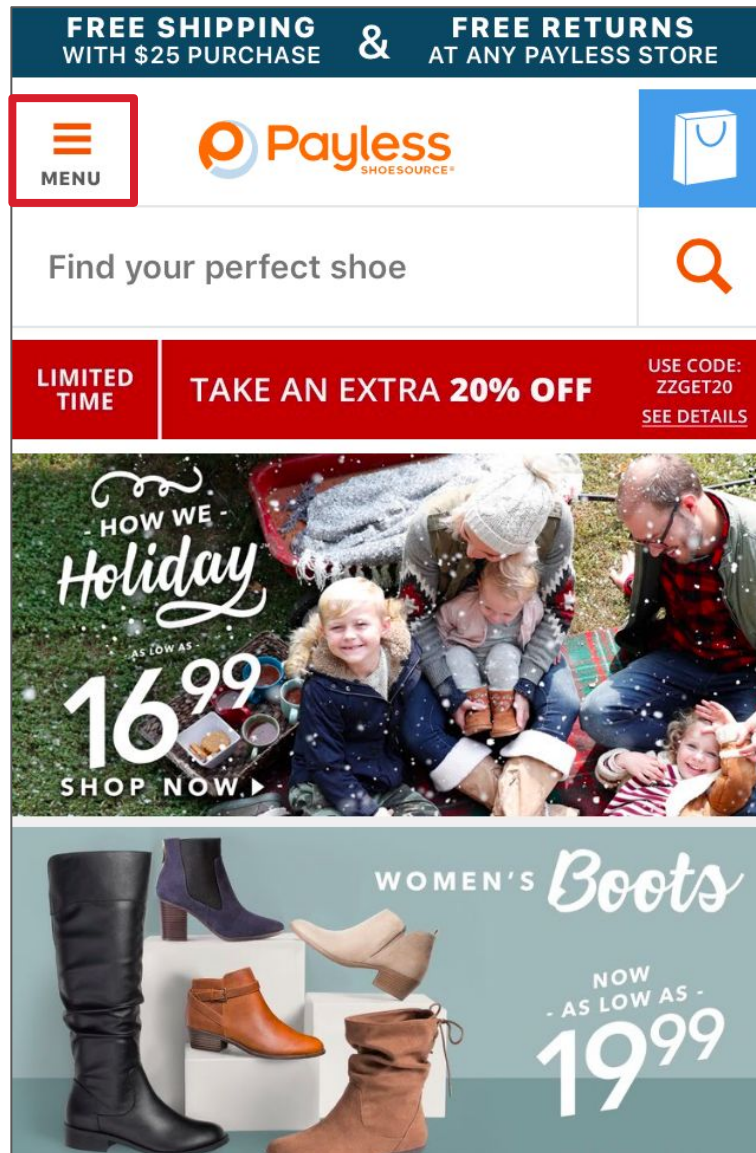
Guideline #26. The search bar should be the most prominent feature of the top menu

By now, we have schemas (mental frameworks) for what's expected on the top menu of a mobile site. The company logo, perhaps some navigation button, but most importantly the search bar.

Of all the features on the top menu, exploring a website is most difficult without the search bar. For this reason, it's imperative that the search function is unmissable. If people can't find it when they need it, they'll undoubtedly abandon the site.

Search bars are especially necessary when navigating a site with lots of content. Imagine trying to find a particular product on Amazon without searching, or finding a blog post without typing in the title.

The search bar can be made prominent in many ways. It can be large, it can color-contrast the menu, and it can include the expected magnifying glass icon.

When designing the search bar, stick with convention. Choose the standard magnifying glass, and place the bar in an expected location (center or top right corner).

Site Component - Navigation and Search
Conversion Heuristic - Friction

User quote - When asked what they would improve on the Fresh mobile site: *"I would put the search box first on the site"*

User quote - When asked what they liked most about the Sephora mobile site: *"It was easy to use the search engine"*

User quote - When asked what they liked most about the Clinique mobile site: *"The search icon was very prominent"*

Adherence example

Zappos: This search bar takes up quite a large amount of space relative to other elements of the menu, and includes the word SEARCH in a color contrasting button along with the conventional magnifying glass icon.

86th Percentile
CUX - APPEARANCE

Adherence example

Payless: This search box also takes up a significant amount of space, includes the magnifying glass, and suggests that it be utilized to 'Find your perfect shoe'.

15th
Percentile
CUX - APPEARANCE
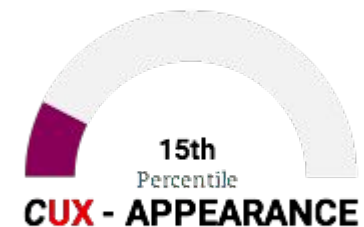
Guideline #27. Search results should be relevant

Users should be able to find what they're looking for, plain and simple. If you don't have what they're looking for, offer something similar. When search results are relevant, conversion rates are higher.

Best practices for relevant search results:

Autosuggest
As a user begins typing their search term, the search engine displays a list of related, "suggested" items below the search box (in real time). This has two advantages. First, users don't have to type out the entire search term, making things just a bit easier. Second, users can get an idea of what your site offers. Not only do you have denim tops, but you also have denim dresses and jackets.

Autocomplete
As a user types their search term, the search engine suggests a way to complete the search term right in the search box. Even reducing cognitive load a little bit by doing something like this will boost conversions.

Correct typos
Typos happen all the time, even more often on mobile devices. The search engine should be capable of identifying said typos, and displaying the intended results nonetheless.

Keep a search history
There are users who perform repetitive searches, or continually search for similar content. To make the journey a little easier, maintain a history of recently searched terms. As the user begins typing their search term, matching queries found in the search history can be autosuggested.

Not sure how your search engine is doing? Use Google Analytics to find out. You can see what people are typing in and searching for, allowing you to optimize all of the best practices above.
You can also figure out which products to highlight. If 45% of site visitors are searching for one product in particular, it may be a good idea to advertise it on the homepage.

Site Component - Navigation and Search
Conversion Heuristic - Distraction and Focus

User quote - When asked what frustrated them the most about the Lulus mobile site: "*I liked the search function, it was very easy to use and put all my search terms unlike some search tools that don't pull any results when you get too many search terms.*"

Adherence example
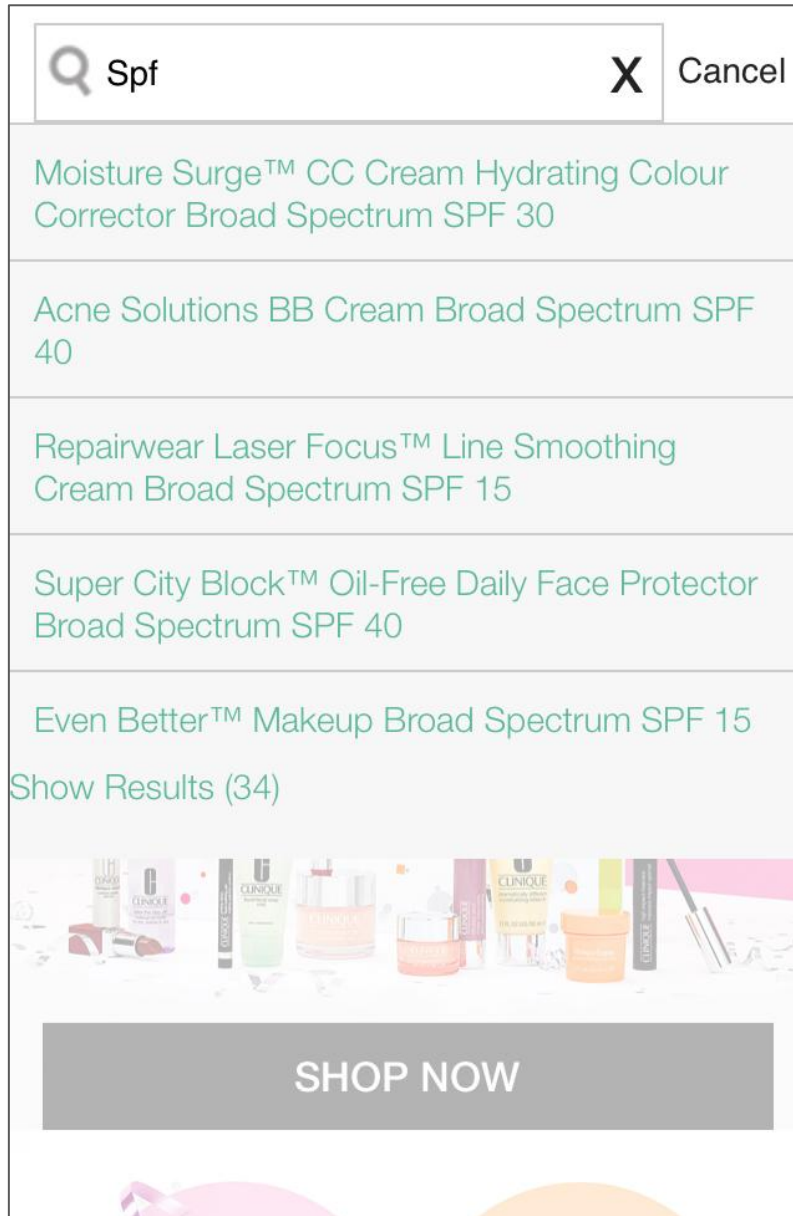
Clinique: This search autosuggests top products containing SPF

77th
Percentile
CUX - CREDIBILITY
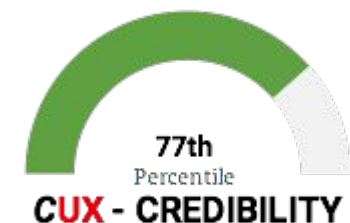
Adherence example
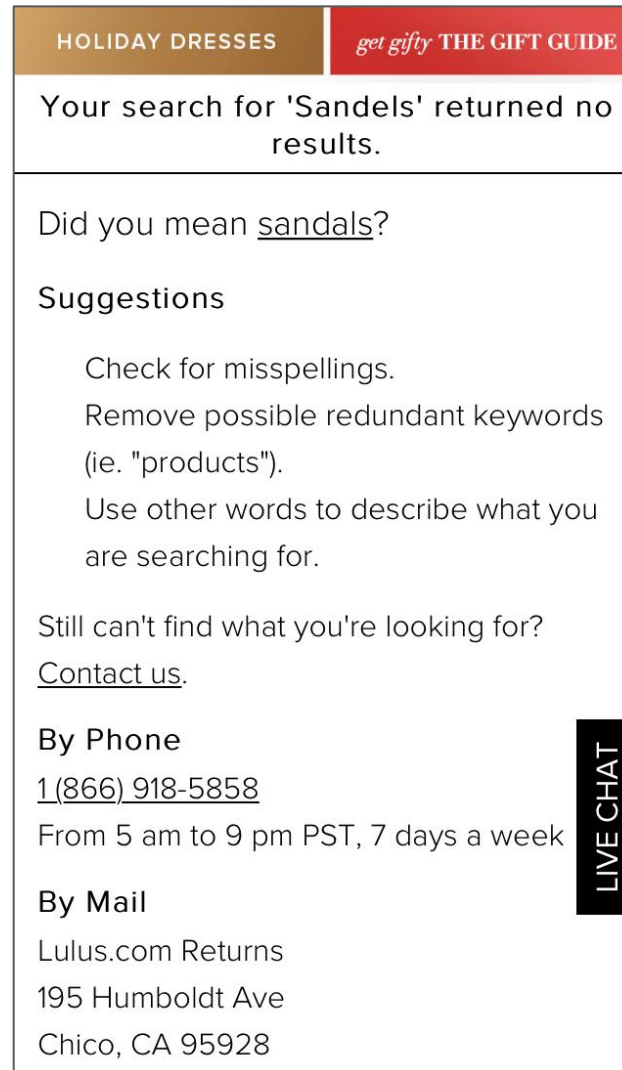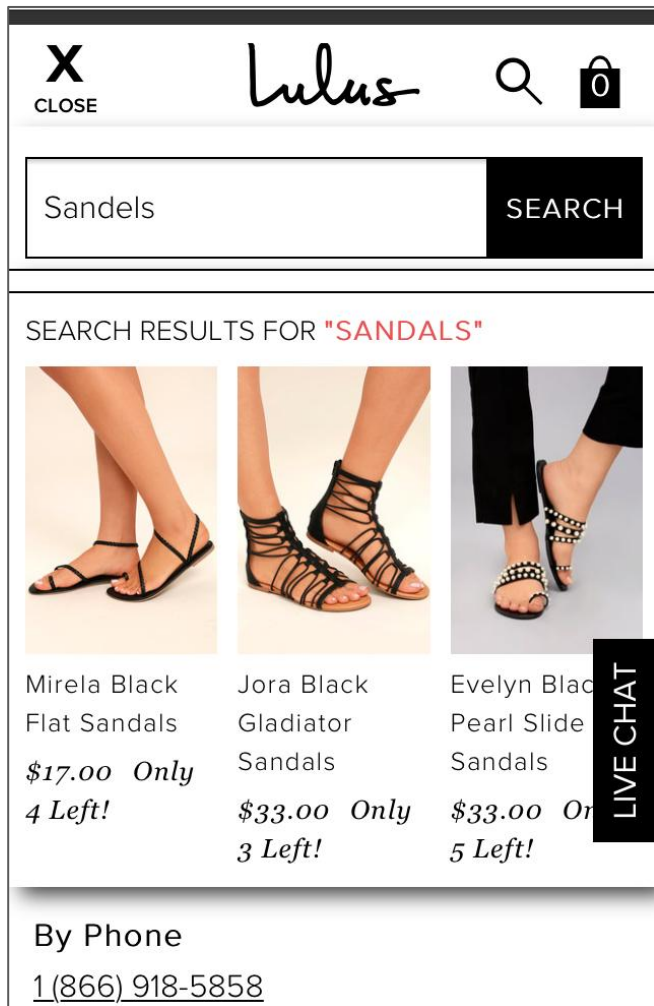
Lulus: As a user is entering a typo, the search results autosuggest a similarly spelled products. If the user misses or ignores these autosuggestions and searches 'Sandels' anyway, they see the right photo as the search results. The underlined sandals leads to the intended product category.
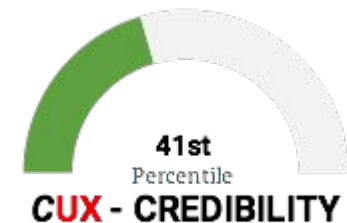
Guideline #28. Navigation menu should follow conventional placement, and should dropdown or slideover

Imagine you're getting ready to leave for work in the morning, go to grab your keys off the counter where they usually sit, and they're not there. You spend too much time looking for them only to find out your roommate made a basket to hold keys in. Even if this new, special place is objectively better than the countertop, it's an inconvenience more than anything. You wasted your time and were left in the dark. Chances are you're feeling annoyed with your roommate, too.

The same thing applies to the layout of websites. Conventional design is efficient. When it comes to the layout of a website, "getting creative" is overwhelmingly bad for conversion rates.

Adapting a desktop layout to a mobile one presents a challenge: How can we maintain design conventions when the screen is significantly smaller? There will be compromises, but you can still keep menus and other design elements where they're expected.

Navigation menus are expected to be at the top of the page. Sub-items should expand either as a dropdown from the top, or a slideover from the left.

An expanding menu has three main advantages:
First, it preserves space. Second, it encourages focus on each step at hand. Third, it minimizes cognitive load.

The navigation menu should be where it's expected, take up minimal space (while still ranking near the top of the pages visual hierarchy), and should expand to show sub-items.

Site Component - Navigation and Search
Conversion Heuristic - Friction

User quote - "*I liked that the site was designed in an intuitive way that helped me navigate (the main menu was up in the upper left corner, just where I'd expect it to be)*"

User quote - When asked what frustrated them the most about the LEGO mobile site: "*The lego icons threw me off. I wasn't sure what they meant but I don't play with Legos*"

User quote - When asked what they liked most about the LUSH mobile site: "*The pull out menu leading to each product displayed nicely*"

Adherence example
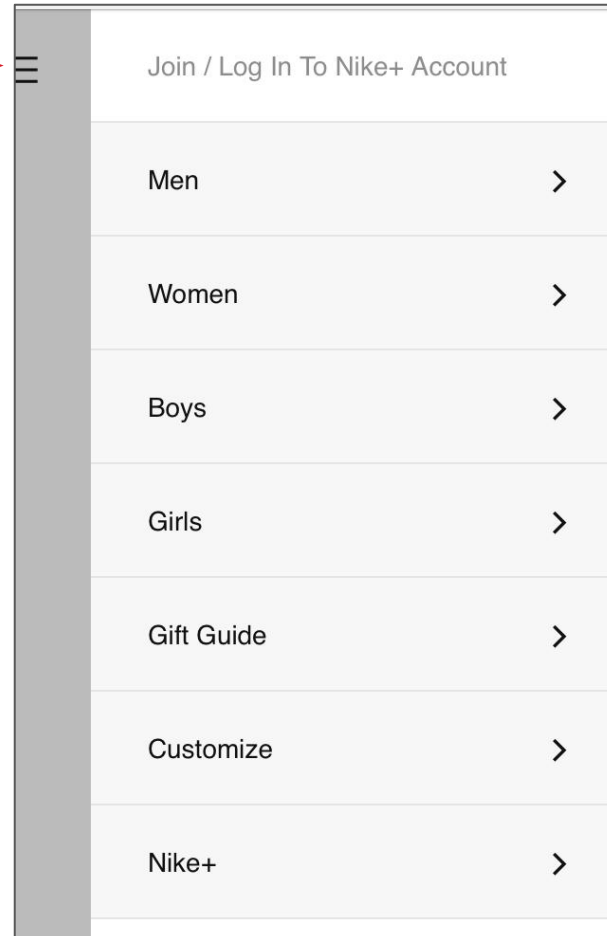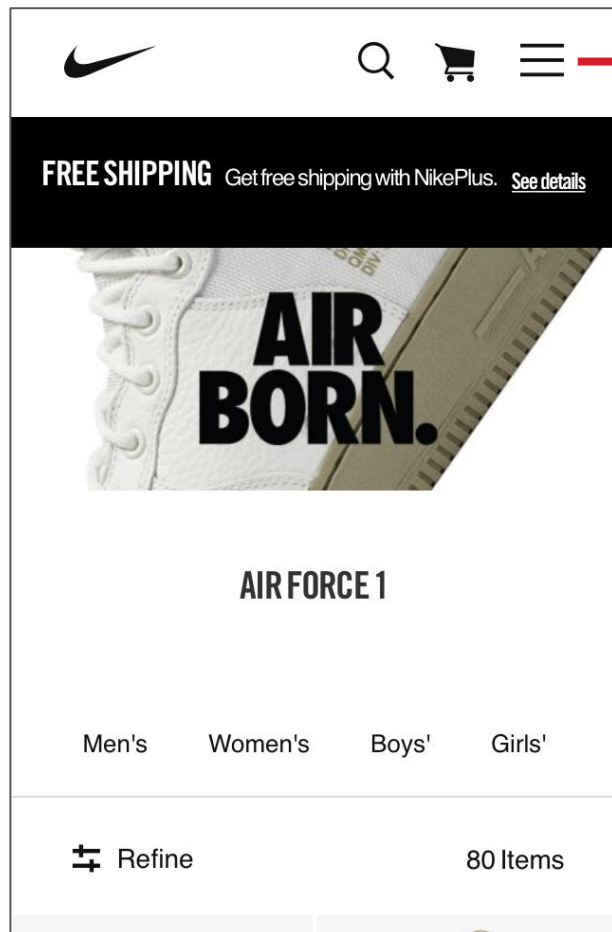
Nike takes full advantage of screen space with this full screen slideover extending from the conventionally placed hamburger menu in the top right corner.

73rd Percentile
CUX - APPEARANCE
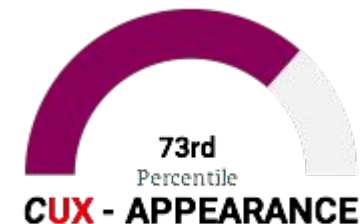
Guideline #29. Avoid multi-level navigation whenever possible, keep menus short and clear

Navigation menus on mobile sites should be shallow and thoughtfully organized. Try not to go beyond category > subcategory (e.g. Shoes > Women's shoes).

If users are challenged to go deeper than this (e.g. Shop > Shoes > Women's shoes > Running shoes > Nike), they'll abandon your site more often than not. This approach is not conducive to browsing. It requires users to know (almost) exactly what they're looking for, although often times they're on your site to browse from a larger selection.

Stick with two layers as a best practice, three layers as an absolute maximum.

