



ModCloth

Accessibility Cognitive Walkthrough *iOS App*

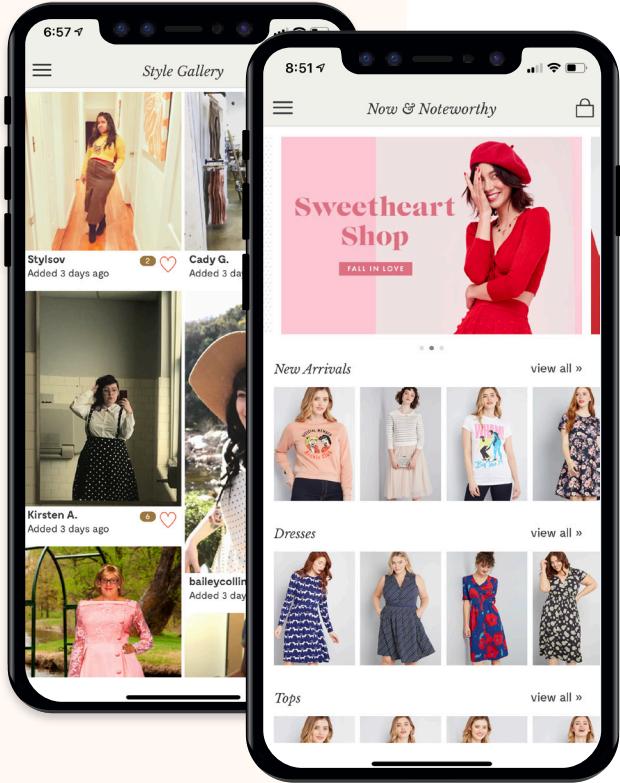


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a quick look

EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

Our Evaluation

ModCloth's iOS app is central to their **mobile-first retail strategy**. Our evaluation focused on **accessibility** within the search, browse, and filter functions. We used the streamlined **cognitive walkthrough** method, which examines a specific task step-by-step with a target user in mind.

Key Findings

Our team identified multiple accessibility issues at each step of the process. We have provided **ten recommendations** that we are confident will benefit all customers.

all about modcloth

INTRODUCTION



ModCloth

Vintage Made Modern

ModCloth is a large online retailer that has been delighting customers with **vintage-inspired clothing** and accessories since 2002. The company is known for their commitment to body positivity, inclusivity, and customer engagement.

ModCloth announced a mobile-first retail strategy in 2013, along with the launch of their first iPhone app. Only a few months later, ModCloth reported that mobile browsing accounted for **over 50%** of their customer engagement, with app use significantly outpacing mobile web use.

our process

METHODOLOGY

METHODOLOGY

Overview

We chose a streamlined cognitive walkthrough method for this evaluation. Since the product we examined is a retail app, we felt that evaluating a critical, high-impact task—finding a product using **search, browse, and filters**—would provide the greatest value to our client. Our decision to focus on **accessibility** ensures that our recommendations benefit all users.

Cognitive Walkthrough

A streamlined cognitive walkthrough evaluates **specific tasks** within an interface, using the following process:

- **01** Define target user and create persona
- **02** Select a task
- **03** Identify the steps required to complete the task
- **04** For each step, ask two questions:
 - Q1** Will the user know what to do at this step?
 - Q2** If the user does the right thing, will they know that they did the right thing, and are making progress toward their goal?
- **05** Record successes and failures
- **06** Make recommendations for improvement

METHODOLOGY

Accessibility

Cognitive walkthroughs can be an [excellent way](#) to identify potential accessibility issues, since the process is **task-oriented** and **persona-driven**. We structured our walkthrough for accessibility using the standard two-question framework.

VoiceOver is a built-in **accessibility feature** in iOS that reads content out loud to users. Gestures like tapping, dragging, and flicking are used to navigate apps and websites. Our cognitive walkthrough was conducted using VoiceOver, as it is [preferred by the majority of users](#) with visual impairments.

Severity Scale

In addition to answering each of the two walkthrough questions, we've included a [severity scale](#) to aid in prioritization of solutions:



MINOR

Causes some hesitation or slight irritation.



MODERATE

Causes occasional task failure, delays, and moderate irritation.



CRITICAL

Leads to task failure. Causes user extreme irritation.

a potential customer

PERSONA



Alex

28, Customer Service Assistant

PASSIONATE

INDEPENDENT

WITTY

MEET ALEX

Right Now

Alex is 28 years old, works full time in a customer service job, and lives in San Jose with her boyfriend and dog. They enjoy cooking together, beer tastings, and hiking on the weekends.

This Spring

Alex is attending a close friend's wedding as a bridesmaid. All of the bridesmaids have been instructed to buy blue dresses under \$150. Alex decides to buy her dress on ModCloth because they offer a wide range of plus size clothing in her style.

Accessibility Considerations

Alex has been blind since birth. She prefers online shopping because it saves her time, and she uses her iPhone with VoiceOver to browse her favorite retailers. She has been using VoiceOver since she got her first iPhone in 2012 and is very proficient.

MEET ALEX

Frustrations

- Alex likes to **complete tasks quickly**. She often abandons searches and potential purchases if a website is difficult to navigate.
- Alex doesn't like having to rely on anyone else, even her boyfriend, to help her with tasks. She loves being independent and **getting things done on her own**.
- Because Alex does a lot of online shopping, she's had some frustrating experiences with clothes that didn't fit right when they arrived, or weren't as described. She always tries to find reviews of products from other women her size (1X) before purchasing.

Users Like Alex...

- Blind users are more likely to **use a mobile app for shopping**, compared with users without disabilities
- **69%** of screen reader users **use VoiceOver**, and **75%** reported that iOS is their primary mobile platform
- **67%** go to **page headings** first for navigation
- **85%** feel that **improving websites** would have a bigger impact on accessibility than improving accessibility tools

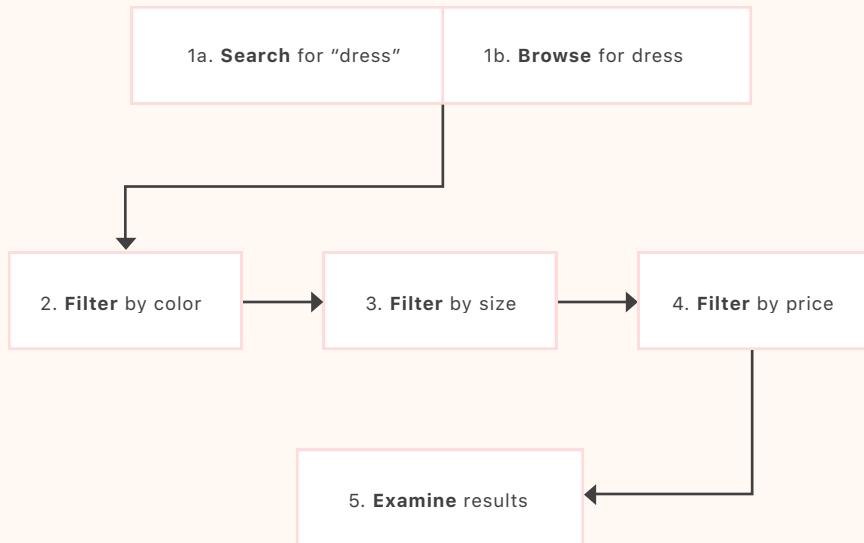
Source: webaim.org/projects/screenreadersurvey7
(Oct 2017)

finding a dress

CORE TASK

CORE TASK

Find a product on the ModCloth iOS app
using *search*, *browse*, and *filter*.



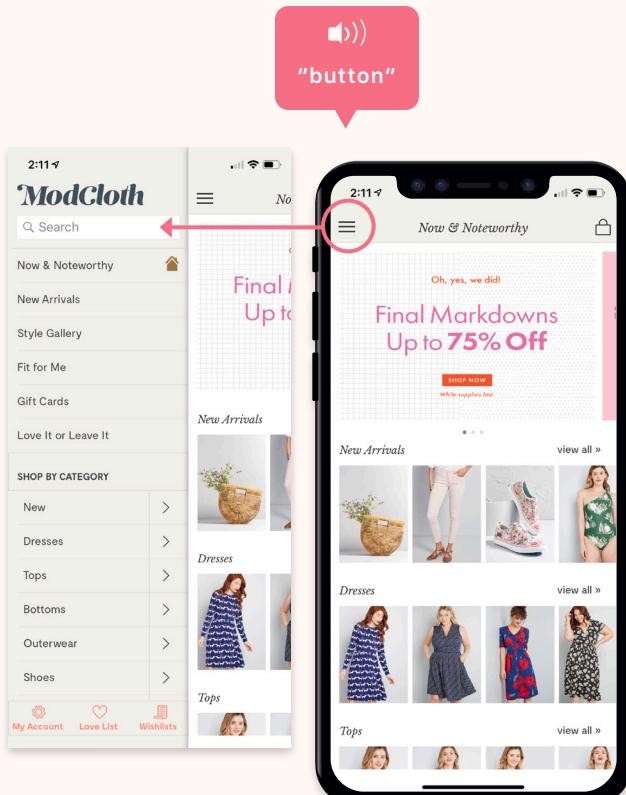
Why it's important

Browsing products is a common task, one that many users go through when using an ecommerce app. A user's ability to easily find the right product is **central to the shopping experience**, and can make or break a potential sale. Our user, Alex, expects to find a product that meets her requirements using **standard online shopping functions** like browse, search, and filter.