But what if you have tons of products that just can't be contained in a shallow menu?

That's where sorting and filters come into play. Find a way to cohesively organize your products that smoothly leads to filters and sorting.

Some mobile sites convert menu selections into filter selections.

For example, if the navigation path on a mobile site selling shoes is Men's shoes > Running, the next page that displays the shoes shows that the "Men" and "Running" filters have been applied. This tactic allows users to "undo" a step from their navigation path by simply deselecting that filter.

Site Component - Navigation and Search
Conversion Heuristic - Friction

User quote - When asked what frustrated them the most about the Toys"R"Us mobile site: "*Navigation was somewhat challenging. Somehow it seemed overwhelming in feeling*"

Adherence example

Fresh: This navigation menu has a maximum of two category levels, also offering a 'view all' and 'discover' option for each category to encourage browsing.

68th Percentile
CUX - USABILITY
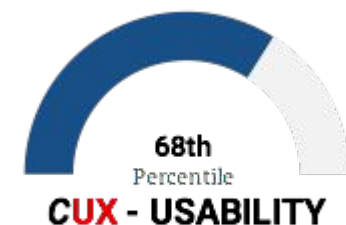
Guideline #30. Consider testing a sticky navigation bar

A "sticky" navigation bar is one that remains fixed at the top or side of the screen when the user scrolls down the page.

The advantage of this structure is constant accessibility to navigation.

Sticky nav bars are *particularly* helpful for long pages, like a list of search results, an extensive product list, or an article. Instead of having to scroll all the way back up to the nav bar, the menu is already available. It serves as a sort of replacement for the "back to top" button you sometimes see.

The purpose of the sticky menu is to help users explore all the content on a page without compromising efficiency and control over navigation, in general contributing to a better user experience.

Warning for small screened mobile devices: This menu may occupy a significant portion of the screen. If you're going to implement it anyway, do what you can to ensure that it's not stealing attention away from other important elements on the screen.

Site Component - Navigation and Search
Conversion Heuristic - Friction

User quote - When asked what they liked most about the Sephora mobile site: *"navigating using the left action bar to find the backpacks section was simple"*

Adherence example

Nike: When browsing a large selection of items (e.g. all men's shoes), the filtering and sorting options, combined under 'Refine', are sticky along with the number of search results which updates as filters or sorting options are applied.
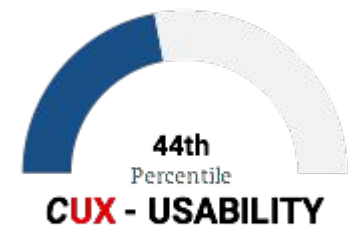
Guideline #31. Provide clear breadcrumbs when on product page for navigation and clear 'exit strategies'

Breadcrumbs are a constant reminder of where a user is *and* how they got there. They're also handy for illustrating a site's structure.

> For example, imagine a user is browsing backpacks. She notices the breadcrumbs "Accessories > Women's Accessories > Women's Backpacks", and is instantly aware that there are more backpacks, perhaps organized under "Men's Backpacks" and "Kids' Backpacks".

Breadcrumbs also encourage browsing while requiring minimal actions. If a user is on a product page and determines the product they're considering isn't for them, breadcrumbs offer the option to navigate to multiple parts of the site in one click.

> Going back to the backpack example, imagine the same user decides she might be better off with a messenger bag instead. She can navigate back to the "Women's Accessories" product category in one easy click.

If you have many products for sale, we recommend using breadcrumbs.

If your products have no logical hierarchy/organization, breadcrumbs won't be helpful.

There are two main types of breadcrumbs recommended for mobile ecommerce sites:

1. **Location-based breadcrumbs** show the hierarchical path that leads to the current page and remind the user where they're currently located.
2. **Attribute-based breadcrumbs** help users understand the relationship between the products they're seeing, and everything that's available. They're often filters that have been applied.

These two types are complementary. Location-based breadcrumbs "narrow down" into attribute-based breadcrumbs

Example: Home > Women's Clothing > Dresses > Casual > Maxi Dress

> The first three breadcrumbs are location-based, the last two are attribute-based

Remember, breadcrumbs are a secondary navigation scheme. They should not replace the navigation bar.

Site Component - Navigation and Search
Conversion Heuristic - Friction

User quote - When asked what frustrated them the most about the Sephora mobile site: "*I didn't see visible headings to go back to product lists. I just had to use my back button.*"

User quote - When asked what frustrated them the most about the Nike mobile site: "*I wish that there were an option to "go back to search results" from a specific product's page.*"

Adherence example

J.Crew: These clickable breadcrumbs provide context and allow users to return to any previous pages they visited throughout their search journey

14th
Percentile
CUX - USABILITY
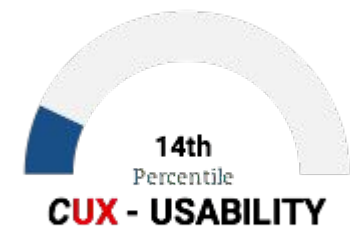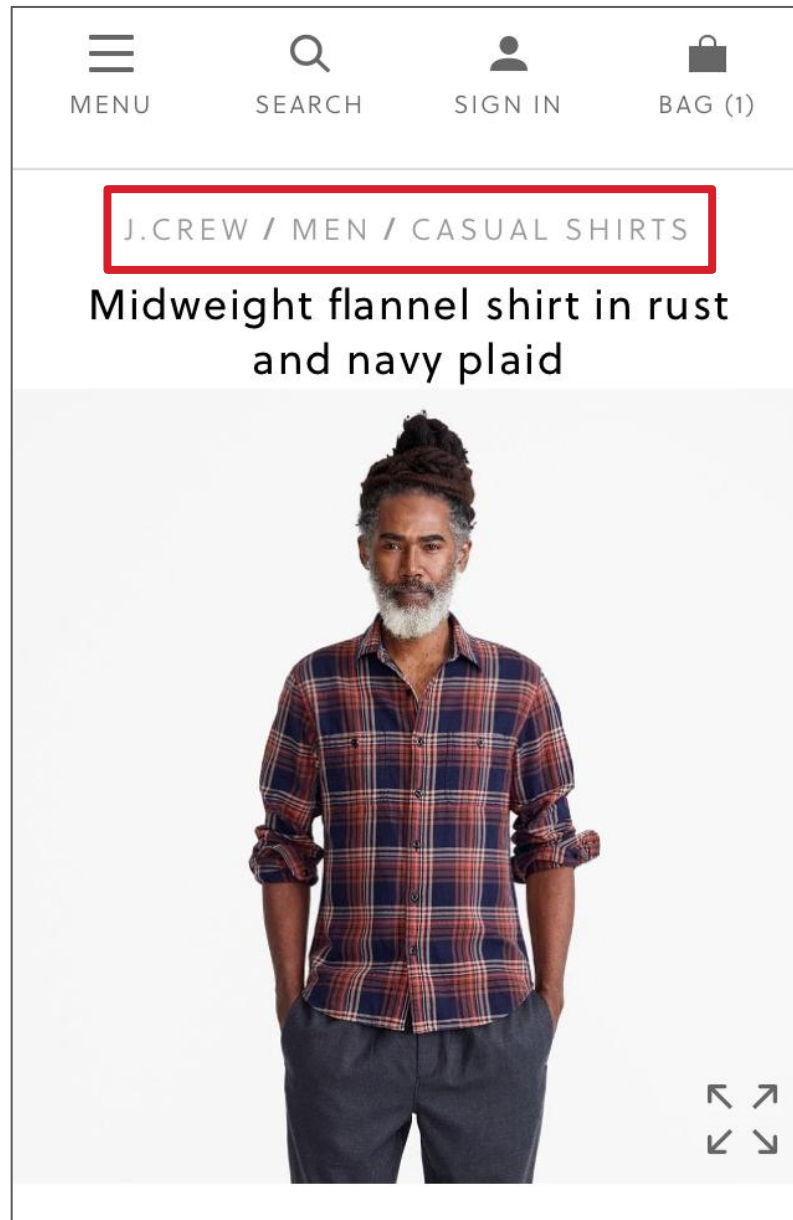
Guideline #32. During search, autosuggest various categories and subcategories where products can be found

When ecommerce sites have a large number of products available, they should be thoughtfully organized into a hierarchy.

If you've taken the time to create a good product hierarchy, it only makes sense to utilize it in as many ways as possible.

One great way to do this is by using categories and subcategories as autosuggestions.

Example: A user is searching for a sweater on a large ecommerce retailer site. As they type "sweater" into the search box, the following autosuggestions appear below the search bar: "Men's sweaters", "Women's sweaters", "Kid's sweaters", and "Sweater dresses".

Instead of navigating to the children's sweaters through a series of several clicks and page loads, the user can simply tap the "Kid's sweaters" autosuggestion to arrive at their destination.

Site Component - Navigation and Search
Conversion Heuristic - Motivation

Adherence example

Zappos: Users who type in a vague term, like 'shoes', are suggested to select one of the following subcategories to narrow down their search

87th
Percentile
CUX - USABILITY

Guideline Chapter:
Filters and Sorting

Guideline #33 Offer universal and category-specific filters

Filters allow users to narrow down search results to get find what they want. They're crucial to an efficient search experience.

So why, in today's climate of ever-advancing technology, do 84% of sites offer a mediocre or poor filtering experience (*source*)? There's no excuse.
Here's how to make sure you're not part of that 84%:

First, make sure you provide the basic filters:
Price: The exact design of this filter is up to you, and the range of prices on your site. Some options include price ranges (e.g. "under $20", "$20-$50", "over $50"), a slider in which both ends can be adjusted for a minimum and maximum price, or the two form fields "Min" and "Max".
Top sellers/most popular/highest rating: This type of filter speaks to the power of social proof. If 300 people gave a product a 5-star rating, it deserves to be acknowledged.
Brand: Some users already know exactly which product they're looking for. This filter is a quick way to help them find it.
Size/Color: These filters aren't necessarily universal, but do apply to many industries.

Category-specific filters are more difficult to define for obvious reasons. To determine which filters to use for which categories, do some market research. Which filters do your most successful competitors use for the same category? You can also do user testing to find out what people look for when shopping for a specific type of product.

Want to know which filters are being used, and which aren't? If filters have a unique URL, you can track them in Google Analytics. If they're javascript based, filter selections can be set up as events in Google Tag Manager.

Site Component - Filters and Sorting
Conversion Heuristic - Friction

User quote - When asked what frustrated them the most about the Clinique mobile site: "*Not having filters (refine by) and sort by on search results page*"

User quote - When asked what they would improve on the Clinique mobile site: "*Having REFINE BY AND SORT BY. Refine by price,color,benefits-long lasting/waterproof/hydration/moist urizer*"

User quote - When asked what frustrated them the most about the Merrell mobile site: "*Lack of price filter*"

Adherence example

LEGO: Both universal filters, like price, and category-specific filters, like theme, help users find the perfect toy.

55th Percentile
CUX - USABILITY
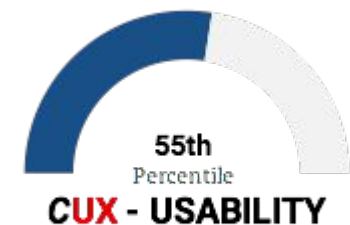
Guideline #34. Filters should be applied immediately (without having to tap an 'apply' button)

The "apply" button is an extra step, and one that some may miss. For these reasons, apply a filter immediately after it's been selected.

Show the number of currently available products that apply to this filter to add control and clarity to the search journey. For example, a shopper who is applying filters can see that there are 20 sweaters, but only 2 cashmere sweaters. They decide not to select the cashmere filter, as they want a larger selection and are mainly just interested in finding a sweater. This small detail saves time and friction, while increasing the shopping flow.

In a similar vein, users should be able to deselect a filter as easily as they select it. Displaying the filter above the search results with a small "x" is an expected, easy, and conventional way to say, "here's how you get rid of this filter".

Site Component - Filters and Sorting
Conversion Heuristic - Friction

User quote - When asked what frustrated them the most about the Fresh mobile site: "*Filters section doesn't close until I click on a button like APPLY*"

User quote - When asked what they liked most about the Sephora mobile site: "*When I applied the filter by price, the results loaded within 5 seconds*"

Adherence example

Guideline #34. Filters should be applied immediately (without having to tap an 'apply' button)

ACTIVITY	➕
RUNNING TYPE	➕
SHOE SIZE	➕
SHOE WIDTH	➕
COLOR	➖

- ☐ ⬛ Black (42)
- ☐ ⬜ Gray (20)
- ☐ 🟦 Blue (17)
- ☐ ⬜ White (39)
- ☐ 🟥 Red (9)
- ☐ 🟩 Green (9)
- ☐ 🟧 Orange (2)
- ☐ 🟫 Tan (2)
- ☐ 🟨 Yellow (2)

Men's Athletic & Sneakers

Products

▼ Filter By   **↓F Sort By**

Your Selections

❌ Brand: adidas

❌ Color: Red

Clear All

adidas Men's Dual Threat 2017 Basketball Shoes

★★★★★ (2)

NOW: $44.98 (43% off!)
WAS: $79.99*

Nike does pretty much everything right here: Each filter is accompanied by the number of available products, selected filters are immediately applied, and they can easily be removed on the product list by clicking the conventionally designed 'x', with the additional option of clearing all filters.

44th
Percentile
CUX - USABILITY
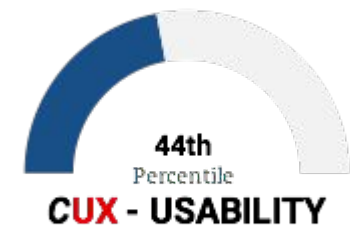
Guideline #35. Appropriately label and position the sorting and filtering features

First, ensure that the sorting and filtering tools are in a conventional location. On mobile sites, this means at the top of the page near the product list. Avoid visually separating the filtering and sorting tools from the product list with any sort of graphics or design elements.

Next, sorting and filtering should be visually distinct tools. Users should immediately be aware that both options are available. This can be muddied when placing sorting options under the list of filters, or vice versa. Don't assume that users will know to scroll all the way down the list of filters to find the sorting tool beneath them.

To ensure that sorting and filtering are seen, and are seen as distinct tools, place a "Sort" button and a "Filter" button side by side at the top of the product list.

Some websites have a combined "Sort & Filter" button. While they are listed together and are only one button, it's still clear that both distinct tools are available, so this is also a feasible option.

Also, be wary of using icons in place of the words "Filter" and "Sort". Many people won't recognize them.

Site Component - Filters and Sorting
Conversion Heuristic - Friction

Adherence example

Adidas clearly differentiates between the sorting and filtering tools, and both are high on the product list's visual hierarchy.

Guideline #36. If there are many filters (6 or more) consider using a lightbox or full-screen filtering

Narrowing 100 search results down to the 4 that you're actually interested in can be a stressful feat, especially on mobile devices with tiny screens. In these situations, filters are necessary.

When you have a lot of options/products, offering many filters is helpful. You're catering to more search journeys this way. However, a long list of filters can be difficult to use.

The goal is to provide a tool that makes shopping easier, not harder. When you have a lot of filters and want to display them in an intuitive and cohesive way, we recommend dedicating a separate page to them.

There are two particular ways to do this:
Slideover onscreen filtering: This approach keeps the search results in context. Users can see how their filter selections are affecting the search results and they select them. Slideover filtering is recommended when there aren't too many filtering selections, and when it's important for the search results to remain in context.

Fullscreen onscreen filtering: This approach devotes a new, separate step to the process of applying filters. Fullscreen filtering says, "this step is important": It encourages concentration. We recommend this approach when the filter selection should be focused on (like when searching for an Airbnb or buying a plane ticket). It's also helpful when there are a ton of filter options.

Tip: Figure out which filters are used the most and situate those at the top of the list.

Site Component - Filters and Sorting
Conversion Heuristic - Distraction and Focus

Adherence example

Fat Brain Toys: With well over 6 filters, it makes sense that this selection takes up the entire screen to help users focus on the task of narrowing down their search.

44th Percentile
CUX - USABILITY
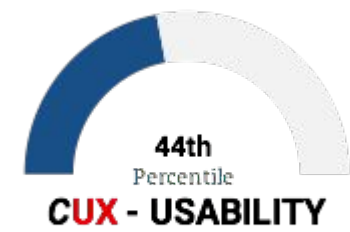
Guideline Chapter:
Lists and Products

CXL institute

Guideline #37. Use visual cues to indicate where to click

It can be hard to know where to click when shopping on a smartphone. There's no cursor to highlight links or visual elements. For this reason, we need to use other, different ways to communicate where a user should tap the screen.

First, links should be styled consistently so that users can quickly pick up on the pattern. Text that is not a link should never be underlined and/or blue, as this is the conventional style for links and will absolutely lead to users clicking the text to no avail.

Next, keep finger size in mind. Don't position multiple hit areas into one, small space. Users will intend to tap one function only to get the other. They'll end up confused and in the wrong place.

Consider making an entire area clickable, instead of implementing a small button. Specifically, the product thumbnail, product name, and price are features that should be clickable. It's easier for users, both physically and mentally, for a list item to be one hit area that leads to the product page than to try and fit three different hit areas (product picture, product page, and reviews for example) into that one list item on a phone screen.

When hyperlinking text, use conventional styling (blue, underlined) to imply that something's clickable.

Use a visual cue that indicates how and where to move on. A right arrow for instance, that indicates you can click it to advance to the next step, or a downward arrow that suggests more items will appear when you tap it.

Site Component - Lists and Products
Conversion Heuristic - Distraction and Focus

Adherence example

Payless: Throughout this site, there are subtle but effective visual cues. On the left photo, the promoted boots are in boxes with shadowed borders, communicating that users can click on each to go to its corresponding product page. The 'find a store' and 'order status' buttons are bordered, also communicating that they're clickable. The 'enter email address' copy tells users to type into the box.

On the right photo, the red boxes around each color thumbnail indicate that users can select the other colors to see how they look without going into the product page.
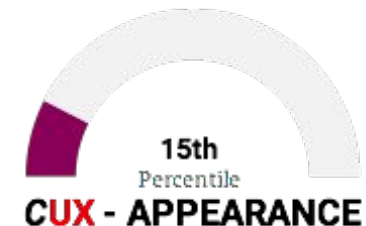
Adherence example
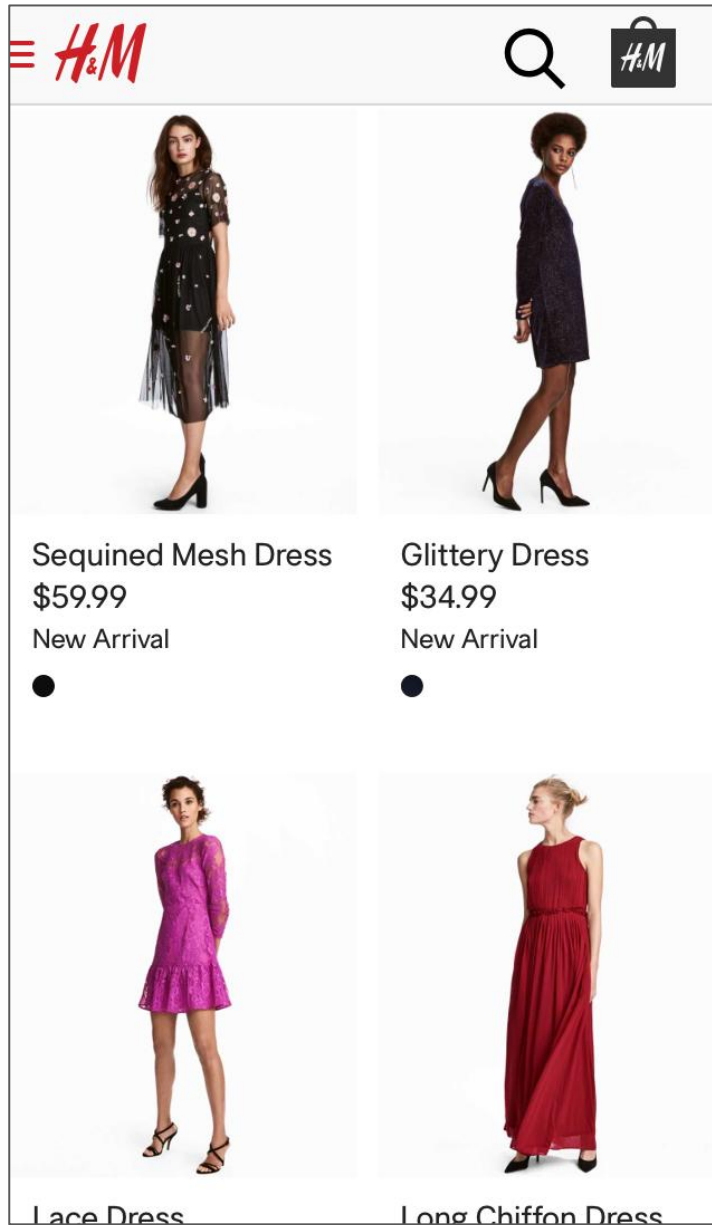
H&M: The product lists on this site are designed so that each listing is one, large hit area. Whether a user clicks the product photo, price, or product name, they're taken to the product page.

69th
Percentile
CUX - APPEARANCE
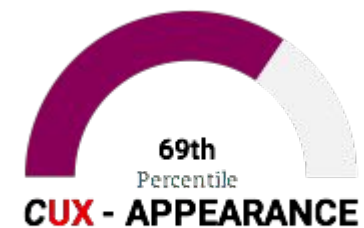
Guideline #38. List items should contain only the most relevant information

Determine what the most important pieces of product information are for each of your products. If you're selling Christmas trees, one factor might be height. If you're selling clothes, a factor might be material. What the product looks like is almost always a top piece of product information.

These top factors are what should be displayed on the product list. The goal of the product list is for users to decide which product to further inspect, quickly and effortlessly. You can facilitate this by displaying the essentials up front.

Keep in mind that, the less area each list item takes up on the screen, the more quickly users can get through the entire product list.

As we mentioned in the last guideline, it's now conventional (and therefore convenient) for an entire list item to be clickable. When a user reads a list item and wants to see the product page, they should be able to tap the screen to get there.

If for some reason making the entire list item clickable doesn't work for your product list, use a visual cue like a "see more" link or an arrow to direct users to the product page.

Site Component - Lists and Products

Conversion Heuristic - Distraction and Focus

User quote - When asked what they liked most about the Sephora mobile site: *"No fuss or distracting information, just a high quality image and price is all I need to be interested in a product"*

Adherence example

Lulus: This product list shows only the essential information: product picture, name, price, and available colors. The product picture, arguably the most important piece of information for clothing, is high-quality and big enough for users to get a good idea of what they're looking at.

85th
Percentile
CUX - APPEARANCE
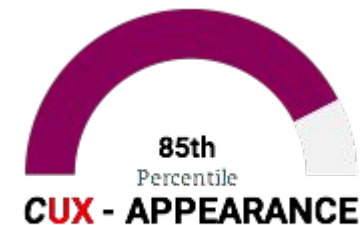
Guideline #39. Display multiple product thumbnails on the product list

Showing multiple views of a product ameliorates the issue that users cannot tangibly assess a product as they would in-store. The better a person can understand what each product looks like while browsing a product list, the more quickly they can determine which one is right for them.

Show a products' different colors, styles, and angles. In just two thumbnails, for example, you can show two different styles, colors, *and* angles of one product just by combining different details together.

There's no point in offering multiple product thumbnails if users don't know they're there. Make it visibly apparent that there are multiple thumbnails for users to browse. Since mobile phones don't have a cursor, we're unable to show a secondary image on mousehover and need to indicate that there are more thumbnails in another way.

Do this by showing small tiles (square or circular) of each photo below the thumbnail. Users can click on the tiles to view the thumbnail.

Site Component - Lists and Products
Conversion Heuristic - Motivation

User quote - When asked how they would improve the DICK's mobile site: "*Add more product pics beside just color options*"

User quote - When asked how they would improve the Nike mobile site: "*I would also implement a "preview" option so I could get a peek at some key product details, or images from different angles, without having to leave the actual search page*"

User quote - When asked what frustrated them the most about the Merrell mobile site: "*The quick look feature is excellent. You're able to take a quick glance at certain pairs of shoes without having to load a new page*"

Adherence example

Payless: Users can view all possible colors from the product list
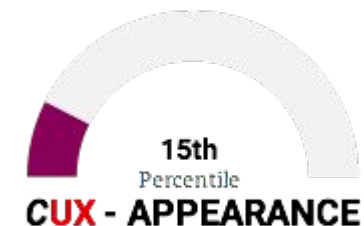
Guideline #47. Each product list item should take up about one-third of the screen

As a best practice, each list item in a product list should take up approximately one third of the screen in portrait mode (when the list is a 1x1 display).

Our benchmark research found that this size for each list item was the happy meeting between providing enough space to adequately showcase each product, and encouraging browsing.

At this size, users can get a pretty good idea of each product: They can see the thumbnail clearly and read the product name/description without having to zoom in. At the same time, they're also aware that there are more products just below to also explore and consider.

Tip: Don't cram list items together to make this guideline work. More importantly than this best practice, display your products appropriately for your site and provide enough whitespace between each list item to communicate that they're separate products.

Site Component - Lists and Products
Conversion Heuristic - Clarity

User quote - When asked what frustrated them the most about the Fresh mobile site: "*I'd like to see more product options side by side, instead of each one taking the width of my screen. This way the list doesn't feel eternal when I'm scrolling down*"

Adherence example

Hasbro: This product list gives items enough screen real estate for users to get a good idea of each product, while also showing enough products at one time to encourage browsing and exploration.

STAR WARS FORCE LINK STARTER SET INCLUDING FORCE LINK

$29.99

MORE

DISNEY DESCENDANTS ISLE STYLE SWITCH MAL

$24.99

MORE

PLAY-DOH KITCHEN CREATIONS MAGICAL OVEN

$24.99

MORE

MY LITTLE PONY: THE MOVIE PINKIE PIE

34th
Percentile

CUX - APPEARANCE
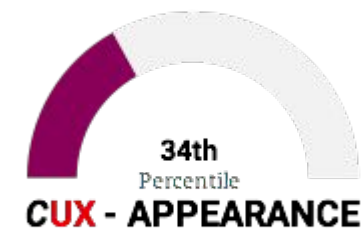
Guideline #40. Use "load more" scrolling on product lists

Site Component - Lists and Products
Conversion Heuristic - Friction

Currently, there are three commonly accepted interactive designs for presenting long lists of content to users:

1. **Pagination:** Products are organized into multiple pages. Users must click a button to move from page one to page two.
2. **Endless scrolling:** All products are available on a long, "endless" product page. Users can (ideally) browse the entire list without interruption.
3. **Load more:** Users click a "load more" or "see more" button to receive more search results.

User testing of these three design patterns on mobile devices revealed the following findings:

-   Pagination links were difficult to tap on small mobile screens.
-   Users browsed approximately twice as many products using endless scrolling compared to pagination.
-   When using endless scrolling on a long product list, users were unable to access the footer to find vital information on shipping, FAQs, etc.

The "load more" design solved the usability issues that occurred with both pagination and endless scrolling.

Show 15-30 products before offering the "load more" button. When it's clicked, the entire list of products should load.

Tip: After browsing a product page and determining it's not for them, many users will click the back button in an effort to return to the product list. Make sure they're able to return to the exact spot on the product list they left off at when this happens.

User quote - When asked what frustrated them the most about the Finishline mobile site: "*Continually having to load more products. When selecting back, it takes you to the beginning, not just back with items previously loaded*"

Adherence example

LUSH offers this 'show more' button on their list of bath bombs.

LUXURY LUSH PUD

Bath Bomb ★★★★★

Lavender soother

Ⓥ

7.0 oz. qty [1] **$7.95**

BUY NOW

SHOW MORE

FIGHTING ANIMAL TESTING · FRESHEST COSMETICS ONLINE · ETHICAL BUYING · 100% VEGETARIAN · NAKED PACKAGING

35th Percentile
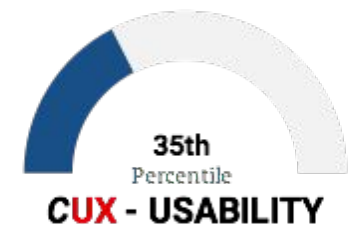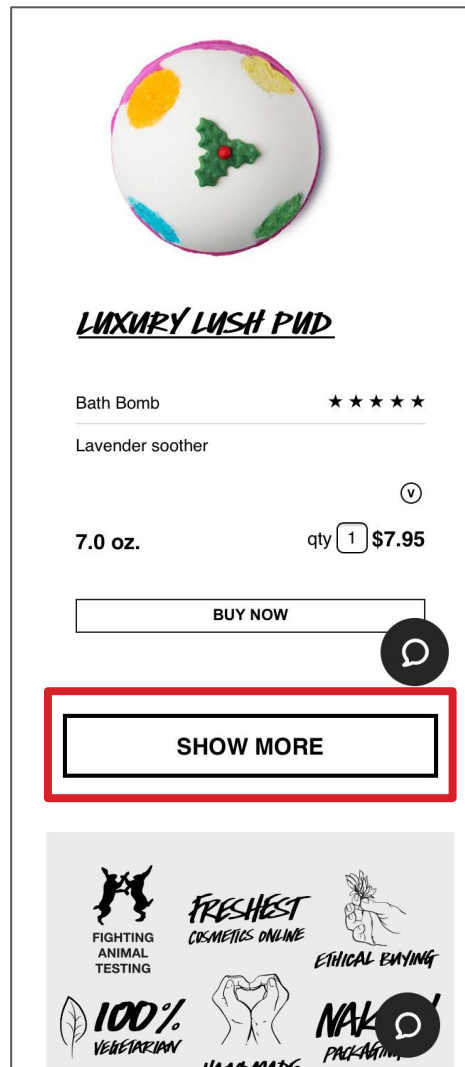
CUX - USABILITY

Guideline #42. Product page content should all be on one single page

This guideline follows the rules of convention and usability.

When considering a product page, users expect to see all of the product information right there on that page.

Some products that are expensive or complicated in nature (tech products for example) have a lot of product information, and it may be tempting to segment the information into different pages. However, this is a totally unconventional approach. Most users won't know that they need to navigate to an additional page for more information.

Especially on a tiny mobile screen, it's highly unlikely that users will understand that additional information is on a different page. If you have a ton of product information to share, simply make the product page long. Users are familiar and comfortable with scrolling, and chances are if they're already on the product page they're willing to scroll down and learn more.

Site Component - Lists and Products
Conversion Heuristic - Clarity

Guideline #43. Showcase recommended products and/or compatible accessories and keep visually separate from primary products

Site Component - Lists and Products

Conversion Heuristic - Distraction and Focus

Add-on or upsell, product recommendations are a great way to increase conversion rates.

They also serve as an efficient method for helping users find a product's compatible accessories, like a charger for a laptop or mitts for a golf club.

Display compatible accessories on the product page, and display them as direct links to that accessory's product page. Make it clear that it is, in fact, compatible using consistent naming schemes.
Example: On an electronics ecommerce site, all laptop product pages display compatible chargers. Each page consistently includes copy that says "This charger is compatible with model X". Users know what to expect, and they know where to find it.

However, for product recommendations to serve as helpful (and not a disruption to the user's shopping flow) they should be carefully situated: As items that are distinctly separate from the actual item(s) on the product list, product page, or cart page.

Clearly separate recommended/compatible products. They should be in a dedicated, labeled area that is secondary in the visual hierarchy to the primary products of the page/list/cart.

When adding recommended products to the cart page, place them below the "proceed to checkout" button so users don't misconceive them as part of the cart contents.

User quote - When asked what they would improve on the Clinique mobile site: "*Having recommendations or view similar items section on individual product page*"

User quote - When asked what frustrated them the most about the Merrell mobile site: "*No recommendations or similar items that I would like on the individual product page*"

User quote - When asked what frustrated them the most about the Nike mobile site: "*It did not have similar items shown once I selected the item I wanted*"

Guideline #44. Each product list item should take up about one-third of the screen

As a best practice, each list item in a product list should take up approximately one third of the screen in portrait mode (when the list is a 1x1 display).

Our benchmark research found that this size for each list item was the happy meeting between providing enough space to adequately showcase each product, and encouraging browsing.

At this size, users can get a pretty good idea of each product: They can see the thumbnail clearly and read the product name/description without having to zoom in. At the same time, they're also aware that there are more products just below to also explore and consider.

Tip: Don't cram list items together to make this guideline work. More importantly than this best practice, display your products appropriately for your site and provide enough whitespace between each list item to communicate that they're separate products.

Site Component - Lists and Products
Conversion Heuristic - Clarity

Guideline #45. Call to actions (CTAs) need to be front and center

Some people think call to actions (CTA) only apply to landing pages. The truth is that all pages have a CTA.

It's possible that desktop CTAs don't make the best mobile CTAs. Consider how goals for each page on your site change when you switch to a mobile design.

Some best practices for mobile site CTAs:
- Place them above the fold
- The CTA should be at the top of the visual hierarchy
- If the CTA is a button, make sure it's big enough to tap. Users should never have to zoom to read a CTA.
- The CTA should be specific, and action-invoking. Its job is to guide users to the next desired step, whether that step is placing an order, or successfully submitting a customer support message.
- The CTA can be a picture or a video. Instead of a button that says "get 10% off my order", a photo/graphic conveying the same information may be more appealing.

In a 2013 study, positioning the CTA in the center of the screen, near the top of the page resulted in increased conversions by **41%.**

Site Component - Lists and Products
Conversion Heuristic - Clarity

Adherence example

Guideline #40. Call to actions (CTAs) need to be front and center

Underarmour: The CTA on this page is very obviously the bright red 'add to bag' button

Color: True Ink (918) / Blue Infinity

Please select a size   Size Chart

5	5.5	6	6.5	7	7.5
8	8.5	9	9.5	10	10.5
11	12				

T **True Fit®** What size fits me best?

Quantity: Please select a size.

1 ⬍   **ADD TO BAG** 🛍

PayPal Checkout

SHOPRUNNER free 2-day shipping & free returns
learn more | sign in

Designed to do it all, this shoe is ready to log miles on miles—all while looking, feeling, and fitting great. The lightweight, breathable upper sits on a Charged Cushioning® midsole for a smooth, super-soft ride.

PRODUCT DNA   —

34th
Percentile
CUX - CLARITY

Guideline #46. Facilitate easy scanning by "chunking" blocks of copy

According to copyblogger, 80% of people read headlines while only 20% read body copy. This may not seem 100% applicable to ecommerce shops, but it does illustrate how humans read online: we generally don't.

We scan.

When it comes to designing and positioning copy on a mobile site, keep this fact in mind.

Whether it's a value proposition, a product description, or a return policy, write only what's necessary and valuable. Ask yourself the following to questions:
1. Cost: "How much time will this take to read, and how difficult is it to read?"
2. Benefit: "What's in it for the reader? What will they gain from reading this?"
If the answers to these questions "pass" your judgment, the copy should stay.

Some tips for easy-to-read copy on a mobile site:
- Use short sentences (they're less overwhelming)
- Avoid complicated sentence structures
- A paragraph should be no longer than 3 or 4 lines
- Use different background colors, subheadings, and images between blocks of copy to avoid cognitive overload
- Font color should contrast background color (i.e. black text on a white background)
- The more space between lines, the easier they are to read

Conversion Heuristic - Friction
UX Dimension - Motivation

Adherence example
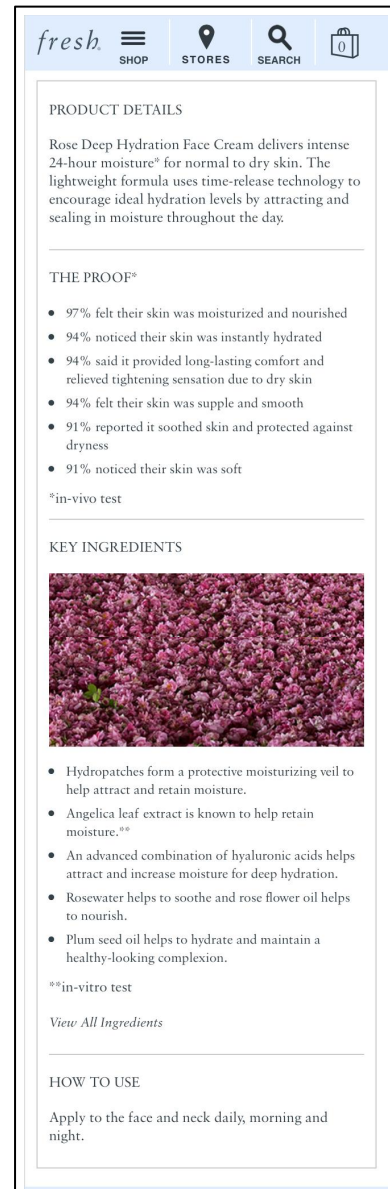
Fresh: This company sells quality products with high price points, so it makes sense to include ample information about each product. The format of this copy facilitates easy scanning, including headers and a variety of text formatting (paragraph vs bullets) along with a picture to break up the monotony.

79th
Percentile
CUX - APPEARANCE
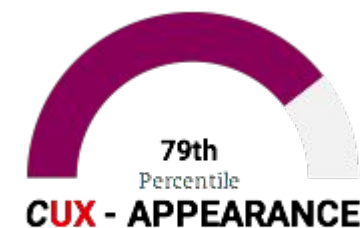
Guideline Chapter:
Forms and Buttons

CXL institute

Guideline #47. Minimize mobile form length

Long forms are conversion killers on desktop sites. They're even worse for mobile visitors.

Filling out forms with a smartphone is time consuming and uncomfortable. To boost mobile conversions, keep your forms as short as possible.

When reviewing your form, ask yourself "Is this field absolutely necessary?". If the answer is no, delete it. You can ask for additional information after the actual conversion with a follow up email or call.

5-6 fields are the maximum recommended number of fields in a form when optimizing for mobile visitors. In addition use vertical-align labels (top) rather than left-aligned labels.

Use a single input field whenever it's possible. For example, when asking for a name, one form field will do (rather than a separate field for first and last name).

Did a user enter their information incorrectly? Validate errors in real-time. Don't wait until they've submitted the whole form and then need to go back and find the error.

If a field has many possible options (states, for example) use a collapsible menu or dropdown list.

Automatically insert the shipping address into the billing address fields, and/or offer a checkbox that states "My shipping information is the same as my billing information", "Use billing address", or a similar message.

Site Component - Forms and Buttons
Conversion Heuristic - Friction

User quote - When asked what they liked most about the Underarmour mobile site, *"I liked the dedicated quick link to the cart at the top of the page. I also appreciated how the shipping and billing information was automatically formatted, and how it alerted me if it appeared that I may have entered incorrect information."*

User quote - When asked what frustrated them the most about the Zappos mobile site: *"I hoped that my name and address would duplicate automatically in the shipping and billing fields"*

User quote - When asked what frustrated them the most about the Lulus mobile site: *"The checkout process needs to enter a lot of information"*

Adherence example

Toys R Us: This form asks for only the essential shipping information, and users are able to put their name into a single field entry.

76th Percentile

CUX - USABILITY

Adherence example

Guideline #44. Minimize mobile form length

J.Crew takes an interesting approach in an attempt to simplify the checkout process. Payment and shipping information is pulled from a user's Google accounts (if they have any). When 'Payment' is selected, any cards on file with Google accounts display so a user simply has to select which card they'll pay with rather than entering all the information manually.

14th Percentile
CUX - USABILITY
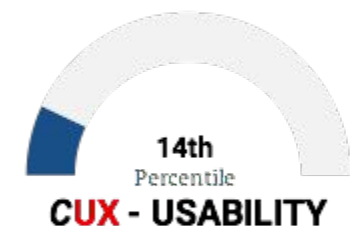
Guideline #48. Clickable elements (like buttons) should have strong affordance

"Affordance" is the term used to describe clues about an object's purpose. Some mobile-related examples include the Email button on iPhones being an envelope icon, or the Phone button being a phone icon. Even first-time iPhone users should have little doubt about the purpose of these two buttons.

A real-world example may be rounded, numbered buttons in an elevator. It's obvious that the purpose of these buttons is to take you to the corresponding floor.

When it comes to buttons on a website, affordance is the indication that the button can be clicked on, and possibly what will happen when you click on it. If a user doesn't know a button is a button, then they certainly won't know to click on it.