Good to know: While our primary focus was the iOS version of this app, we tested the Android version as well. We have noted areas in our findings where there were significant differences between the two.

what we discovered

FINDINGS



Findings - Step 1a

SEARCH FOR “DRESS”

1. Will the user know what to do?

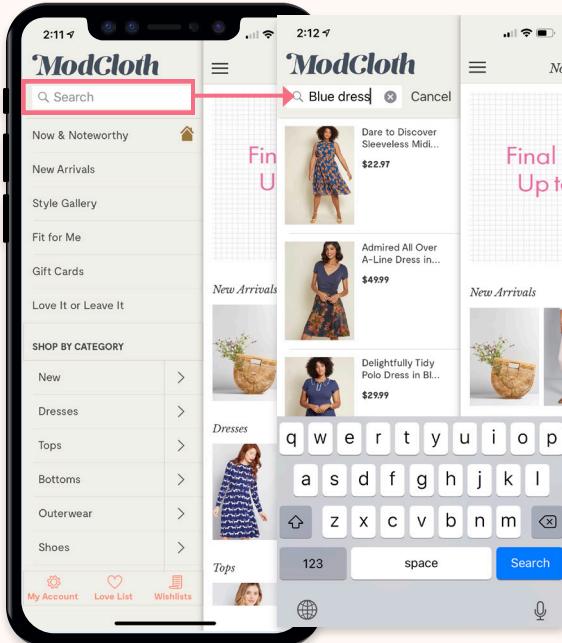
No. The search function **cannot be found** in iOS using VoiceOver. Search is inside the top navigation menu, which requires clicking a hamburger menu icon. The menu icon is not assigned alt text or labels that say “menu”; it simply says “button”. Our user is not provided with the information required to locate either menu or search functions.



Good to know: In the Android version of the app, this step can be completed successfully, as the search function is outside of the menu.

Recommendations:

- Menu and search are two of the most important functions for users. Place the search function at the top of the page, but outside of the menu. Elevating the entry point for search ensures that all users can access this critical function quickly and easily.
- If a menu icon is used, be sure to label it as “menu” with alt text, label, accompanying text, or all three.



Findings - Step 1a

SEARCH FOR “DRESS”

2. If the user does the right thing, will she know that she did the right thing, and is making progress toward her goal?

Maybe. If the user locates the menu and search bar within it, either through trial-and-error or assistance* from a sighted user, she will be able to use the search function. However, it may be unclear whether the search has been applied, due to confusing feedback. When the menu is expanded, its content is positioned after all page content.



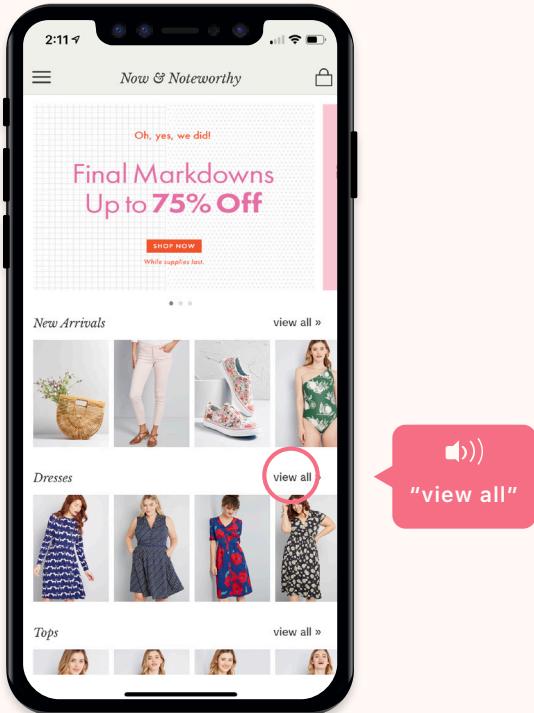
Recommendations:

- Provide feedback on user actions as much as possible. When a search is performed, ensure that the user is told that the search terms have been applied, and that the results page begins with a heading that includes the label “search results” as well as the search terms used.
- Menu content should always appear before page content, visually and structurally.

*Never assume that your user has access to external resources. Provide all task-critical information within the system itself.

Findings - Step 1b

BROWSE BY CATEGORY: “DRESSES”



1. Will the user know what to do?

Maybe. It is not possible for the user to browse via the menu (see page 16) but the homepage currently contains multiple categories, including “dresses”. If the user needed a product category not featured on the homepage, she would not be able to complete this step. The text that says “dresses” is linked to an individual product listing, not the “dresses” category. Only “view all” links to the “dresses” category. Category images are not accessible.