Some indicators that lend to button affordance:
- Downward arrows suggest a dropdown list
- Rightward arrows suggest moving to the next step
- Blue underlined text suggests a link
- A series of dots (with one highlighted) below an image indicates you can click the others or swipe the image to view more of whatever it is you're looking at (product pictures, for example)
- Left and right arrows with an image in the center indicate that you can click either button to browse other images
- "+ more" suggests clicking to view more
- Conventionally accepted icons/metaphors (a cog icon that takes users to their settings, for example)
- Gradient fade
- Borders
- Contrasting colors

Site Component - Forms and Buttons
Conversion Heuristic - Friction

User quote - When asked what frustrated them the most about the Nike mobile site: "*Sometimes I would click on different things, trying to navigate to a new category and the site wouldn't respond.*"

Adherence example
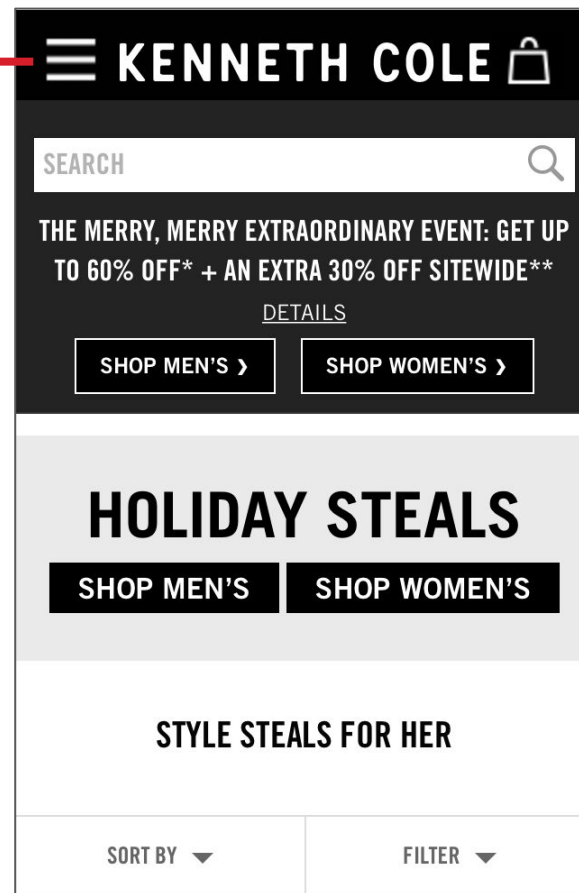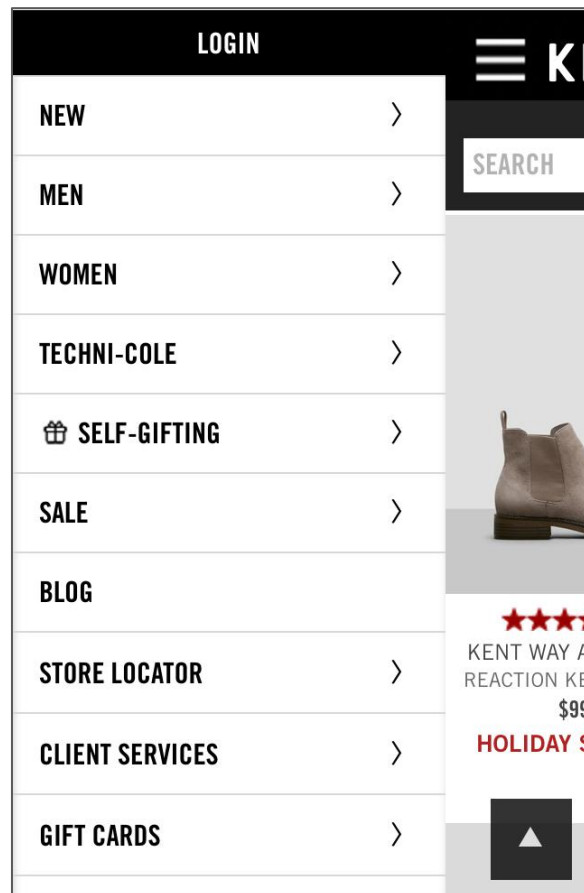
Kenneth Cole: Many elements here have strong affordance. The magnifying glass and shopping bag are conventional icons that indicate their purpose. There are plenty of arrows that indicate where users can see more by tapping. The borders around 'shop men's' and 'shop women's' also show that these are clickable elements.
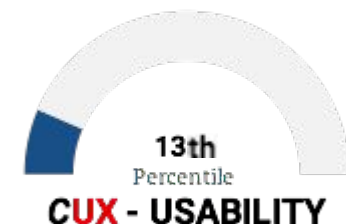
Guideline #49. Forms and buttons need to be large enough to click with proper spacing between links

Buttons and forms are extremely common elements and widely used on websites.
However, when designing these elements for mobile version websites, one of the huge problems is to ensure ease of use, since the screens are reduced, and consequently the available space for these visual elements is also reduced.

The concept of "*Finger-Friendly Design*" is to ensure that users have a comfortable touch area, to avoid them to select other unwanted elements or take action by mistake.

Imagine a visitor of an ecommerce that instead of selecting the "payment" button to complete the purchase, selects the "delete all items" or "cancel" button by mistake, because of the little space between them in relation to the buttons of the touch area - that situation it's a bad experience!

So, what are the ideal measures?

An important study conducted by MIT Touch Labs was carried out and the results reached that average finger pads are between 10-14mm and fingertips are 8-10mm, making 10mm x 10mm at good minimum touch target size.

From this study and several user interface tests, large mobile platforms such as Google (Android) and Apple (iOS) included in their guidelines the measures to ensure good usability and accessibility to users:

- android: target size of **48x48 pixels** (wide-tall).

- iOS: target size of **44x44 pixels** (wide-tall).

Site Component - Forms and Buttons
Conversion Heuristic - Friction

Adherence example
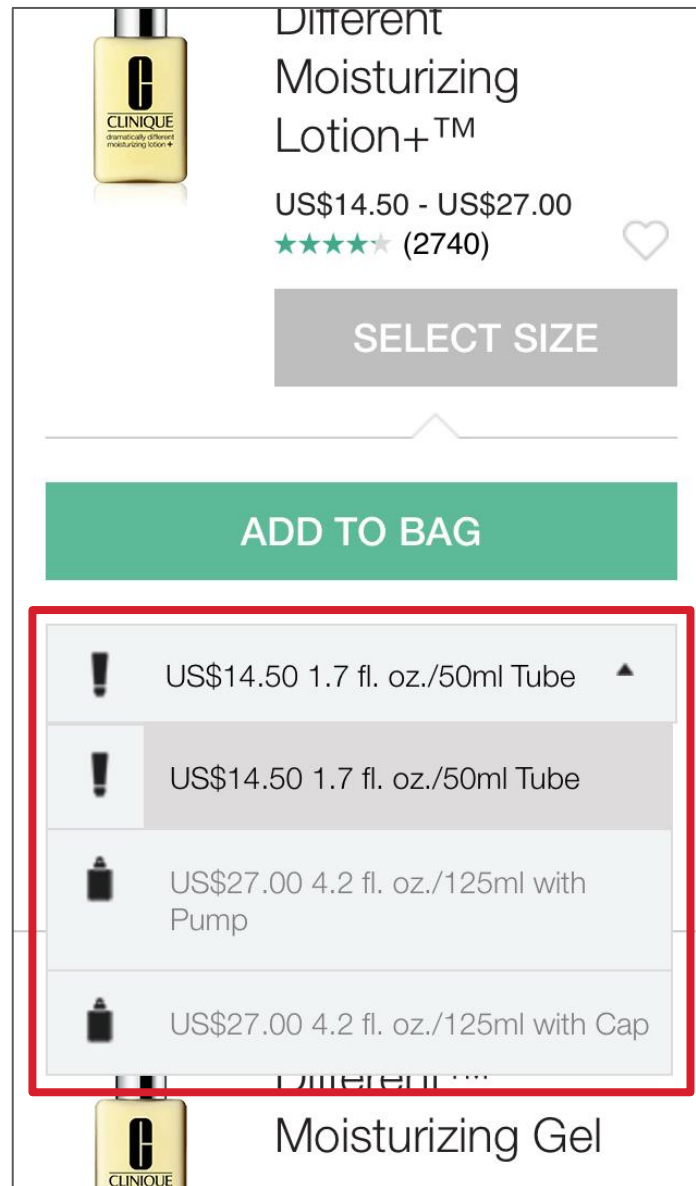
Guideline #46. Forms and buttons need to be large enough to click with proper spacing between links

Clinique: All the buttons in this area are easily large enough to click with confidence. Although the size selections (highlighted in red box) aren't spaced apart, their size makes up for it.

56th
Percentile
CUX - USABILITY
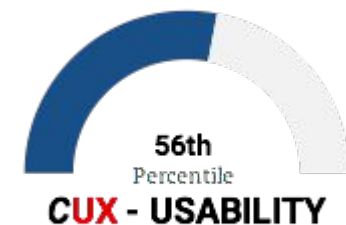
Guideline #50. Clickable element hit areas should not overlap

This straightforward guideline is one that calls for a bit of QA.

When designing clickable elements like links, buttons, or list items, be sure that no hit areas overlap. Moreover, make sure that no hit areas are so close to each other that a finger could accidentally tap the wrong one.

Repeatedly failing to click a button will result in one thing: site abandonment.

Do your list items have multiple hit areas?

Example: A ticket vendor site shows upcoming concerts as list items. Each item has two hit areas: the name of the concert leads to a page with more information, and a smaller "buy" button, that skips the information page and directly adds a ticket to the user's cart.

Multiple hit areas per list item should generally be avoided, as users may either not know which to click, or will accidentally click the wrong item.

Site Component - Forms and Buttons
Conversion Heuristic - Friction

User quote - When asked what frustrated them the most about the Fresh mobile site: "*It was very cluttered and I kept clicking the wrong thing*"

Guideline #51. Use a progress bar for users to track form completion

When completing a form on a mobile phone, only a few form fields will fit onto the screen at one time. Due to this size constraint, users can't have a "big picture" of their progress: They don't know how many fields are left to complete.

Progress bars work as an excellent solution to this issue. Design a small tracker on the top of the screen to visually communicate how much of the form is left to fill out.

There are two common designs for progress bars:
A constant bar:

A series of dots (each representing a step/form field) connected by one line:

Both designs serve the same purpose: To keep users from feeling overwhelmed or out of control. To get the form filled.

For the second design, some sites will label each step ("shipping info", "billing info", etc). This not only helps the user stay on track of their progress, but also provides a clear expectation as to what information they'll be asked to provide.

Site Component - Forms and Buttons
Conversion Heuristic - Motivation
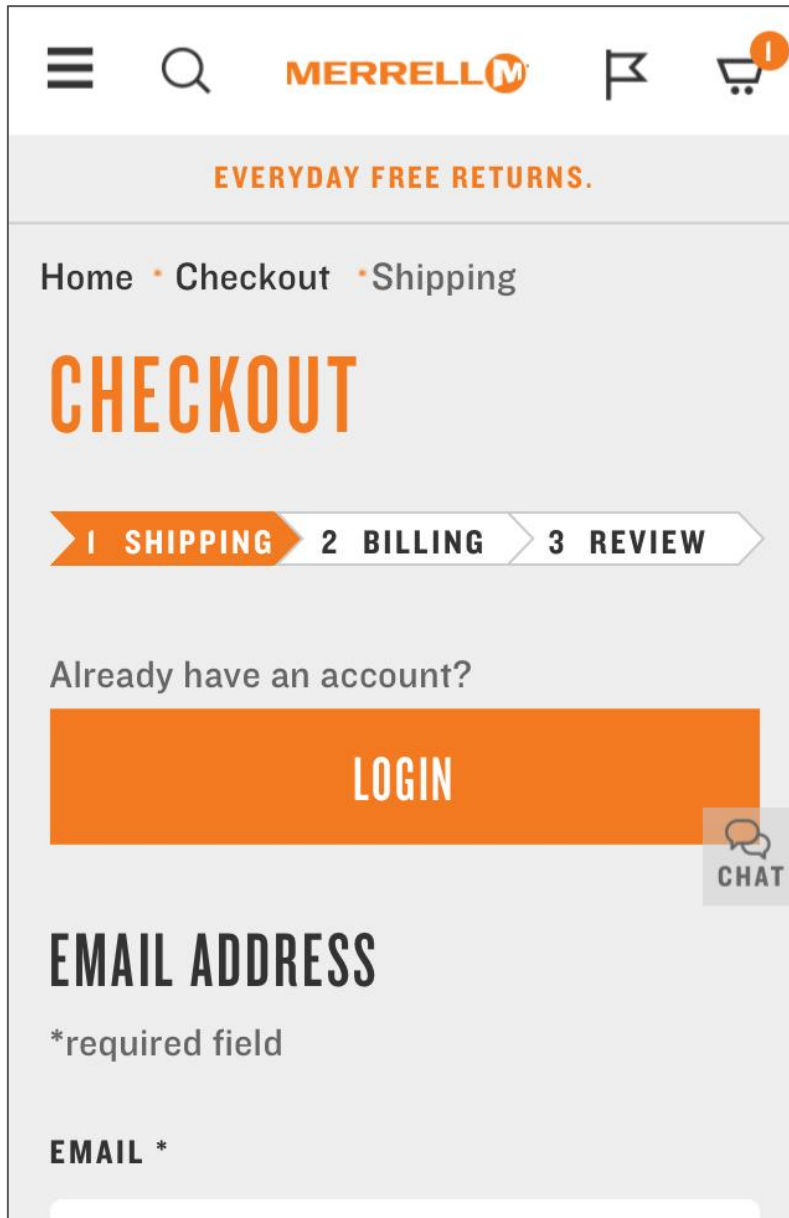
User quote - When asked how they would improve the Nike mobile site: "*would add a progress bar over the process of checking out*"

Adherence example

Merrell: This progress bar communicates what users will do during checkout (shipping, billing, review) while keeping them updating on their progress.

23rd Percentile
CUX - APPEARANCE

Guideline #52. Form field labels should be top aligned

Form field labels are designed to help users complete a form as accurately and quickly as possible. Their position in relativity to the form field should be conducive to this goal.

There are three possible placements to display form field labels. We recommend using the last on a mobile site:

1. **Inline**: The label is displayed in the actual form field and disappears when the user begins typing. While this approach does save space, it also presents a significant challenge: What if the user is typing in the form field, and forgets what the field is asking for? They have to delete all of their text to see the label again.
2. **Left aligned**: Label is left of the form field. The main problem with this option is the small size of mobile screens. In many cases, users will have to side scroll or pinch the screen to see the entire label and text field. This opens the door for a host of interaction issues and decreases usability.
3. **Top aligned**: This is the recommended approach for mobile sites. Users can easily see both the form field and label simultaneously, don't have to pinch or scroll, and won't run the risk of forgetting what it is they're supposed to be typing in. Top aligned labels work well regardless of field type (e.g. radio buttons, dropdown, or text box). Top aligned field labels *also* allow the form field display to be as large as possible, since the label isn't crammed next to it. While top aligned labels do take up more space, vertical scrolling is now intuitive for most mobile users and so is not a significant issue.

     Tip: Consider dynamic field label positions that become left aligned when the user enters landscape orientation. Left aligned field labels tend to work better in landscape mode: There's plenty of room for both the label and field to fit on one line with a landscape screen. Also, considering the large keyboard that comes with landscape mode, top aligned labels often will not fit on the screen with the form field, causing usability issues.

Site Component - Forms and Buttons
Conversion Heuristic - Friction

CXL institute

Adherence example

Kenneth Cole: These top aligned labels allow for a large field input area.
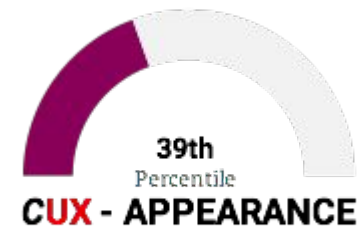
Guideline #53. Form field input should remain entirely visible while being filled out

Imagine you just completed a form with 10 fields. Upon submitting the form, you're notified that you incorrectly filled out one field. You then have to go back through the form, find the incorrect field, find the error inside that field, and correct it. Now imagine the field that has been incorrectly completed is your email address, which happens to be very long. You have to awkwardly scroll through the input to find your typo and correct it.

While this scenario is frustrating, fortunately it's also avoidable.

If a user can't see an entire form field, validating what they typed - or finding and correcting an error - can be a nightmare. Design forms so that each entire field is visible, no scrolling or pinching required.

One way to achieve this:
Determine what number of characters can be seen at one time in a form field. When 80-90% of those characters have been filled, decrease the input text size 10-20% so users can still see the entire input content.
Example: 30 characters can be seen in a form field. When the user types the 25th character, the font size decreases so the entire input remains visible.

Site Component - Forms and Buttons
Conversion Heuristic - Clarity

Guideline #54. Use a visual calendar for date form field (instead of user having to type date in)

This guideline follows the idea that forms should be as minimal and simple as possible.

When prompting users to select a date close to the present, use a calendar picker instead of an open text field. This is not only faster, but decreases the chances of users inputting incorrect information into a text box.

Some particular scenarios where a calendar picker would be helpful include selecting a day for a doctor's appointment, choosing a time span when you'll rent a car, or scheduling a meeting with your banker. Time slot pickers can also be helpful for scheduling, like making a dinner reservation for example.

Note: We want to emphasize that calendar pickers are only helpful when tentative dates are *close to present*. If you're asking someone to use a calendar picker to select their birthdate, year and all, that's not going to be helpful.

Beware of the OS native date picker. While it shouldn't be avoided at all costs, usability tests have shown that users get annoyed with the precision required to use this tool.

Site Component - Forms and Buttons
Conversion Heuristic - Friction

Guideline #55. Provide dropdown boxes whenever possible

Usability tests show that native mobile dropdowns are hard to use/control and decrease overall understanding of a menu's items. The main reason for this is that native dropdowns show very few menu items at one time. Native dropdowns (Android and iOS) only occupy half of the phone's screen, meaning that users have to scroll, sometimes quite a bit, to see all menu items.

When designed well, dropdown menus serve as efficient, space-saving elements. By nature, they also prevent users from searching for unavailable or incorrect keywords (because they offer a predefined list of options).

Custom UI dropdowns are the best choice.

The dropdown can be designed to take up the entire screen in order to show all available options. You can also use multiple columns if there are many menu options. Showing all items at once increases scannability, control, and knowledge of menu items.

The overarching advantage of custom dropdowns is that you have complete control over how it looks, and can also optimize your design.

When should a dropdown menu be avoided?
When there are too many options: For example, if over 15 options are jammed together and it's difficult to click on the right item or to even read each menu item.
Too few options: If only two options are offered, such as "male" and "female", implementing a dropdown menu isn't helpful, but is instead an extra, unnecessary click.

Site Component - Forms and Buttons
Conversion Heuristic - Friction

Adherence example
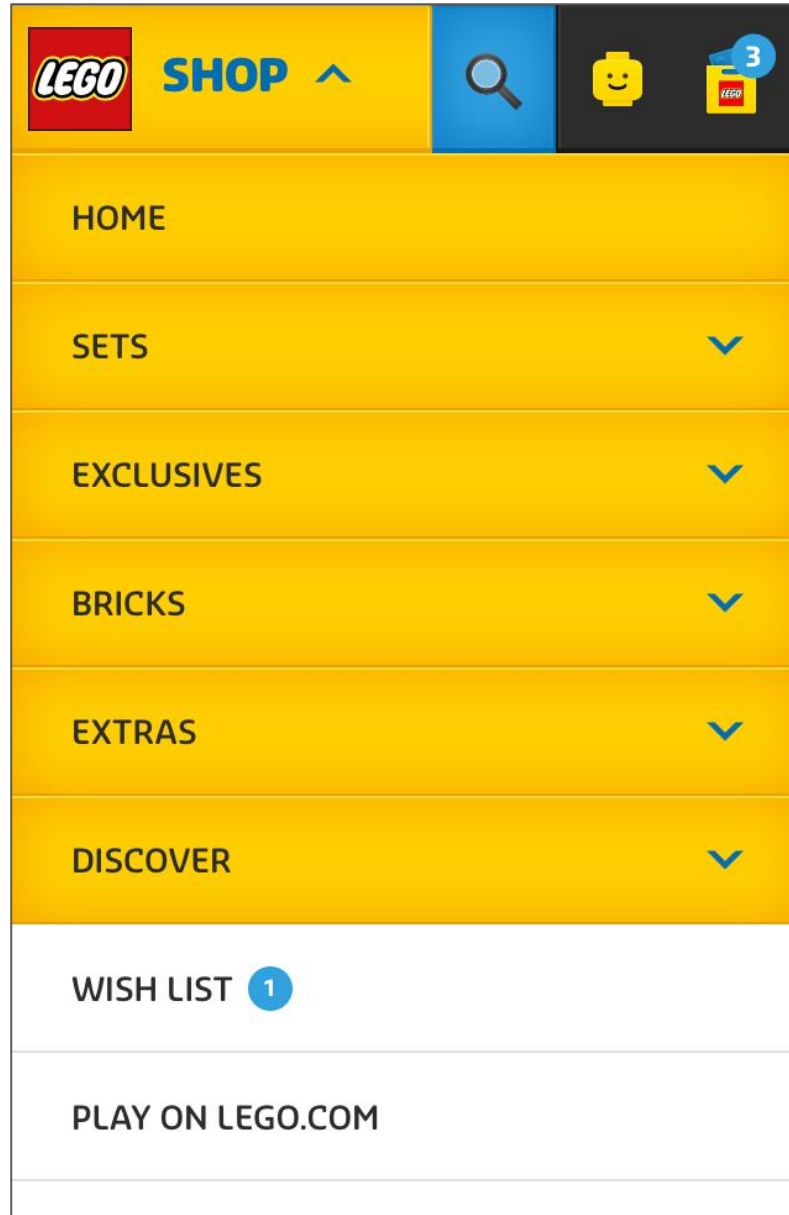
LEGO: This navigation menu makes good use of custom dropdowns. The 'Shop' dropdown reveals product categories and other popular content on the site. The product categories expand and collapse, so users can easily browse each before deciding where to navigate next.

55th
Percentile
CUX - USABILITY
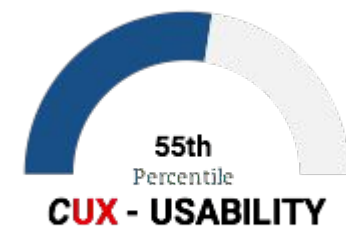
Guideline #56. Do not use native dropdowns, implement custom dropdowns

Several mobile web services use native drop-down menus as the main navigation, but this approach is not always the best, as proven in some tests with real ecommerces users.

The explanation for the difficulty of use is that by using the native dropdown, users could not see all the items in the listing - since only a few items can be viewed at a time.

When we imagine that the great majority of users have the behavior to try to visualize all the available options and then evaluate which is the best to choose, this type of element does not meet the expectations of users.

- What is the best solution?

Using well-designed drop-down menus can bring many benefits, and this is possible by creating customized and improved options where the native version fails to offer a good user experience.

So instead of using the native versions (which have a default behavior, regardless of the type and amount of data), the advantage of using custom interfaces is to be able to customize the visual elements according to the amount of items you want to display from an only time, eliminating unnecessary steps difficulties of use.

Site Component - Forms and Buttons
Conversion Heuristic - Friction

Adherence example

Guideline #47. Do not use native dropdowns, implement custom dropdowns

Sephora: This custom dropdown is far more user friendly than a native dropdown would've been.

90th
Percentile
CUX - APPEARANCE
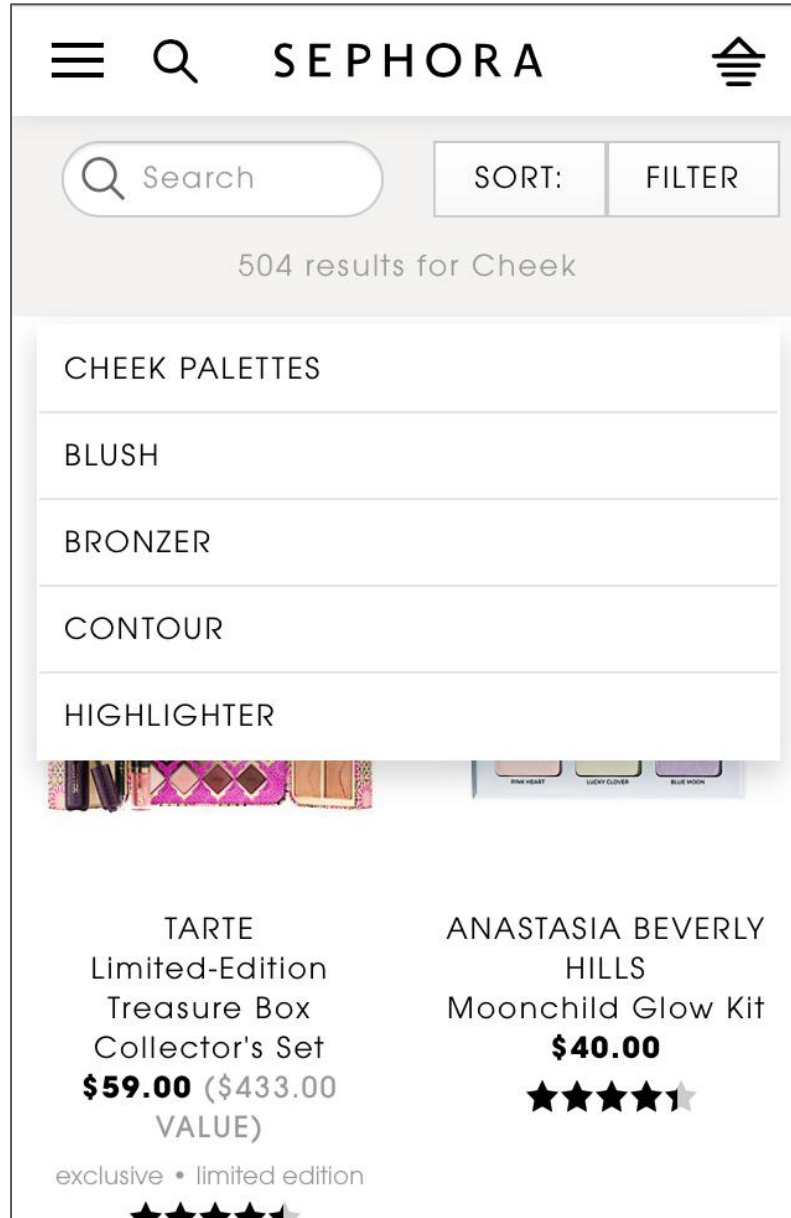
Guideline #57. Offer optimized keyboards

Some ways to optimize keyboards:

Keyboard display should be customized according to the required text input: For fields where only numbers are accepted, like a phone or credit card number, automatically display the numeric keyboard. Another common - and helpful - customization is adding "@" to the primary keyboard for the email address form field. Also consider increasing the size of key hitareas when possible.

Provide required field formatting: Don't make users format. If it's a phone number you're asking for, they shouldn't have to type in type in any extra dashes or parentheses. Just the numbers.

Implement auto-capitalization where appropriate: Often, systems automatically capitalize the first letter of a text-type data entry by default. This is helpful for names and address fields. This rule should not be applied to every field, however (email address field for example). Remember, the goal is to require one less step of your users.

Disable the autocorrect function: An outdated or low-efficiency dictionary can be quite frustrating. Users have to retype their field entry after it has been autocorrected (think email addresses or uncommon last names). Don't autocorrect form fields.

Implement custom keyboards consistently; User testing found that a custom numeric keyboard actually hindered the checkout flow when used inconsistently. When a custom numeric keyboard was used for the credit card field but not for the expiration date field, users got confused and worried that they were making some error.

Site Component - Forms and Buttons
Conversion Heuristic - Friction
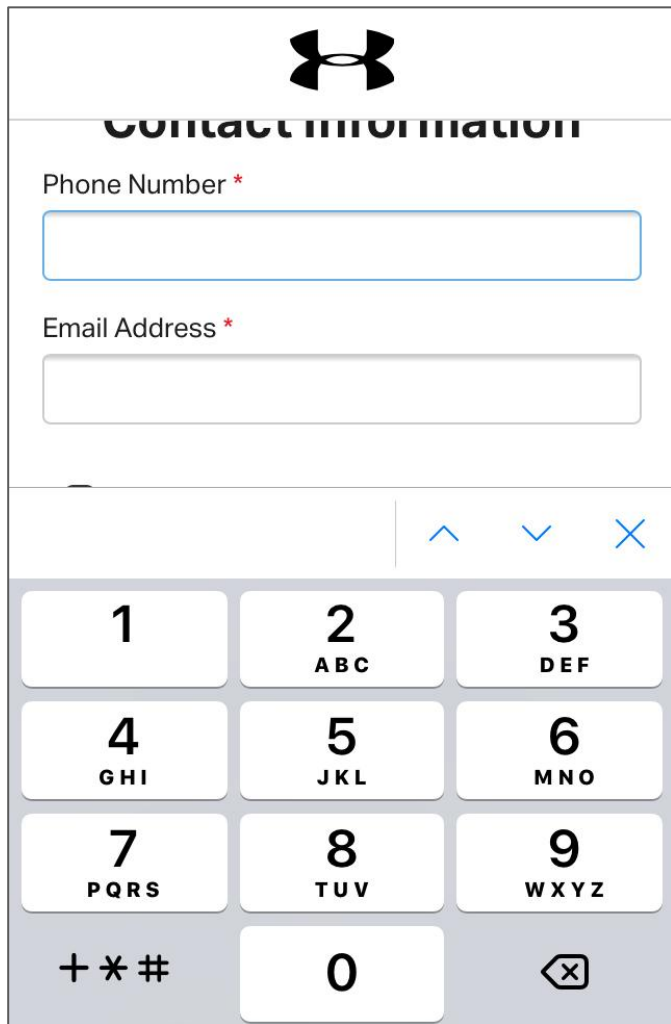
User quote - When asked what they liked most about the Merrell mobile site: "*On a number field, it switched to the numbers screen on my iPhone*"
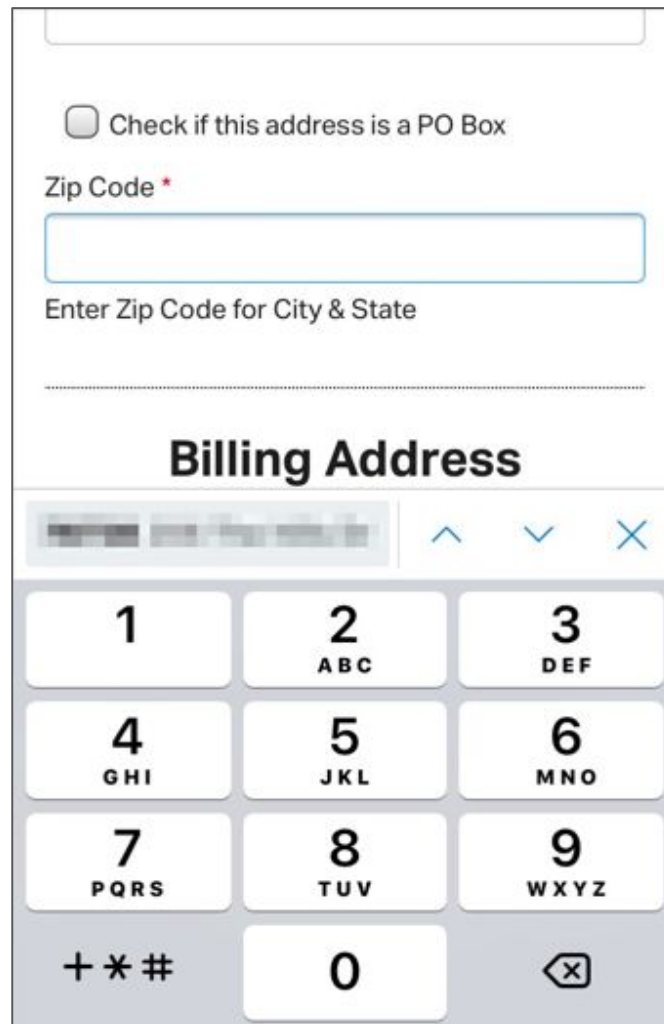
User quote - When asked what frustrated them the most about the Fresh mobile site: "*Had to format phone number manually*"

Adherence example

Underarmour: The numeric keyboard is automatically displayed when users enter their phone number and zip code during checkout. Additionally, any addresses saved in Google are suggested (right photo) to simplify the checkout process.

18th Percentile
CUX - USABILITY
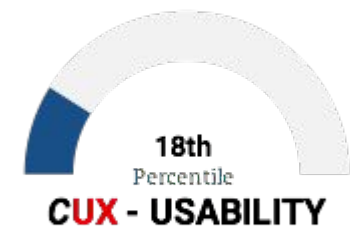
Guideline #58. If using an accordion style design, allow users to collapse it using the back button

The mode of interaction of an accordion is quite simple: When tapped/clicked, the accordion expands to display previously hidden information.
Example: On a clothing website, a "Women's" accordion can be tapped and all women's clothing categories are displayed (e.g. blouses, dresses, pants). Further, each of these categories can also be tapped to display their subcategories. The top "Women's" selection can be tapped once more to "close" the accordion.

Accordions are excellent UI elements. They conserve space while offering plenty of information about where users should go to find particular products/content on the site. They're especially helpful on mobile sites, as they provide a lot of information and context in exchange for the small amount of space they take up.

To avoid usability and understanding issues that may come with the accordion, make it clear that the content is collapsible. A common way to do this by including an arrow in the accordion header (e.g. next to the word "Women's") that points downward (suggesting that more will be revealed upon tapping) that then points upward once the accordion has been expanded (suggesting that it can be collapsed).

The browser back button should also perform the collapsing action. Many users will try to use the back button for this purpose, provide the outcome they're expecting.

Site Component - Forms and Buttons
Conversion Heuristic - Friction

Guideline #59. Make sure 'add-to-cart' cta isn't confused with the cart icon - (product pages should have 2 buttons)

Even when specifically designed to be prominent, CTAs get overlooked.

When a user is on a product page and ready to buy, the next step should be unmissable. For this reason, it can helpful (and certainly can't hurt) to have two add-to-cart CTAs: one above the product description and one below it.

This approach appeals to two different search journeys. Users who arrive on the product page and are immediately ready to buy can click the CTA above the product description. Meanwhile, users who examine the product details and then decide they're ready to buy can click the CTA below the product description.

Tip: Make sure your add-to-cart CTA is visually distinct from the actual shopping cart icon (typically found in the top right corner).

Site Component - Forms and Buttons
Conversion Heuristic - Clarity

User quote - When asked what they liked most about the LUSH mobile site: *"I liked how quick it was to get from the product page to checkout"*

Guideline #60. Auto-populate form fields based on IP address

To reduce the number of form fields a user is required to fill, consider auto-filling some based on their IP address.

This strategy can be used for various fields including postal (ZIP) code, state, city, and country

Ecommerce delivery can especially benefit from this strategy by showing visitors places closer to their homes, optimizing and simplifying the search process.

Tip: While it's helpful to auto-fill data based on a user's IP address, keep the option to manually edit these fields open.

Site Component - Forms and Buttons

Conversion Heuristic - Friction

User quote - When asked what they would improve on the LUSH mobile site: "*I would allow for an auto populate feature to complete the city and state fields once the shopper gives their zip code . This would save the user some typing and scrolling*"

User quote - When asked what they liked most about the Sephora mobile site: "*I also liked how the checkout helped me by auto filling my city and state after I entered my zip code*"

User quote - When asked what frustrated them the most about the Fresh mobile site: "*Had to type in state and city, zip code didn't auto fill*"

Guideline #61. Consider replacing long dropdowns with auto-complete fields

When applied to systems accessed via mobile devices, auto-complete makes filling out forms faster, simpler and with requires less work.

But, how should it work?
By combining auto-complete with drop-down menus we ensure that users are saving time by searching for a specific item, without having to scroll through the entire listing, as well as being very useful when the user wants to fetch an item but is not sure of the correct term or is writing the term in the wrong way.

To ensure that autocomplete works correctly in a menu, options that anticipate the results for each typed character must be presented, as well as bring the most wanted items related to that search, as well as a history of the most recently searched items.

By providing a properly functioning auto-complete mechanism, we're helping users find the desired options - it works as a guide to the final goal!

Site Component - Forms and Buttons
Conversion Heuristic - Friction

Guideline #62. Design and enforce a 'click-to-call' button on key areas where customers might have FUDs

Sometimes fears, uncertainties, and doubts (FUDs) are inevitable. If a product is expensive and/or highly technical, for example, people will naturally be more hesitant to make a purchase.

In these types of situations, boost credibility by answering your potential customer's questions and/or FUDs. One of the best and most common ways to answer questions is by providing a phone number. People can call, (hopefully) have their questions answered, and feel safer and more confident about making the purchase.

Talk to your customers to find out which FUDs are most common for your offer, and think about areas on your site where users experience FUDs. Is it during checkout? On the pricing page?

Once you've determined these areas on your site, design and place the "click to call" button there.

Instead of looking for an FAQ list, searching the internet for an answer, or abandoning your site, users will be able to get in contact with you and friction is minimized.

Site Component - Forms and Buttons
Conversion Heuristic - Motivation

User quote - When asked why they would buy from the Fat Brain Toys mobile site instead of its competitors: *"it seems that this site wants to come across as very customer-oriented with the little blurb about toy experts standing by on the phone number referenced at the top. It would be easy for me to call and get help if I needed it."*

User quote - When asked what they liked most about the Adidas mobile site: *"I loved that with the error message I got I also got a telephone number to call and get help"*

Adherence example
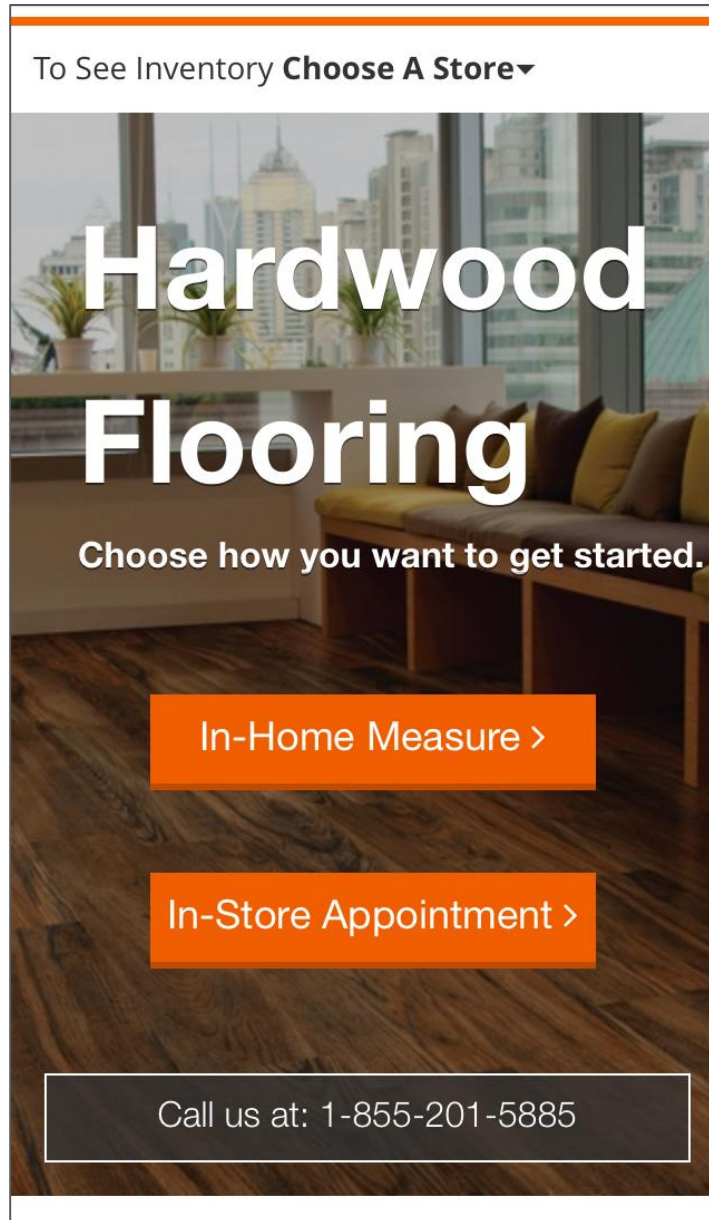
Home Depot: When users browse the hardwood flooring subcategory of Home Depot's home services, they're immediately prompted to get in touch with someone via appointment or phone call. As an expensive undertaking and purchase, it's highly likely that people will face FUDs when shopping for new hardwood flooring (especially from a mobile phone).

Note: Although we didn't study the Home Depot mobile site, we used this page as an example. The sites we did study, by nature of the products they sell, probably do not require click-to-call buttons.

Guideline #63. Use real-time validation for presenting form errors

Some form errors can be auto-detected, such as a missing at sign in the email address field or a phone number with an extra digit. The best and most appropriate time to notify users of these errors is in real-time.

Users will experience much less friction if they can immediately fix an error while they're still on that page, rather than seeing the error notification *after* they've submitted the form and then navigating back to locate and fix the error.

Similarly, form fields can also be auto-detected as correct. If the email address includes the at sign and a ".com" at the end, for example, it can be validated as correct.

Users feel confident and generally better about their experience when they know they're completing a task (e.g. completing a form) correctly.

Provide real-time validation whenever possible for form fields. This includes validation for when the user has completed a field correctly and incorrectly. The most commonly used and understood method for real-time validation are the green checkmark and red x symbols. Consider using these conventional icons.