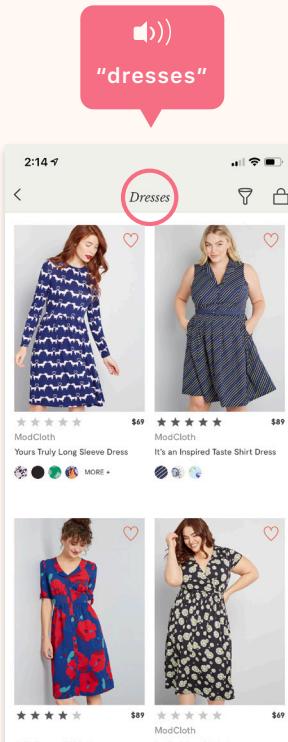
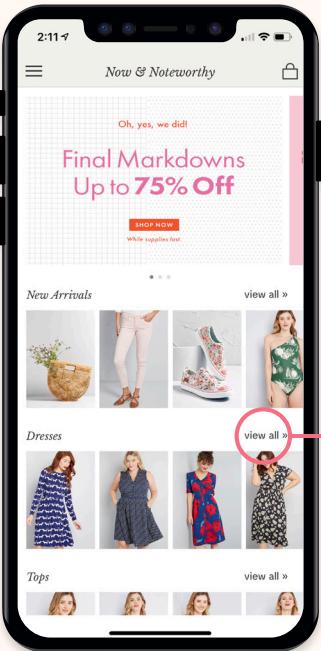


MODERATE

Good to know: In the Android version of the app, the hamburger menu button reads “Now and Noteworthy” instead of “menu”. Users navigating with Voice Assistant will not be able to identify the menu and open it. Neither Android nor iOS users can access the menu.

Recommendations:

- Ensure that headings, labels, and link titles match up with the content they accompany and with user expectations. Category titles should lead to category pages, while product titles should lead to product pages.



Findings - Step 1b

BROWSE BY CATEGORY: “DRESSES”

2. If the user does the right thing, will she know that she did the right thing, and is making progress toward her goal?

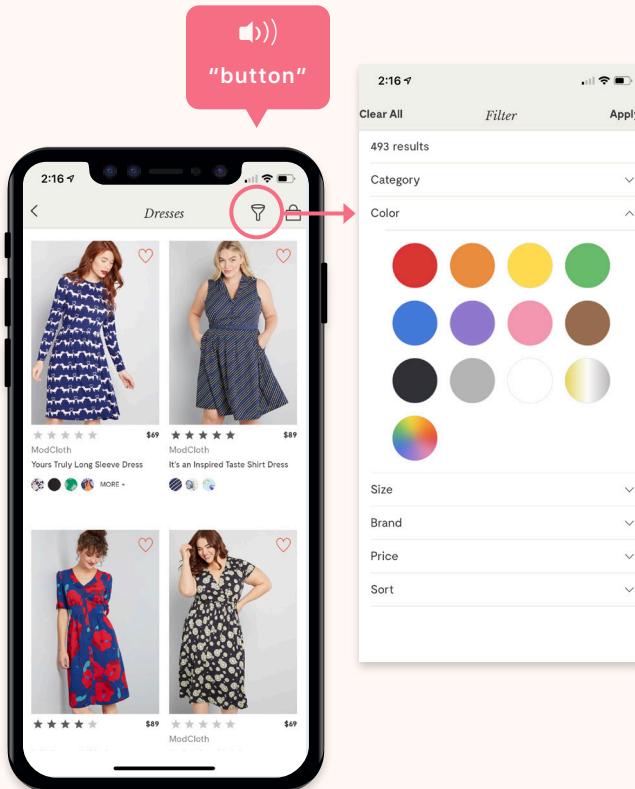
Yes. If the user taps “view all”, the resulting page begins with a heading that says “dresses”, followed by product listings within that category.



MINOR

Recommendations:

- All images that convey information should be accessible via screen reading software and described with alt text.



Findings - Step 2

FILTER BY COLOR

1. Will the user know what to do?

No. The user cannot access the filter menu in iOS. The filter icon is labeled "button" instead of "filter". If the filter menu is opened, each color swatch is likewise labeled "button", so it is not possible for the user to identify and select a specific color swatch.



Good to know: In the Android app, the filter menu icon is labeled as "filter", so users can access it easily. However, the "filter by color" function does not exist.