Tip: Use formatting placeholders for more nuanced fields to increase the chances of users filling them out successfully the first time around:
- *mm/dd/yyyy*
- *+1(111)111-1111*
- *"the password must contain at least 8 characters"*

Site Component - Forms and Buttons
Conversion Heuristic - Clarity

User quote - When asked what frustrated them the most about the Fresh mobile site: "*Not being able to see exactly what that issue or error was when I was trying to submit my shipping information. It kept saying that there was a generic error but it never specified what the problem was*"

User quote - When asked what they liked most about the Lego mobile site: "*Each and every input box was styled and there was good feedback when required fields were not entered*"

Adherence example

H&M: This form detects a lack of the at sign and prompts the user to correct their error.

23rd Percentile

CUX - USABILITY

Guideline #64. Auto advance through form fields as users complete a form field entries

Most people think of filling out forms as a tedious, involved task. Smaller screens and hit areas on mobile devices make forms even more unpleasant.

However, with the implementation of some particularly helpful measures designed to make filling out forms easier, it *is* possible to change these perceptions.

For fields with easy to verify formats (e.g. credit card number, credit card expiry date, phone number) automatically advance to the next field upon completion.

Each field that automatically advances is one less click and a few seconds saved for the user.

Tip: Also consider visually highlighting the field that is currently being filled (with a color contrasting border, for example)

Site Components - Forms and Buttons
Conversion Heuristic - Friction

Guideline Chapter:
Ads and Popups

Guideline #65. Keep popups to a minimum

Pop-ups, whether advertisements or site promotions, are a nuisance. That's not news.

Ads and promotions are part of business, though, and popups actually do work. There's a middle ground between harassing users until they bounce, and never using a popup. The key is to plan them strategically, sparingly, and wisely.

popups or modal windows are acceptable in the following scenarios:
- When attempting to interrupt the user's flow in order to help them make a decision
  Example: A user is reading a preview of an ebook, and after reading halfway into the first chapter a popup prompts them to enter their email address (or buy the book)
- When you want the user to confirm their decision
  Example: Verifying that a user is ready to place their order
- To focus in on a specific piece of content
  Example: Full size product pictures or a video

If you're going to use a popup for a site promotion or to gather emails, implement a user scrolling triggered popup. The idea is that users have had a chance to see the quality of your content and are more likely to be interested in learning more about your offer. Experiment with scroll depth and look for the click rate sweet spot.

Site Component - Ads and Popups
Conversion Heuristic - Distraction and Focus

User quote - When asked what frustrated them the most about the Clinique mobile site: "*There were pop up ads that were annoying*"

User quote - When asked what frustrated them the most about the Clinique mobile site: "*The pop up prior to checking out that tried to get me to add more to my cart.*"

User quote - When asked what frustrated them the most about the Nike mobile site: "*The ad to download the App kept popping up and was very annoying*"

Adherence example

LUSH: Guests must confirm their location before entering this site. This popup is valid and necessary, as the experience that follows depends on it.

46th Percentile
CUX - CREDIBILITY
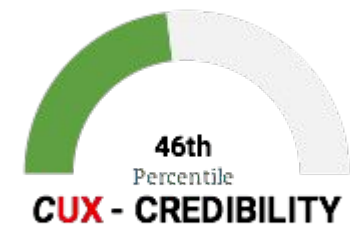
Guideline #66. Avoid placing ads in the middle of content, this can create false floors/bottoms

The false bottom is also often referred to as a logical end and the illusion of completeness. Essentially, a false bottom is the point on a page where a visitor believes the page will not scroll further, despite the fact that there is more content below that point.

Some ways false bottoms are created: huge ads (or hero shots) that span the entire visible area, a ton of whitespace, a body of copy that ends neatly at the bottom of the visible area, or a banner ad spanning the bottom of the visible area that looks like a footer ad.

How to avoid this problem?
Use a dedicated tool or Google Tag Manager to find areas where a significant number of users drop off, or where scrolling tends to stop. Consider whether they may be perceiving a false bottom at this spot. Perhaps there's some content placed here that's creating this illusion.

Further approaches to avoiding a false bottom:
- Use visual cues like downward arrows to encourage scrolling. You can also use buttons with copy like "continue" or "keep reading".
- Use the "cut-off" look. Purposely straddle a piece of content above the fold and below it to communicate that there's more below.
- Maintain a pattern in your design/format to set visual expectations. Repeat header and content formatting in a rhythmic way that users can predict.

Site Component - Ads and Popups
Conversion Heuristic - Distraction and Focus

User quote - When asked what frustrated them the most about the Merrell mobile site: "*The constant sale image on my screen was a bit annoying as it hid my search results*"

Guideline #67. If you must display ads, display them intelligently

Ads hurt usability for two major reasons: they're disruptive and can create false bottoms.

If your mobile site displays ads, consider the following best practices:
- Prioritize content so that users see important information (value proposition, CTA, navigation menu, etc.) before ads. Even sticky ads are less intrusive than ads ad the top of the page when they're placed beneath a site's essential content.
- Avoid ad placement that creates false floors
- Place ads at the end of a piece of content rather than in between paragraphs
- If an ad is placed lower on the page, use visual cues to indicate that there's more beneath it

Site Component - Ads and Popups

Conversion Heuristic - Distraction and Focus

User quote - When asked what they liked most about the Sephora mobile site: *"No ads"*

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Competitive Mobile *C*UX Benchmarking Chapters

Mobile Ecommerce subverticals

Beauty

Clothing & Apparel

Footwear

Sports

Toys

CUX Benchmarking Methods

(repeated in methods appendix)

A major component of this user-testing-based report is a supplement to the the qualitative data in the form of user survey-based quantitative data on users perceptions of website quality via a standardized questionnaire component. It allows us to benchmark the user experience of a website in a unique and highly useful way for conversion-minded practitioners. We call the approach *CUX* Benchmarking.

The features & benefits of this *CUX* benchmarking approach:

- **Conversion Focused:** developed with a UX dimension quantifying user's perception of a website's value proposition, or why they should consider a site compared to its competition.
- **Quantitative**: based on 100+ user datapoints for each site
- **Generalizable & Transferable**: It can describe the quality of any website - ideal for relative context, understand how scores relate to each other when measuring before and after a design change, or compared to a competitor.
- **Multidimensional**: It includes the main factors for measuring website user experience and general quality of a website.
- **Standardized, Normalized, and Validated**: It has been developed through extensive testing on a massive user testing database (see the [peer-reviewed paper](#) on it's foundation) and the metrics produced for any one website is able to be placed in context relative to its peers and relative to itself if replicated after website modification.
- **Repeatable:** Ideal for quantifying a baseline for comparison against later site design changes.
- **Ideal for Competitive Benchmarking**: Quickly and reliably know how your website is perceived (in dimensions of appearance, clarity, usability, and credibility) relative to your competition. Comparing against multiple websites provides context for what's working and not working to make inspired, hypothesis-driven design decisions.
- **Ideal alongside User-Testing results**: 5-10 user sessions providing qualitative, open-ended responses to questions relative to similar UX dimensions as what's in the CUX metric will provide actionable direction for design improvements.

CUX Benchmarking Methods

(repeated in methods appendix)

The UX benchmark metric is adapted from the [SUPR-Q: a comprehensive measure of the quality of the website user experience](#). Published in 2015 in the [Journal of Usability Statistics](#), Jeff Sauro presents this new standardized survey metric that has four subcomponents to measure perceptions of a website's usability, credibility, appearance and loyalty. We modified this metric by adding an additional subcomponent, clarity. Website clarity, or specifically, clarity of the value proposition a website offers on it's homepage, is a primary driver for customer motivations and thus extremely important to conversion rates and customer perceptions generally.

The five subcomponents and their associated survey question(s) presented in a likert-scale format:

USABILITY
This website is easy to use.
It is easy to navigate within the website.

CREDIBILITY (Trust)
I feel comfortable purchasing from this website.
I feel confident conducting business with this website.

LOYALTY
How likely are you to recommend this website to a friend or colleague?
I will likely visit this website in the future.

APPEARANCE
I found the website to be attractive.
The website has a clean and simple presentation.

CLARITY (our additional question, not part of SUPR-Q)
I clearly understand why I should buy from this website instead of its competitors.
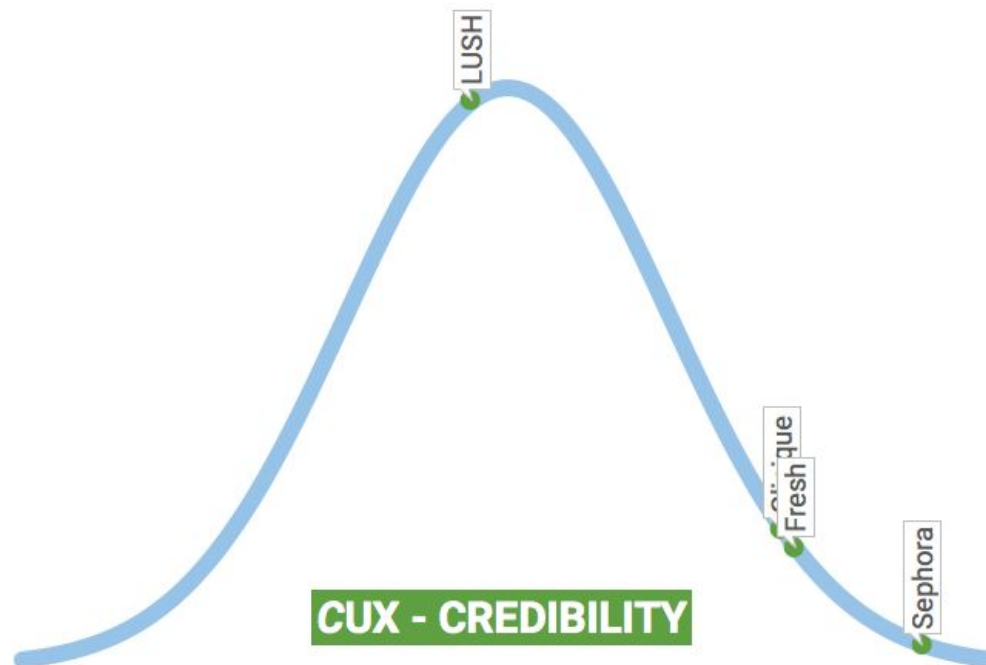
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institute

CUX Benchmarking Methods

(repeated in methods appendix)

With the data from these questions across participants ([ranging from 55 - 108 per site](#)), we calculated a competitive UX benchmark metric among the sites studies, and within sub-verticals (e.g., apparel, nutrition, recreation) and thus provide a quantitative perspective that complements the qualitative user-testing data.

The results between the quantitative and qualitative testing aren't explicitly comparable, but they both should be a foundation for where hypothesis testing and benchmarking should start.

Note that we developed a unique calculation of the benchmark metric for this report, as we had the addition of the UX dimension of clarity. Thus it is not directly comparable to the SUPR-Q metric calculation. However, the metric we derived leverages the psychometric validation work to create and qualify the list of questions, and in our opinion improves the benchmark by adding a valuable perspective related to customer motivation towards buying from one vendor instead of another.

The value proposition, a part of our thinking in creating the clarity question, has proven to be one of the most important test variables in creating consistent and significant lifts in conversion optimization rate. Ecommerce business today are competing with the likes of Amazon, Best Buy, Zappos, and need to differentiate by clearly relating the benefits for why a customer needs to buy from them and not from Amazon.

*C*UX Benchmarking Methods
» Explanation of Figures

With the data from the survey questions across participants, we calculate percentile ranking for each website on each UX dimension subcomponent and for a global metric. We also calculated the metric for the sub-verticals (beauty, clothing & apparel, footwear, sports, and toys). The figures below represent example visualizations of the data.

Standalone rank figure

Percentile Rank - In this case, 43rd percentile, meaning out of full database of websites ranked, 57% rank higher

43rd
Percentile
*C*UX - Global

Competitive rank figure

Normalized curve of all websites ranked across all industries. Each site is plotted relative to one another based upon the standard deviation of all sites in the sample. This curve evenly distributes sites along the x-axis in balance

swansonvitamin (41st)

gnc (59th)

Sites within a subvertical

vitaminshoppe (78th)

vitacost (84th)

bodybuilding (92nd)

fitnessfirst (11th)

*C*UX - Global

Appearance: All subverticals

Bell curve with data points labeled (left to right): Fat Brain Toys, Payless, Merrell, J.Crew, Hasbro, Kenneth Cole, Underarmour, DICK's, LEGO, Clinique, LUSH, H&M, Nike, Fresh, Lulus, Zappos, Finish Line, Toys"R"Us, Sephora, Adidas

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Usability: All subverticals

Fat Brain Toys
Nike
LEGO
Clinique
LUSH
Lulus
Sephora
Fresh
Hasbro
DICK's
Toys"R"Us
Underarmour
Merrell
Payless
H&M
Adidas
Kenneth Cole
J.Crew
Zapos
Finish Line

CXL
institute

Credibility: All subverticals

Curve with data points labeled (left to right ascending): Fat Brain Toys, J.Crew, Kenneth Cole, Hasbro, Merrell, H&M, Underarmour, Lulus, Payless, LUSH, Nike, Zappos; then descending: LEGO, Clinique, Fresh, DICK's, Adidas, Toys"R"Us, Sephora, Finish Line

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Loyalty: All subverticals

J.Crew
Kenneth Cole
Fat Brain Toys
Payless
Merrell
Underarmour
Hasbro
Lulus
Nike
H&M
LUSH
LEGO
Zappos
Fresh
Finish Line
Adidas
DICK's
Clinique
Toys"R"Us
Sephora

Clarity: All subverticals

Lulus

Nike

H&M

Underarmour

LEGO

Payless
Hasbro
Merrell

Adidas

Fat Brain Toys
J.Crew
Kenneth Cole

LUSH

Fresh
Finish Line
Zappos
Clinique
DICK's

Sephora
Toys"R"Us

CXL institute

Ecommerce subvertical:
Beauty

From Alexa top 25:

Beauty Contents

Standalone website rank profiles

Competitive benchmarking per UX dimension

Sephora

LUSH

Fresh

Clinique

CUX Global

Appearance

Clarity

Credibility

Loyalty

Usability

92nd
Percentile
CUX - GLOBAL

90th
Percentile
CUX - APPEARANCE

66th
Percentile
CUX - USABILITY

92nd
Percentile
CUX - CREDIBILITY

97th
Percentile
CUX - LOYALTY

97th
Percentile
CUX - CLARITY

LUSH
FRESH
HANDMADE
COSMETICS

48th
Percentile
CUX - GLOBAL

63rd
Percentile
CUX - APPEARANCE

35th
Percentile
CUX - USABILITY

46th
Percentile
CUX - CREDIBILITY

49th
Percentile
CUX - LOYALTY

83rd
Percentile
CUX - CLARITY

fresh

70th Percentile
CUX - GLOBAL

79th Percentile
CUX - APPEARANCE

68th Percentile
CUX - USABILITY

77th Percentile
CUX - CREDIBILITY

58th Percentile
CUX - LOYALTY

89th Percentile
CUX - CLARITY

FREE 2-DAY UPGRADE WITH $75. CODE SHIP2 SHOP NOW >

CLINIQUE

GET IT IN TIME FOR CHRISTMAS.
ORDER BY THESE DATES.

| Free Ground Shipping | 2-Day Shipping | Overnight Shipping |
| Order by 12/19 3PM ET | Order by 12/20 **3PM ET** | Order by 12/21 **3PM ET** |

TODAY ONLY
Free 2-Day Shipping
with any $75 purchase.*
Place your order by 3PM ET.
CODE **SHIP2**

SHIP IT FAST

63rd Percentile
CUX - GLOBAL

59th Percentile
CUX - APPEARANCE

56th Percentile
CUX - USABILITY

77th Percentile
CUX - CREDIBILITY

72nd Percentile
CUX - LOYALTY

93rd Percentile
CUX - CLARITY

*C*UX - Global

CUX - Global

SEPHORA — 92nd Percentile **CUX - GLOBAL**

fresh. — 70th Percentile **CUX - GLOBAL**

CLINIQUE — 63rd Percentile **CUX - GLOBAL**

LUSH FRESH HANDMADE COSMETICS — 48th Percentile **CUX - GLOBAL**

CXL institute

*C*UX - Appearance

Survey questions (likert-scale)
I found the website to be attractive
The website has a clean and simple presentation

CUX - APPEARANCE

SEPHORA
CUX - APPEARANCE
90th
Percentile

fresh.
CUX - APPEARANCE
79th
Percentile

LUSH
FRESH
HANDMADE
COSMETICS
CUX - APPEARANCE
63rd
Percentile

CLINIQUE
CUX - APPEARANCE
59th
Percentile

CXL institute

*C*UX - Clarity

Survey question (likert-scale):
I clearly understand why I should buy from this website instead of its competitors.

CUX - CLARITY

LUSH
Fresh
Clinique
Sephora

SEPHORA

97th
Percentile
CUX - CLARITY

CLINIQUE

93rd
Percentile
CUX - CLARITY

fresh.

89th
Percentile
CUX - CLARITY

LUSH
FRESH
HANDMADE
COSMETICS

83rd
Percentile
CUX - CLARITY

CXL institute

CUX - Credibility

Survey questions (likert-scale):

I feel comfortable purchasing from this website.

I feel confident conducting business with this website.

SEPHORA

92nd Percentile
CUX - CREDIBILITY

fresh.

77th Percentile
CUX - CREDIBILITY

CLINIQUE

77th Percentile
CUX - CREDIBILITY

LUSH FRESH HANDMADE COSMETICS

46th Percentile
CUX - CREDIBILITY

LUSH

Clinique

Fresh

Sephora

CUX - CREDIBILITY

*C*UX - Usability

Survey questions (likert-scale):

This website is easy to use.

It is easy to navigate within the website.

CUX - USABILITY

fresh.
68th Percentile
CUX - USABILITY

SEPHORA
66th Percentile
CUX - USABILITY

CLINIQUE
56th Percentile
CUX - USABILITY

LUSH FRESH HANDMADE COSMETICS
35th Percentile
CUX - USABILITY

CXL institute

*C*U*X* - Loyalty

Survey questions (likert-scale):

How likely are you to recommend this website to a friend or colleague?

I will likely visit this website in the future.

CUX - LOYALTY

SEPHORA

97th
Percentile
*C*U*X* - LOYALTY

CLINIQUE

72nd
Percentile
*C*U*X* - LOYALTY

fresh.

58th
Percentile
*C*U*X* - LOYALTY

LUSH
FRESH
HANDMADE
COSMETICS

49th
Percentile
*C*U*X* - LOYALTY

C*X*L
institute

Ecommerce subvertical:
Clothing & Apparel

From Alexa top 25:

J.CREW   Kenneth Cole   H&M   Lulus

CXL institute

Clothing & Apparel Contents

Standalone website
rank profiles

Competitive
benchmarking per UX
dimension

J.Crew

Kenneth Cole

H&M

Lulus

CUX Global

Appearance

Clarity

Credibility

Loyalty

Usability

J.CREW

14th
Percentile
CUX - GLOBAL

27th
Percentile
CUX - APPEARANCE

14th
Percentile
CUX - USABILITY

18th
Percentile
CUX - CREDIBILITY

11th
Percentile
CUX - LOYALTY

15th
Percentile
CUX - CLARITY

18th Percentile
CUX - GLOBAL

39th Percentile
CUX - APPEARANCE

13th Percentile
CUX - USABILITY

20th Percentile
CUX - CREDIBILITY

13th Percentile
CUX - LOYALTY

13th Percentile
CUX - CLARITY

35th
Percentile
CUX - GLOBAL

69th
Percentile
CUX - APPEARANCE

23rd
Percentile
CUX - USABILITY

34th
Percentile
CUX - CREDIBILITY

35th
Percentile
CUX - LOYALTY

56th
Percentile
CUX - CLARITY

Lulus

46th Percentile
CUX - GLOBAL

85th Percentile
CUX - APPEARANCE

65th Percentile
CUX - USABILITY

41st Percentile
CUX - CREDIBILITY

32nd Percentile
CUX - LOYALTY

46th Percentile
CUX - CLARITY

*C*UX - Global

CUX - Global

Lulus — 46th Percentile CUX - GLOBAL

H&M — 35th Percentile CUX - GLOBAL

Kenneth Cole — 18th Percentile CUX - GLOBAL

J.CREW — 14th Percentile CUX - GLOBAL

*C*UX - Appearance

Survey questions (likert-scale)
I found the website to be attractive
The website has a clean and simple presentation

CUX - APPEARANCE

Lulus — 85th Percentile **C**UX - APPEARANCE

H&M — 69th Percentile **C**UX - APPEARANCE

Kenneth Cole — 39th Percentile **C**UX - APPEARANCE

J.CREW — 27th Percentile **C**UX - APPEARANCE

*C*UX - Clarity

Survey question (likert-scale):
I clearly understand why I should buy from this website instead of its competitors.