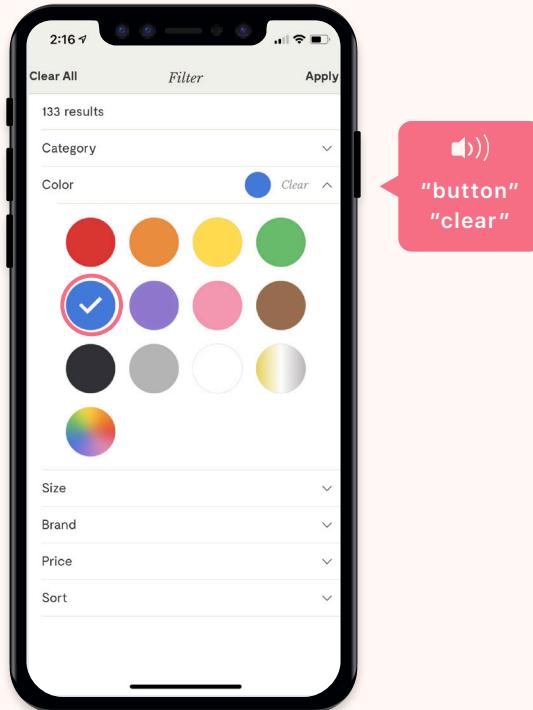
Recommendations:

- Ensure that all buttons and links have alt text or labels describing their functions, like "filter" and "menu". Labeling color swatches with alt text would allow screen reader users to filter by color. It also benefits users with color blindness.

Findings - Step 2



FILTER BY COLOR



"selected: button"



"button"
"clear"

2. If the user does the right thing, will she know that she did the right thing, and is making progress toward her goal?

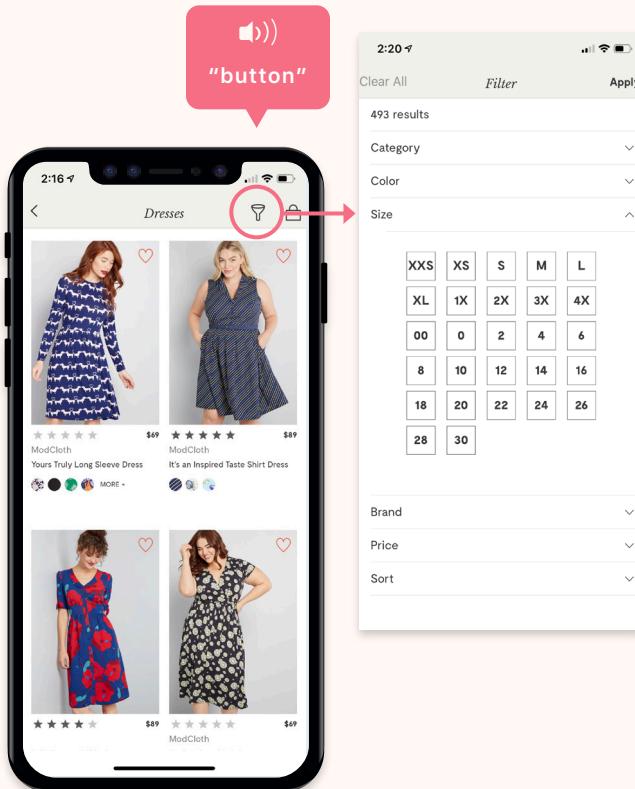
No. User cannot complete this step. If she uses trial-and-error to find the filter menu and select a color swatch, there is not sufficient feedback to indicate that the filter has been applied, or which color has been chosen. Feedback reads "selected: button"



CRITICAL

Recommendations:

- If user has selected an option, always provide feedback.
- Identify filter results with the same heading structure as search results. Indicate at the top of the page that a filter has been applied, and what that filter is.



Findings - Step 3

FILTER BY SIZE

1. Will the user know what to do?

No. The user cannot access the filter menu in iOS. The filter icon is labeled "button" instead of "filter". However, if the user finds the filter menu, size options are labeled clearly and can be selected.



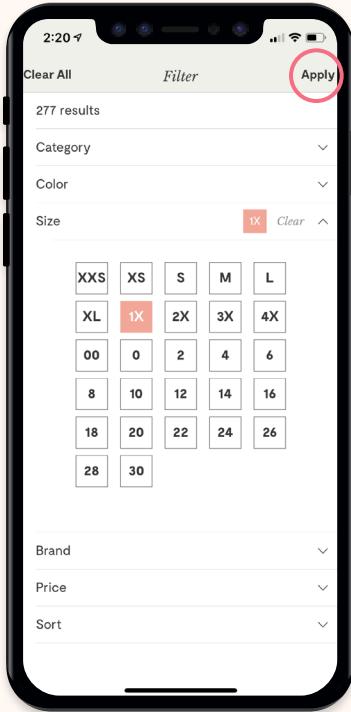
Recommendations:

- Refer to advice about filter icon on page 20.

Findings - Step 3



FILTER BY SIZE



🔊)
“selected:
1X”

🔊))
“apply”

🔊))
“selected:
1X”

2. If the user does the right thing, will she know that she did the right thing, and is making progress toward her goal?

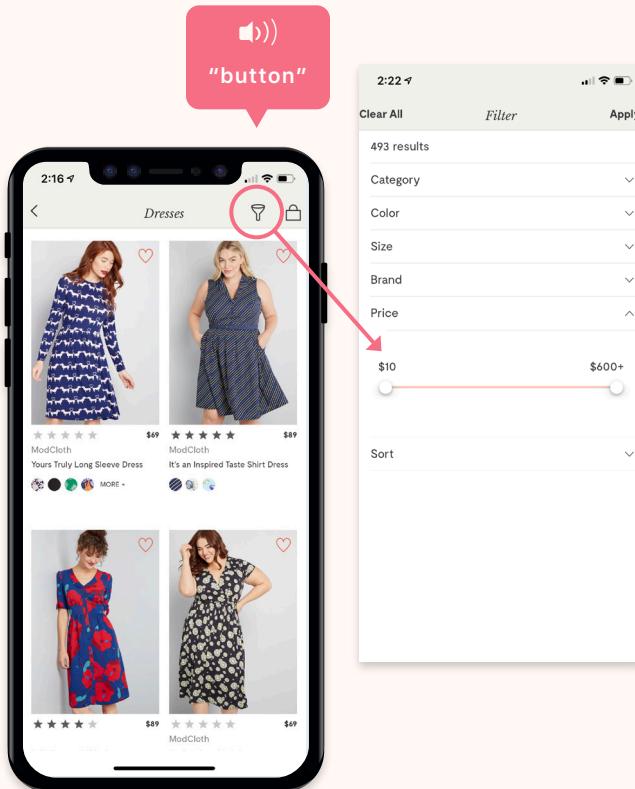
Maybe. The user may find the filter menu through trial-and-error and select a size, but there is not sufficient feedback to indicate whether a filter has been applied. When a filter is selected, the user is moved to the next filter category instead of filtered results. Applying a filter or closing the filter menu requires tapping the “apply” button, but it is not easy to locate that button after selecting a filter.

😞 MODERATE

Good to know: Size selection does not exist in Android.

Recommendations:

- If an extra step is required to apply a filter (for instance, an “apply” button), this should be clearly indicated to the user.
- Ensure that browse, search, and filter features are accessible via screen readers in all versions of the app.



Findings - Step 4

FILTER BY PRICE

1. Will the user know what to do?

No. The user cannot access the filter menu in iOS. The filter icon is labeled "button" instead of "filter". If the user does locate the filter menu, the price filter is an inaccessible slider that cannot be manipulated using screen reading software. The only information the user can access is default high and low prices (\$10 - \$600) with no option to adjust the values or apply the filter.



Recommendations:

- Avoid using sliders for option selection. They are usually not accessible to screen readers, and because they require a high level of precision, they are also inaccessible for users with certain motor disabilities or situational impairments. Consider replacing with large buttons for price ranges or a number entry field.

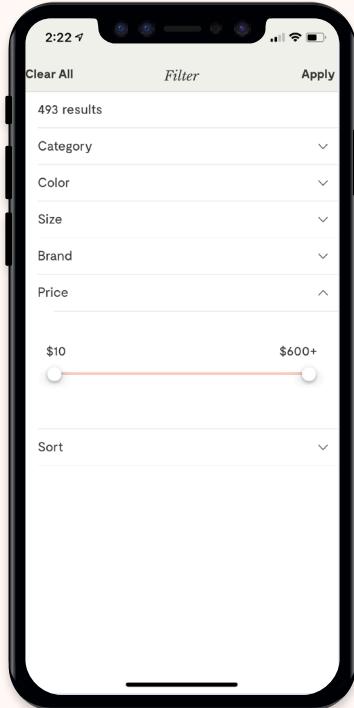
Findings - Step 4



FILTER BY PRICE

2. If the user does the right thing, will she know that she did the right thing, and is making progress toward her goal?

No. It is not possible to filter by price, so there is no feedback within the system.



Recommendations:

- Refer to advice on page 24 for slider alternatives.