Lulus

H&M

Kenneth Cole
J.Crew

CUX - CLARITY

H&M

56th
Percentile
CUX - CLARITY

Lulus

46th
Percentile
CUX - CLARITY

J.CREW

15th
Percentile
CUX - CLARITY

Kenneth Cole

13th
Percentile
CUX - CLARITY

*C*UX - Credibility

Survey questions (likert-scale):

I feel comfortable purchasing from this website.

I feel confident conducting business with this website.

CUX - CREDIBILITY

Lulus
41st
Percentile
CUX - **CREDIBILITY**

H&M
34th
Percentile
CUX - **CREDIBILITY**

Kenneth Cole
20th
Percentile
CUX - **CREDIBILITY**

J.CREW
18th
Percentile
CUX - **CREDIBILITY**

*C*UX - Usability

Survey questions (likert-scale):

This website is easy to use.

It is easy to navigate within the website.

CUX - USABILITY

Lulus — 65th Percentile **CUX - USABILITY**

H&M — 23rd Percentile **CUX - USABILITY**

J.CREW — 14th Percentile **CUX - USABILITY**

Kenneth Cole — 13th Percentile **CUX - USABILITY**

*C*UX - Loyalty

Survey questions (likert-scale):
How likely are you to recommend this website to a friend or colleague?
I will likely visit this website in the future.

H&M

35th
Percentile
CUX - LOYALTY

Lulus

32nd
Percentile
CUX - LOYALTY

Kenneth Cole

13th
Percentile
CUX - LOYALTY

J.CREW

11th
Percentile
CUX - LOYALTY

H&M

Lulus

Kenneth Cole

CUX - LOYALTY

CXL
institute

Ecommerce subvertical:
Footwear

From Alexa top 25:

Footwear Contents

Standalone website rank profiles

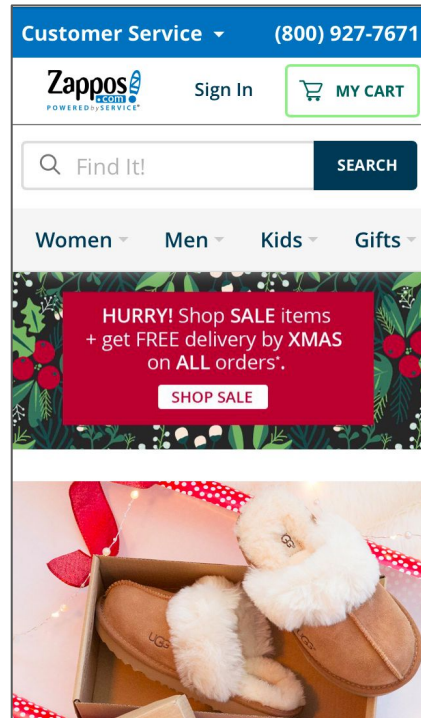### Competitive benchmarking per UX dimension

Payless

Zappos

Finish Line

Merrell

CUX Global

Appearance

Clarity

Credibility

Loyalty

Usability

Payless SHOESOURCE

25th
Percentile
CUX - GLOBAL

15th
Percentile
CUX - APPEARANCE

21st
Percentile
CUX - USABILITY

42nd
Percentile
CUX - CREDIBILITY

20th
Percentile
CUX - LOYALTY

27th
Percentile
CUX - CLARITY

Customer Service ▾   (800) 927-7671

Zappos.com
POWERED by SERVICE®   Sign In   🛒 MY CART

🔍 Find It!   SEARCH

Women ▾   Men ▾   Kids ▾   Gifts ▾

HURRY! Shop **SALE** items + get FREE delivery by **XMAS** on **ALL** orders*.
SHOP SALE

77th
Percentile
CUX - GLOBAL

86th
Percentile
CUX - APPEARANCE

87th
Percentile
CUX - USABILITY

54th
Percentile
CUX - CREDIBILITY

55th
Percentile
CUX - LOYALTY

92nd
Percentile
CUX - CLARITY

87th Percentile
CUX - GLOBAL

87th Percentile
CUX - APPEARANCE

89th Percentile
CUX - USABILITY

97th Percentile
CUX - CREDIBILITY

61st Percentile
CUX - LOYALTY

90th Percentile
CUX - CLARITY

MERRELL M

24th Percentile	23rd Percentile	20th Percentile
CUX - GLOBAL	CUX - APPEARANCE	CUX - USABILITY

31st Percentile	24th Percentile	24th Percentile
CUX - CREDIBILITY	CUX - LOYALTY	CUX - CLARITY

*C*UX - Global

*C*UX - Appearance

Zappos.com
87th Percentile
CUX - APPEARANCE

FINISH LINE
86th Percentile
CUX - APPEARANCE

MERRELL
23rd Percentile
CUX - APPEARANCE

Payless SHOESOURCE
15th Percentile
CUX - APPEARANCE

Payless
Merrell
Finish Line

CUX - APPEARANCE

*C*XL institute

*C*UX - Clarity

CUX - CLARITY

Merrell
Payless

Finish Line
Zappos

Zappos
92nd
Percentile
C**UX** - CLARITY

FINISH LINE
90th
Percentile
C**UX** - CLARITY

Payless SHOESOURCE
27th
Percentile
C**UX** - CLARITY

MERRELL
24th
Percentile
C**UX** - CLARITY

CXL institute

*C*UX - Credibility

*C*UX - Usability

CUX - USABILITY

FINISH LINE — 89th Percentile **CUX - USABILITY**

Zappos.com — 87th Percentile **CUX - USABILITY**

Payless SHOESOURCE — 21st Percentile **CUX - USABILITY**

MERRELL — 20th Percentile **CUX - USABILITY**

CXL institute

*C*UX - Loyalty

FINISH LINE™
61st Percentile
C*UX* - LOYALTY

Zappos.com
55th Percentile
C*UX* - LOYALTY

MERRELL M
24th Percentile
C*UX* - LOYALTY

Payless SHOESOURCE
20th Percentile
C*UX* - LOYALTY

Zappos
Finish Line
Payless
Merrell

CUX - LOYALTY

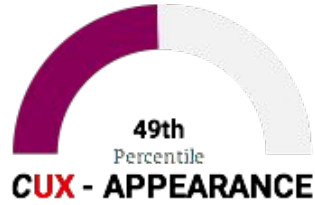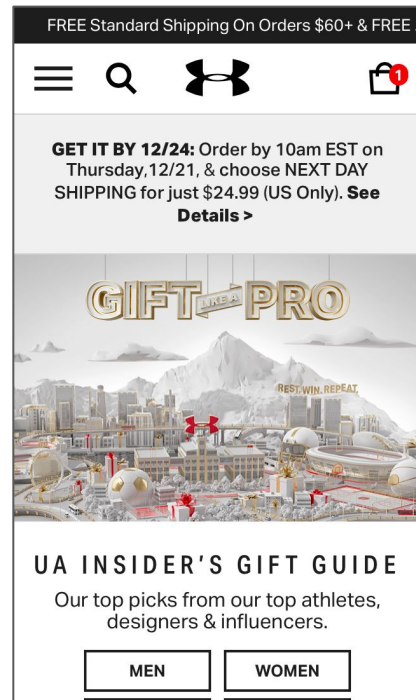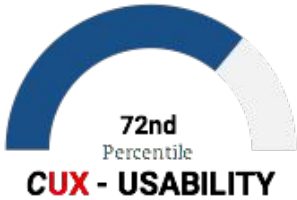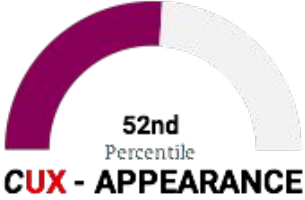CXL institute

Ecommerce subvertical:
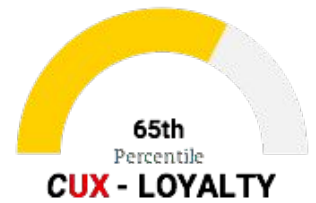# Sports

From Alexa top 25:

Sports Contents

Standalone website rank profiles

Competitive benchmarking per UX dimension

Nike

Underarmour

DICK's Sporting Goods

Adidas

CUX Global

Appearance

Clarity

Credibility

Loyalty

Usability

NIKE

GIVE SPORT.

Shop Gifts

44th
Percentile
CUX - GLOBAL

73rd
Percentile
CUX - APPEARANCE

44th
Percentile
CUX - USABILITY

49th
Percentile
CUX - CREDIBILITY

34th
Percentile
CUX - LOYALTY

44th
Percentile
CUX - CLARITY

FREE Standard Shipping On Orders $60+ & FREE .

GET IT BY 12/24: Order by 10am EST on Thursday,12/21, & choose NEXT DAY SHIPPING for just $24.99 (US Only). **See Details >**

GIFT *LIKE A* PRO

REST. WIN. REPEAT.

UA INSIDER'S GIFT GUIDE
Our top picks from our top athletes, designers & influencers.

| MEN | WOMEN |

31st
Percentile
CUX - GLOBAL

49th
Percentile
CUX - APPEARANCE

18th
Percentile
CUX - USABILITY

39th
Percentile
CUX - CREDIBILITY

27th
Percentile
CUX - LOYALTY

34th
Percentile
CUX - CLARITY

68th Percentile
CUX - GLOBAL

52nd Percentile
CUX - APPEARANCE

72nd Percentile
CUX - USABILITY

80th Percentile
CUX - CREDIBILITY

68th Percentile
CUX - LOYALTY

94th Percentile
CUX - CLARITY

adidas

85th Percentile
CUX - GLOBAL

92nd Percentile
CUX - APPEARANCE

80th Percentile
CUX - USABILITY

85th Percentile
CUX - CREDIBILITY

65th Percentile
CUX - LOYALTY

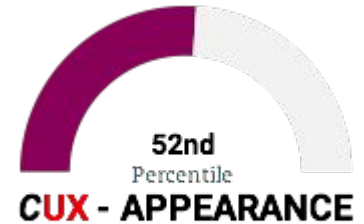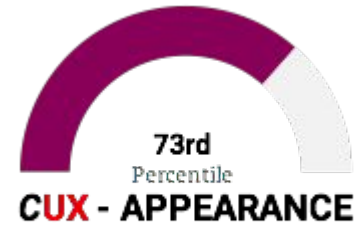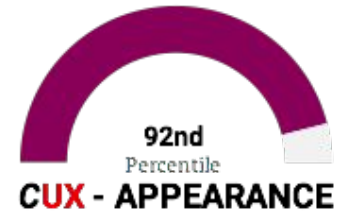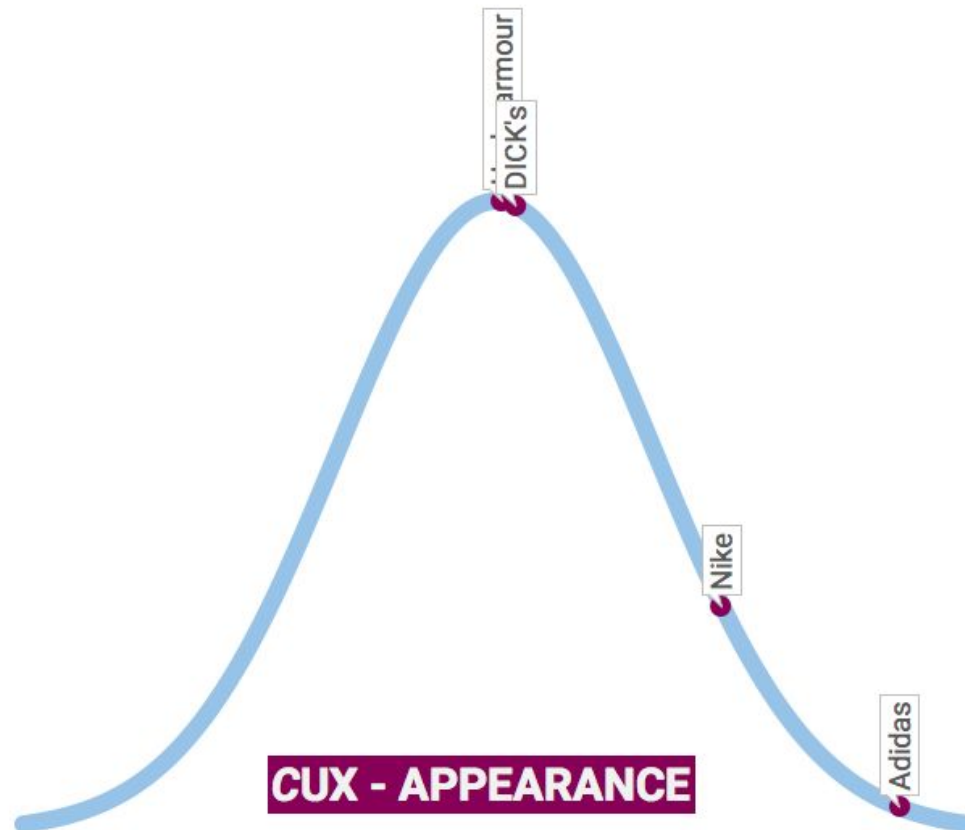**73rd** Percentile
CUX - CLARITY

*C*UX - Global

*C*UX - Appearance

Survey questions (likert-scale)

I found the website to be attractive
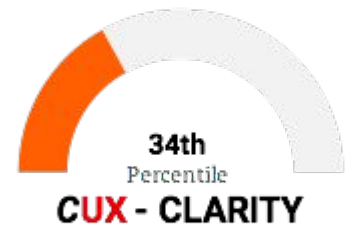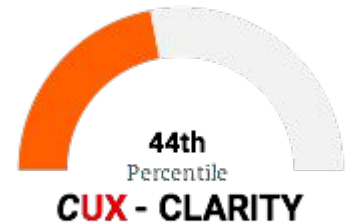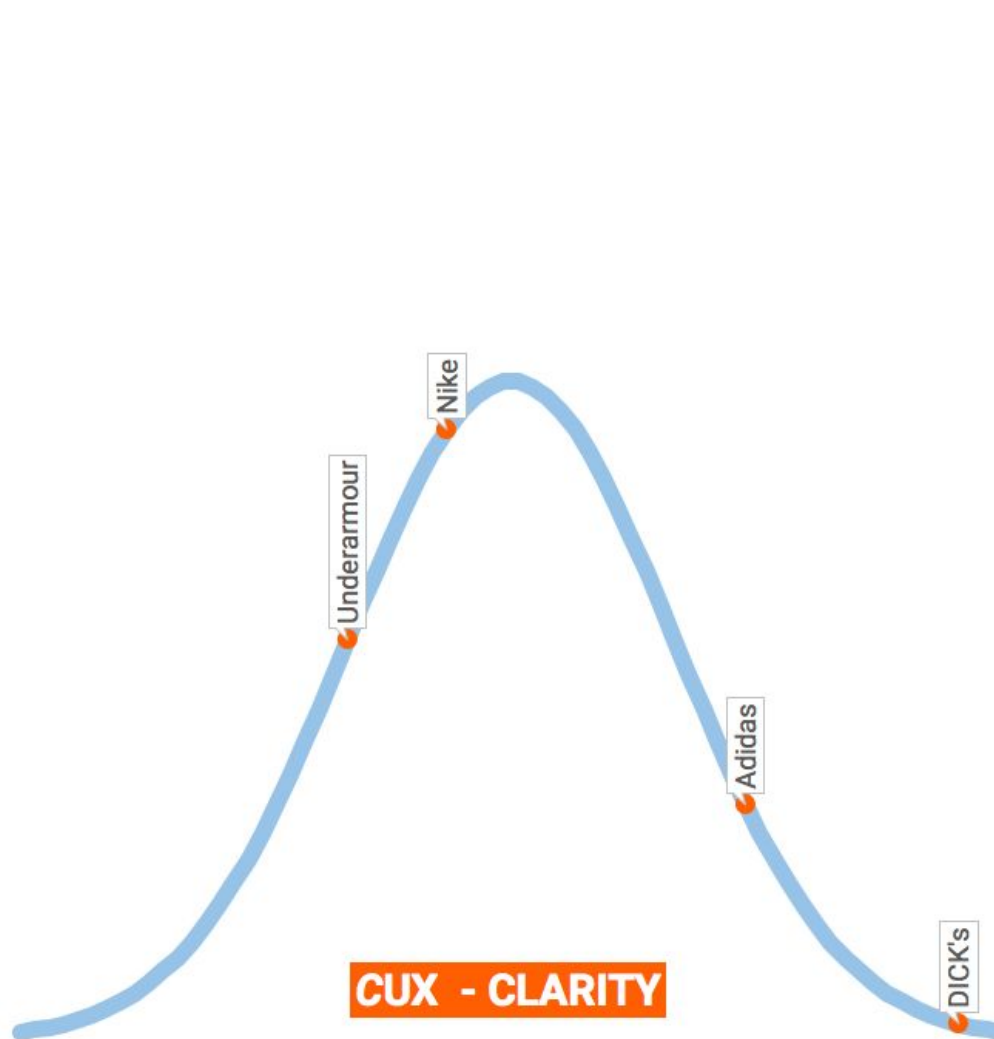
The website has a clean and simple presentation

adidas — 92nd Percentile — CUX - APPEARANCE

NIKE — 73rd Percentile — CUX - APPEARANCE

DICK'S SPORTING GOODS — 52nd Percentile — CUX - APPEARANCE

UNDER ARMOUR — 49th Percentile — CUX - APPEARANCE

CUX - APPEARANCE

CXL institute

*C*UX - Clarity

Survey question (likert-scale):
I clearly understand why I should buy from this website instead of its competitors.

Nike

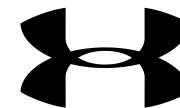Underarmour

Adidas

DICK's

CUX - CLARITY

DICK'S SPORTING GOODS
94th
Percentile
CUX - CLARITY

adidas®
94th
Percentile
CUX - CLARITY

NIKE
44th
Percentile
CUX - CLARITY

UNDER ARMOUR
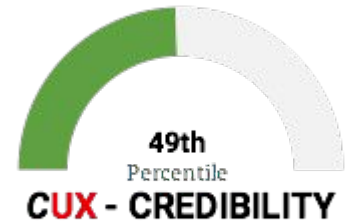34th
Percentile
CUX - CLARITY
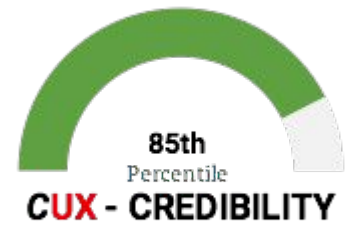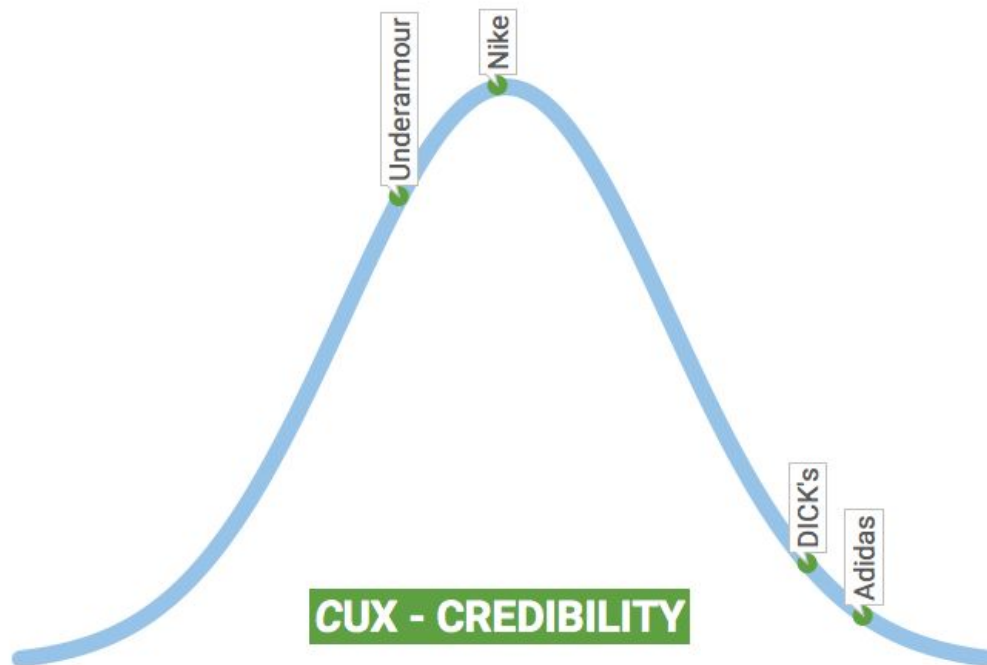
CUX - Credibility

Survey questions (likert-scale):

I feel comfortable purchasing from this website.