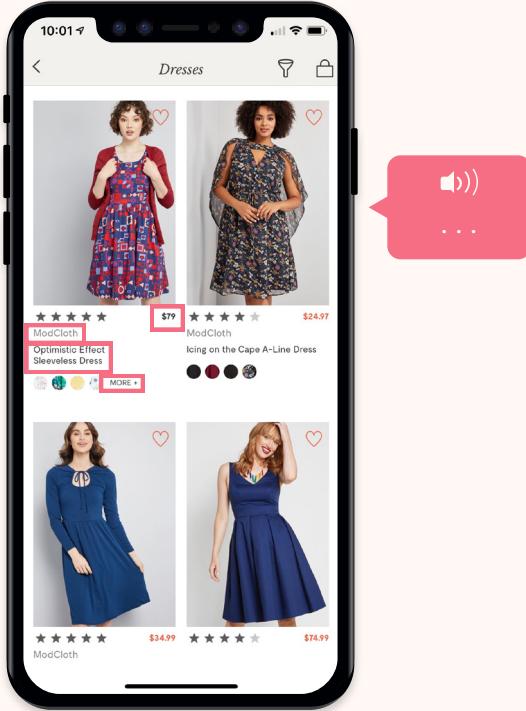
Findings - Step 5



EXAMINE RESULTS

1. Will the user know what to do?

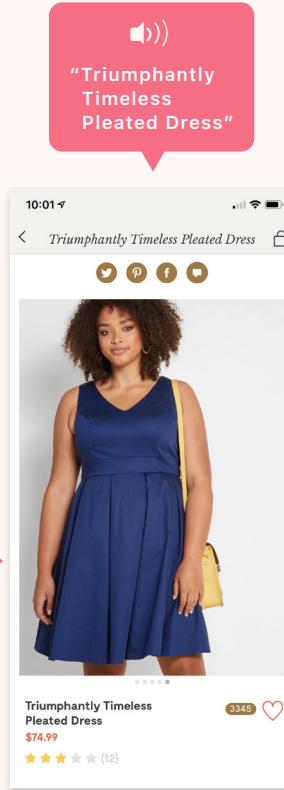
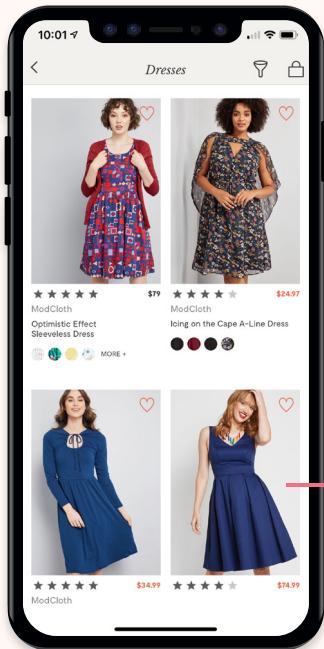
Maybe. The user can access the product overviews that appear in search results and filter results. Product price, brand, and title are available to screen readers. Product images cannot be accessed and do not contain alt text. Product star ratings and color swatches cannot be accessed.



Good to know: In the Android app, the same product information is available but it is read as a single item of text, which saves the user time.

Recommendations:

- If multiple product overview elements link to the same page (title, image, price) consider grouping them together to save time and reduce cognitive load for screen reader users.
- All product images should be accessible via screen reading software and described with alt text. Providing basic information in alt text—like style, length, and color—helps users select products. Bonus: This is also good for SEO.



Findings - Step 5

EXAMINE RESULTS

2. If the user does the right thing, will she know that she did the right thing, and is making progress toward her goal?

Yes. The user is able to tap on the product title to navigate to the product page. However, the product title is small and hard to target with VoiceOver navigation gestures, so it may be challenging for the user to tap the link. Once on the product page, the same product title is right at the top of the page, which indicates to the user that she is in the correct place.



MINOR

Recommendations:

- Consider increasing product title font sizes. Linking the product image to the product page would provide a larger target area.
- Product titles in this app include a style description (a-line dress, knit dress), which is helpful to the user. Consider adding additional descriptors to the title, like length, sleeve type, or color. Color swatches should always be accessible via alt text, in case a product is available in multiple colors.

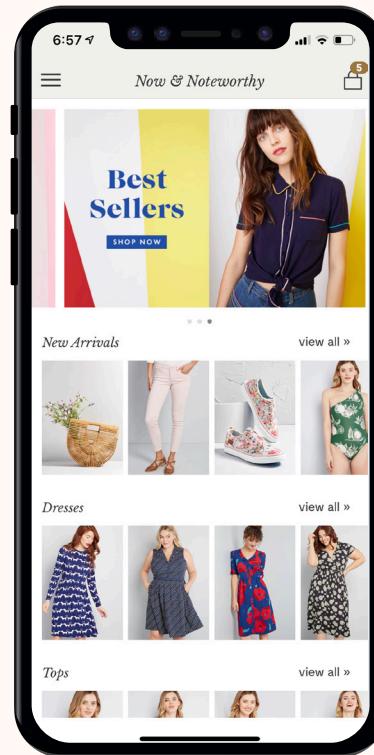
what does this mean?

SUMMARY

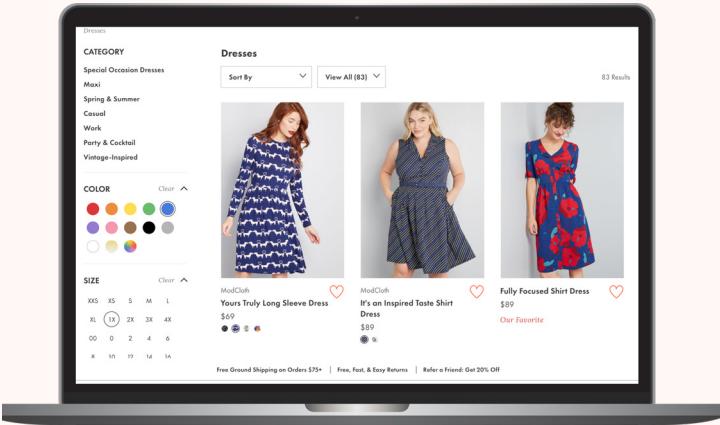
WHAT'S GOING WELL?