I feel confident conducting business with this website.

CUX - CREDIBILITY

adidas
85th
Percentile
CUX - CREDIBILITY

DICK'S SPORTING GOODS
80th
Percentile
CUX - CREDIBILITY

NIKE
49th
Percentile
CUX - CREDIBILITY

UNDER ARMOUR
39th
Percentile
CUX - CREDIBILITY

CXL institute

*C*UX - Usability

Survey questions (likert-scale):

This website is easy to use.

It is easy to navigate within the website.

adidas — 80th Percentile — CUX - USABILITY

DICK'S SPORTING GOODS — 72nd Percentile — CUX - USABILITY

NIKE — 44th Percentile — CUX - USABILITY

UNDER ARMOUR — 18th Percentile — CUX - USABILITY

CUX - USABILITY

Nike

DICK's

Underarmour

Adidas

CXL institute

*C*UX - Loyalty

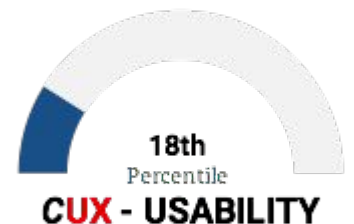Survey questions (likert-scale):

How likely are you to recommend this website to a friend or colleague?

I will likely visit this website in the future.

DICK'S SPORTING GOODS
68th
Percentile
*C*UX - LOYALTY

adidas®
65th
Percentile
*C*UX - LOYALTY

NIKE
34th
Percentile
*C*UX - LOYALTY

UNDER ARMOUR
27th
Percentile
*C*UX - LOYALTY

CUX - LOYALTY

Underarmour

Nike

Adidas

DICK's

Ecommerce subvertical:
Toys

From Alexa top 25:

Toys **Contents**

Standalone website
rank profiles

Competitive
benchmarking per UX
dimension

Fat Brain Toys

Hasbro

Toys"R"Us

LEGO

CUX Global

Appearance

Clarity

Credibility

Loyalty

Usability

23rd
Percentile
CUX - GLOBAL

13th
Percentile
CUX - APPEARANCE

44th
Percentile
CUX - USABILITY

17th
Percentile
CUX - CREDIBILITY

15th
Percentile
CUX - LOYALTY

17th
Percentile
CUX - CLARITY

30th
Percentile
CUX - GLOBAL

34th
Percentile
CUX - APPEARANCE

28th
Percentile
CUX - USABILITY

25th
Percentile
CUX - CREDIBILITY

28th
Percentile
CUX - LOYALTY

27th
Percentile
CUX - CLARITY

30th
Percentile
CUX - GLOBAL

34th
Percentile
CUX - APPEARANCE

28th
Percentile
CUX - USABILITY

25th
Percentile
CUX - CREDIBILITY

28th
Percentile
CUX - LOYALTY

27th
Percentile
CUX - CLARITY

56th
Percentile
CUX - GLOBAL

54th
Percentile
CUX - APPEARANCE

55th
Percentile
CUX - USABILITY

75th
Percentile
CUX - CREDIBILITY

54th
Percentile
CUX - LOYALTY

69th
Percentile
CUX - CLARITY

*C*UX - Global

LEGO

Hasbro

Fat Brain Toys

Toys"R"Us

CUX - Global

Toys'R'Us
90th Percentile
*C*UX - GLOBAL

LEGO
56th Percentile
*C*UX - GLOBAL

Hasbro
30th Percentile
*C*UX - GLOBAL

Fat Brain Toys
23rd Percentile
*C*UX - GLOBAL

CXL institute

*C*UX - Appearance

Survey questions (likert-scale)
I found the website to be attractive
The website has a clean and simple presentation

CUX - APPEARANCE

Fat Brain Toys

Hasbro

LEGO

Toys"R"Us

89th
Percentile
CUX - APPEARANCE

54th
Percentile
CUX - APPEARANCE

34th
Percentile
CUX - APPEARANCE

13th
Percentile
CUX - APPEARANCE

*C*UX - Clarity

Survey question (likert-scale):
I clearly understand why I should buy from this website instead of its competitors.

ToysЯus
99th
Percentile
CUX - CLARITY

LEGO
69th
Percentile
CUX - CLARITY

Hasbro
27th
Percentile
CUX - CLARITY

Fat Brain Toys
17th
Percentile
CUX - CLARITY

Fat Brain Toys
Hasbro
LEGO
Toys"R"Us

CUX - CLARITY

CXL institute

CUX - Credibility

Survey questions (likert-scale):

I feel comfortable purchasing from this website.

I feel confident conducting business with this website.

Toys"R"Us — 90th Percentile CUX - CREDIBILITY

LEGO — 75th Percentile CUX - CREDIBILITY

Hasbro — 25th Percentile CUX - CREDIBILITY

Fat Brain Toys — 17th Percentile CUX - CREDIBILITY

CUX - CREDIBILITY

Fat Brain Toys

Hasbro

LEGO

Toys"R"Us

*C*UX - Usability

Survey questions (likert-scale):

This website is easy to use.

It is easy to navigate within the website.

Toys"R"Us

76th
Percentile

CUX - USABILITY

LEGO

55th
Percentile

CUX - USABILITY

Fat Brain Toys

44th
Percentile

CUX - USABILITY

Hasbro

28th
Percentile

CUX - USABILITY

Fat Brain Toys

LEGO

Hasbro

Toys"R"Us

CUX - USABILITY

CXL institute

*C*UX - Loyalty

Survey questions (likert-scale):

How likely are you to recommend this website to a friend or colleague?

I will likely visit this website in the future.

Toys"R"Us — 94th Percentile — CUX - LOYALTY

LEGO — 54th Percentile — CUX - LOYALTY

Hasbro — 28th Percentile — CUX - LOYALTY

Fat Brain Toys — 15th Percentile — CUX - LOYALTY

CUX - LOYALTY

Fat Brain Toys

Hasbro

LEGO

Toys"R"Us

Methods

The information in this report was primarily derived from two large rounds of user surveys and testing, described in detail below. We supplemented those efforts with extensive agency client research findings and 30+ user experience research studies conducted by the [CXL Institute](#) research team.

A sample of the studies are referenced within guideline sections in the report, and include (but aren't limited to):

- [Visual Cue Study: Lead Generation Form on a Landing Page](#)
- [Ecommerce Product Page Study (Part 1/3): Value Perceptions and Image size](#)
- [Ecommerce Product Page Study (Part 2/3): Visual Perceptions and Image Size](#)
- [Ecommerce Product Page Study (Part 3/3): Visual Perceptions and Text Format](#)
- [Social Proof Study: Which Kind Increases Perception and Recall](#)
- [Value Proposition Study: Effects of Layout on Perception & Message Recall](#)
- [Pricing Page Study (Part 1) Effects of Plan Price Order](#)
- [Pricing Page Study (Part 2) Effects of 'Highlighting' a Plan](#)
- [Video Voice-Over Preference Study](#)
- [Testing the Presenter's Paradox - Do People Really Average (Not Sum) Object Values?](#)
- [Trust Seals (Part 1) - Security Vs. Familiarity](#)
- [Trust Seals (Part 2) - Online Security Perceptions & Trust Seals](#)
- [Security on Checkout (Part 1) - Visual Perception and Recall of Trust Seals](#)
- [Security on Checkout (Part 2) Effects of Visual Reinforcement on Credit Card Fields](#)
- [Form Field Usability - Single Vs. Multi-Column Form Completion Time](#)
- [Benefit List Placement on an Ecommerce Product Page](#)
- [Form Field Usability - Multi-Select vs. Radio Buttons](#)
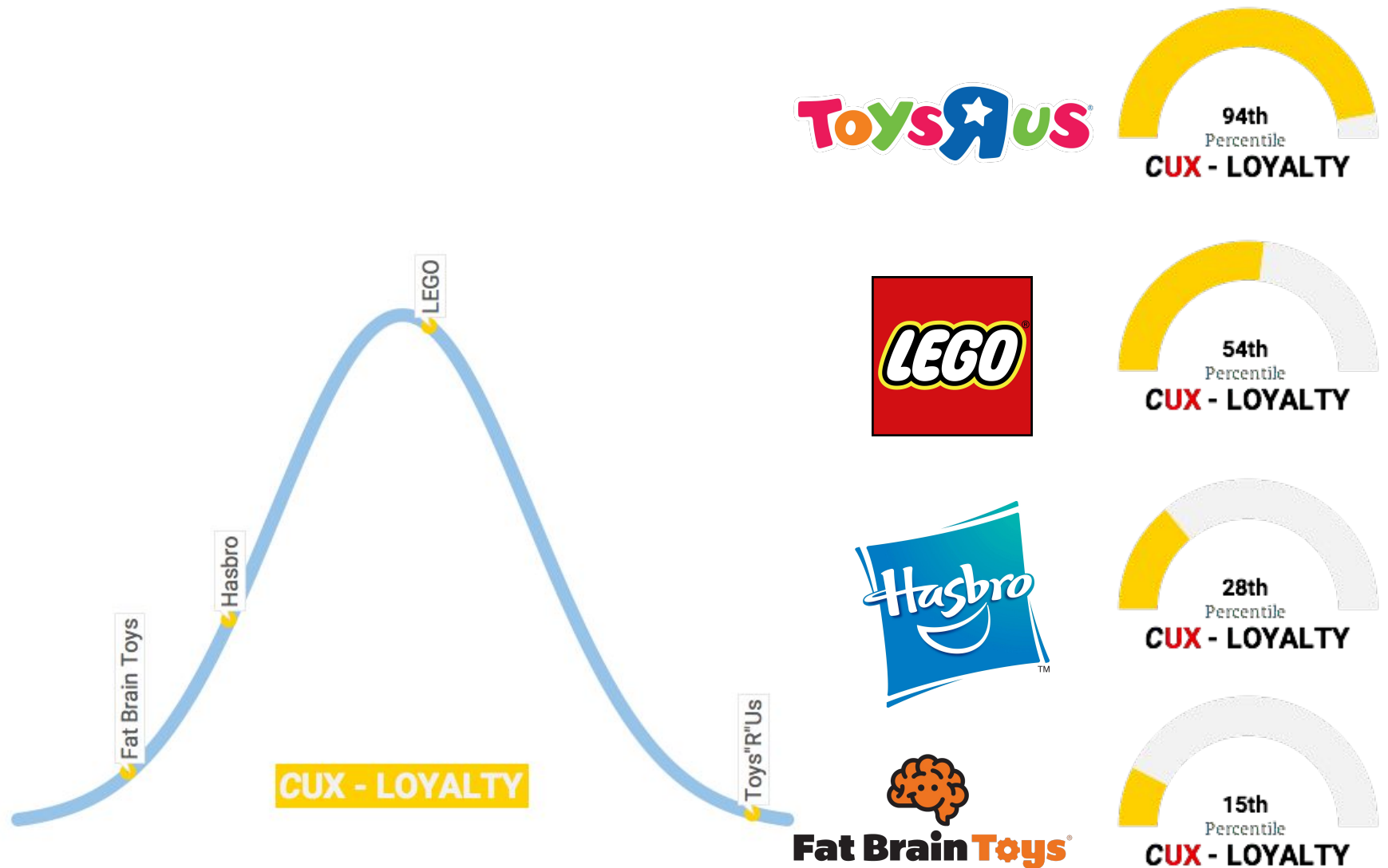- [Credibility Effects of a 'Human Authority Image' (e.g., picture of the founder) on an Agency Website](#)
- [The Presenter's Paradox Revisited: No Effects of Visuals on Perceived Value](#)
- [How Distracting are Banner Advertisements on Home Pages? A Case Study](#)
- [Distraction of Internal Promotion vs. Third-Party Banner Advertisements](#)
- [User Reading Patterns of the New York Times - 2004 vs. 2016](#)

Methods » Website Selection

20 sites were selected from 5 categories or subcategories of [Alexa's Top 500 Sites on the Web](#) representing 5 ecommerce subverticals, which are ranked by their 1 month alexa traffic. The 1 month rank is calculated using a combination of average daily visitors and pageviews over the past month. The site with the highest combination of visitors and pageviews is ranked #1.

Four sites from each subvertical were chosen from the first top-ranked 20 options, and for the quantitative survey methodology one site was selected from the 20th top-ranked page options (so a site ranking near 400). This site serves as a reference against the top tier sites and was included to validate the UX benchmark metric calibration (see Qualitative User-testing methods below).

Subverticals included:

- **Beauty**
  - Sephora
  - Clinique
  - LUSH
  - Fresh

- **Footwear**
  - Zappos
  - Payless
  - Merrell
  - Finish Line

- **Sports**
  - Nike
  - Adidas
  - DICK's Sporting Goods
  - Underarmour

- **Toys**
  - Toys"R"Us
  - Fat Brain Toys
  - Hasbro
  - LEGO

- **Clothing & Apparel**
  - J.Crew
  - H&M
  - Lulus
  - Kenneth Cole

Methods »

CUX Benchmarking - Quantitative Insights

A major component of this user-testing-based report is a supplement to the the qualitative data in the form of user survey-based quantitative data on users perceptions of website quality via a standardized questionnaire component. It allows us to benchmark the user experience of a website in a unique and highly useful way for conversion-minded practitioners. We call the approach *CUX* Benchmarking.

The features & benefits of this *CUX* benchmarking approach:

- **Conversion Focused:** developed with a UX dimension quantifying user's perception of a website's value proposition, or why they should consider a site compared to its competition.
- **Quantitative**: based on 100+ user datapoints for each site
- **Generalizable & Transferable**: It can describe the quality of any website - so can be used for competitive benchmarking and is ideal for relative context, understand how scores relate to each other when measuring before and after a design change, or compared to a competitor.
- **Multidimensional**: It includes the main factors for measuring website user experience and general quality of a website.
- **Standardized, Normalized, and Benchmarked**: It has been developed through extensive testing on a massive user testing database (see the peer-reviewed paper on it's foundation) and the metrics produced for any one website is able to be placed in context relative to its peers and relative to itself if replicated after website modification.
- **Repeatable:** Ideal for quantifying a baseline for comparison against later site design changes.
- **Ideal for Competitive Benchmarking**: Quickly and reliably know how your website is perceived (in dimensions of appearance, clarity, usability, and credibility) relative to your competition. Comparing against multiple websites provides context for what's working and not working to make inspired, hypothesis-driven design decisions.
- **Ideal alongside User-Testing results**: 5-10 user sessions providing qualitative, open-ended responses to questions relative to similar UX dimensions as what's in the CUX metric will provide actionable direction for design improvements.

Methods »
CUX Benchmarking - Quantitative Insights

The UX benchmark metric is adapted from the [SUPR-Q: a comprehensive measure of the quality of the website user experience](). Published in 2015 in the [Journal of Usability Statistics](), Jeff Sauro presents this new standardized survey metric that has four subcomponents to measure perceptions of a website's usability, credibility, appearance and loyalty. We modified this metric by adding an additional subcomponent, clarity. Website clarity, or specifically, clarity of the value proposition a website offers on its homepage, is a primary driver for customer motivations and thus extremely important to conversion rates and customer perceptions generally.

The five subcomponents and their associated survey question(s) presented in a likert-scale format:

USABILITY
This website is easy to use.
It is easy to navigate within the website.

CREDIBILITY (Trust)
I feel comfortable purchasing from this website.
I feel confident conducting business with this website.

LOYALTY
How likely are you to recommend this website to a friend or colleague?
I will likely visit this website in the future.

APPEARANCE
I found the website to be attractive.
The website has a clean and simple presentation.

CLARITY (our additional question, not part of SUPR-Q)
I clearly understand why I should buy from this website instead of its competitors.

Methods »
*C*UX Benchmarking - Quantitative Insights

With the data from these questions across participants (<u>ranging from 55 - 108 per site</u>), we calculated a competitive UX benchmark metric among the sites studies, and within sub-verticals (e.g., footwear, beauty, etc.) and thus provide a quantitative perspective that complements the qualitative user-testing data.

The results between the quantitative and qualitative testing aren't explicitly comparable, but they both should be a foundation for where hypothesis testing and benchmarking should start.

Note that we developed a unique calculation of the benchmark metric for this report, as we had the addition of the UX dimension of clarity. Thus it is not directly comparable to the SUPR-Q metric calculation. However, the metric we derived leverages the psychometric validation work to create and qualify the list of questions, and in our opinion improves the benchmark by adding a valuable perspective related to customer motivation towards buying from one vendor instead of another.

The value proposition, a part of our thinking in creating the clarity question, has proven to be one of the most important test variables in creating consistent and significant lifts in conversion optimization rate. Ecommerce business today are competing with the likes of Amazon, Best Buy, Zappos, and need to differentiate by clearly relating the benefits for why a customer needs to buy from them and not from Amazon.

Methods »

User Testing - Qualitative Insights

Remote unmoderated user-testing was performed in partnership with TryMyUI.

TryMyUI is a remote, cross-platform user testing tool that enables the customer to get qualitative video data on their website/webapp/mobile-app from their target demographic users.

With a host of analytical tools like Collaborative annotations, UXCrowd and UXDiagnostics, TryMyUI enabled our researchers to extract key user insights from the video and survey data.

Methods »
User Testing - Qualitative Insights

Testing was performed on each of the 30 top-tier sites (see Site Selection) with 10 users for each site performing tasks in a 'talk-aloud' protocol. Each of the 300 user sessions lasted 15-20 minutes.

Tasks provided were meant to mimic common experiences with an ecommerce site, including finding and purchasing a relatively specific item, comparing multiple items, browsing for an undefined item, and the checkout process.

The participants were given the following type of scenario and task list, here presented for the Clothing & Apparel subvertical:

Scenario: Imagine you accidentally destroyed your friend's shirt and need to buy them a new one. You're browsing the Gap website to see if they having something similar.

1) Find a women's black short sleeve shirt for $35 or less.
2) Now that you've found a shirt, compare it to others that are similar and add the one you'd prefer to buy to the shopping cart.
3) Imagine you need a birthday gift for your friend. Find something you think they'd like and add it to the shopping cart.
4) Now please go to your cart and complete the purchase; Credit Card#: 1111 2222 3333 4444 CVV: 111 Expiration Date: 06/01/2017. Your task will end when you see an error message after submitting the proxy credit card information.

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Methods »
User Testing - Qualitative Insights

For each task, users rated task difficulty on a 7 point likert scale, and task completion time was recorded.

Post-task questions for all sessions included:

1. *What frustrated you most about this site?*
2. *If you had a magic wand, how would you improve this site?*
3. *What did you like about the site?*
4. *How clearly do you understand why you should buy from this website instead of its competitors? (0=Not at all likely, and 10=Very Likely)? Please tell us why you chose this answer.*

The first 3 questions were designed to get a standard set of responses across sites.

The 4th was exploratory in a sense, as we asked this same question in the quantitative survey method. Here, we wanted to see how people answered this with some reasoning *behind* the numeric response (the "why" part of the question).

About » Authors

CXL institute

Ben Labay - Ben does UX research at *CXL*. He is a research scientist with a background in statistics and data science.

Maddie Sidoff - Maddie designs, executes, and writes about UX research studies with *CXL*.

Peep Laja - Peep is our conversion guru, the mastermind behind the work we provide for our customers. He has worked with thousands of companies all over the world.

About » CXL Institute

CXL Institute is where people go to become advanced conversion optimizers and t-shaped marketers. Through the conversion course, students (marketers and other professionals) learn how to improve conversion optimization, UX, and web analytics skills.

We provide on-demand CRO, UX, and digital analytics video courses created and presented by top experts. Quizzes after each lesson along with a final exam ensure that our students are absorbing the content, and that they're truly qualified conversion optimizers by the time they earn their certificate.

CXL is a data-driven growth & conversion optimization agency. We use UX research, A/B testing & analytics to drive continuous improvement.

We help clients increase revenue:

- We identify where your website is leaking money and where the biggest sources of gains hide
- We create optimized design, copy, & structure improvements, based on the data received
- We run extensive, iterative tests to figure out which optimized treatments work for your site
- We perform conversion research via User Testing and CUX Benchmarking Services - understand UX issues on your site and see how you compare against your competitors.