In the App

- Most navigation elements are located where expected, **at the top of the page**. Users can draw on previous web knowledge to find these important features, as long as they are labeled accurately.
- Overall app structure is logical and easy to understand. If accessibility improvements are made, **major layout changes are not needed**.
- There are several elements with thoughtfully assigned names and labels (such as product titles) that help users understand and navigate the interface.
- Multiple pieces of content that link to a single product listing (title, image, price) are grouped together in Android. If this were applied to all versions of the app, it would **reduce cognitive load** and save time for users.



WHAT'S GOING WELL?



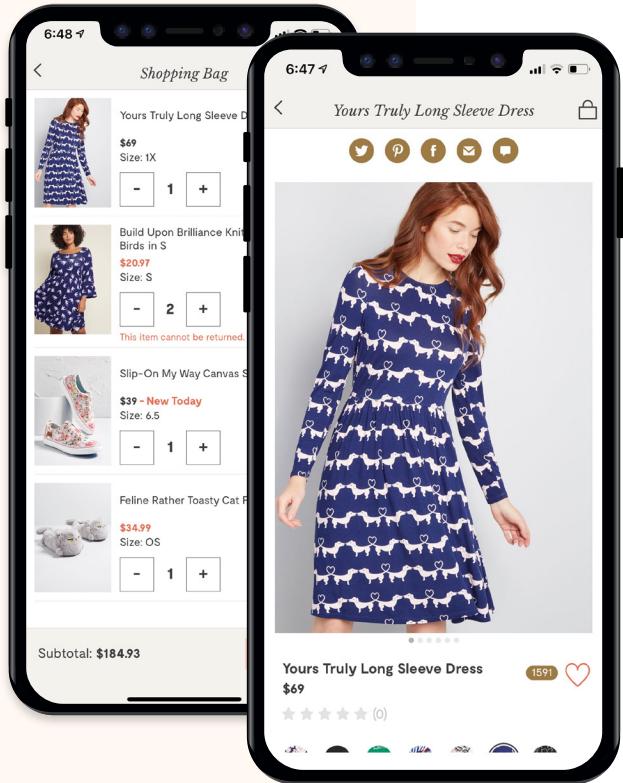
On Desktop

While we didn't conduct a formal evaluation of ModCloth's desktop website, we noticed some standout features that could enrich and improve the app experience, such as:

- **Alt text** on product images that includes the clothing style and color
- **Helpful color swatch titles**, like "Refine by Color: Blue"
- The ModCloth logo on every page links to the homepage, **helping users reorient** while browsing
- **Breadcrumb links** on product pages remind users where they are

RECOMMENDATIONS SUMMARY

- 01** Ensure that **search is easy to access** by placing it outside of the menu.
- 02** Use the **correct components** for each function.
- 03** Replace **sliders** with buttons or number input fields.
- 04** Provide **alt text** for product images, and ensure that these images can be targeted by screen readers. Never embed text in images.
- 05** Label all **icons, buttons, and filters** with names that help users identify their purpose. Provide feedback that indicates whether they have been activated.
- 06** Make the **navigation menu easy to find**. Position expanded menu content before main page content.
- 07** Match **link titles** with the title of the page they link to.
- 08** Incorporate **accessibility testing** into your process.
- 09** Include a **home link** at the top of every page so users can easily reorient themselves.
- 10** Maintain a **consistent page structure** with headings that help the user understand what the page is and how they arrived there. Aim for concise and descriptive page titles.



NEXT STEPS

There are two additional critical areas that we would recommend evaluating next:

- **Product page**
- **Checkout process**

Making these processes fully accessible ensures that all users can have a smooth and engaging experience that results in increased conversions.

And of course, lots of user testing!

- Consider traveling to users with disabilities instead of requiring them to come into the office, setting up user panels for ongoing feedback, working with local organizations, or contracting with vendors who specialize in accessibility testing.
- If users with disabilities are traveling to your location, be sure that you are compensating them for additional travel time, you have the correct accommodations set up in your lab, and decide how you will work around mockups or prototypes that don't yet include accessibility features.

CONCLUSION

Accessible design benefits all users.



THANK YOU!



Questions?

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Further reading

[Accessibility best practices](#)

[How accessibility benefits businesses](#)

[Video of a VoiceOver user](#)