

Amazon Case Study



PBDS.662: Design for Digital Environments
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Professor Hogan
Vy Dinh, Nathan Hollaway, Jasmine Loyal

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Introduction: Project Proposal

Amazon is a large, international online retailer and corporation with several physical locations, including many within the United States. Amazon attracts millions of customers from an array of demographics, including age, occupation, social status and economic status. As a retailer, it appeals to most populations by offering a wide range of products, which can all be found both on their website and on their shopping app. Although demonstrating strong aesthetics, navigation redundancies and deficiencies, and other overly complicated functions diminish the app's user experience. This project seeks to reduce confusion and simplify areas of the app that could lead to confusion.

Solution Proposal

The Amazon Shopping app is a massive app. There is an abundance of information to be presented to the user. The project does not aim to rebrand the company or do a complete overhaul of the app. The scope of the project focuses on specific tasks that affect our defined user groups, and the tasks they are trying to achieve. By performing a usability study using Nielsen's 10 Heuristics of User Interface Design, we were able to identify ways to improve user experience. We will simplify the tasks that we found overly complicated in design/function, create a more efficient experience, and expand on current features to accommodate user needs that currently are not addressed.

Informal Heuristics Study

Informal Heuristics: Introduction

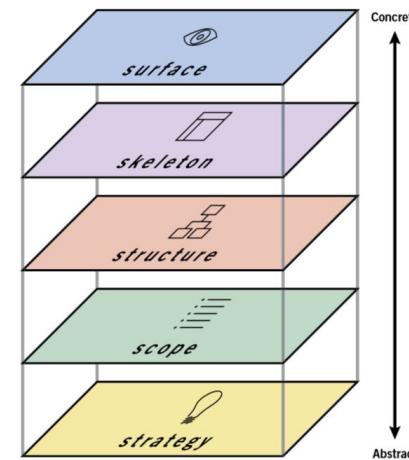
The apps we looked at were Amazon and Yelp with consideration to Weather Channel and IMDB. The initial reasons we reviewed these were their popularity or whether we used them on own phones. We found that Amazon and Yelp had greater functionality and relayed more information. Also, these apps provided more design and navigation issues. Ultimately, we decided to go with Amazon because it has more features that can be improved upon and gave a greater sense of dissatisfaction to the user.

The Amazon Shopping app is an e-commerce app that allows users to access and purchase content in an online store. Users can purchase physical items such as books, electronics and electronic media, apparel, shoes, and home furnishings, as well as manage their Amazon.com account information. In addition, users can also purchase digital media like apps, games, music, and Kindle eBooks. It is supported on both Android and iOS phones.

Amazon boasts that its advantages are: international shipping, convenient, fast, secure, and a universal shopping experience, with settings that allow users to change their country without downloading a separate app. The app serves specifically the user by providing features such as voice shopping, shipping/tracking notifications, and search-by-image. With an Amazon Prime account, the company's premium membership, users are given more perks like free two-day shipping and exclusive offers.

APPROACH

We explored the Amazon Shopping app and discussed different points of failure or questionable features as we came across them. However, in order to organize our findings, we applied Jesse James Garrett's "Five Planes" (19), which will later help us methodically analyze the app for a better user experience.



Informal Heuristics

Strategy

Amazon's purpose for the app is to create an effective retail experience. The objective is to cater to the needs of the customer in as many ways as possible. The average customer wants to have choices, complete transactions quickly, have access to shipping and delivery timelines, and receive their items as soon as possible. Amazon's strategy for the app, therefore, is to place as much content on the screen as they can between the time you open the app to the time you click to checkout. The user makes concessions for the amount of unsolicited content because all of their needs are met. As a retail business, first and foremost, Amazon wants their customers to make purchases. Perks, like those mentioned in the introduction, are effective ways to ensure their customers make purchases regularly because they can do so on-the-go, the moment they think of buying anything.

The user strategy is to be either a consumer or viewer, sometimes only to obtain information such as price and customer reviews.

Surface

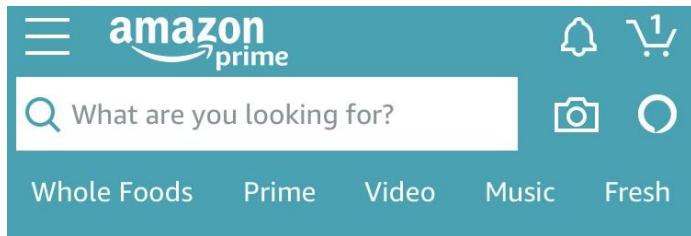
The app begins with a busy, aqua header, which has a difficult to find drop-down menu in the shape of three lines, followed by the Amazon logo, a single, white search bar, text referring to related apps, and icons for the cart, search, and sometimes Alexa. Below, in the body, is a plethora of stationary ads and recommendations, other shades of blue, a lot of text, and little to no icons. Some strong points to the design are almost consistent typeface usage and colorful images.

Informal Heuristics

Scope

Some features of the app are its ability to complete orders, save previous searches and orders, save and maintain address books and other personal information, show the user deals and reviews of purchased items, and make recommendations. Unfortunately, the volume of recommendations, deals, and ads can overwhelm the user. Finding items and ease of checkout are strong points for the app.

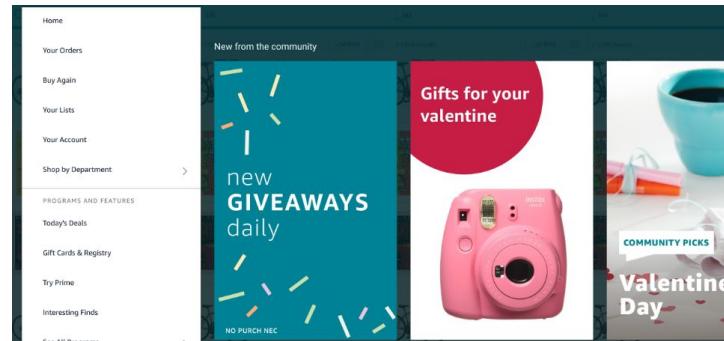
A clustered header with links to other services/companies owned by Amazon, is irrelevant to the app's use as retail: Whole Foods, Prime (is that separate from the market app?), video (has its own app), and music (also has its own app). These, presumably, double as advertisements to get the user to use or purchase these additional features:



Structure

Similarly, unintuitively scrolling to the right of the drop-down menu is a section called “New from the community” that shows the user similar ads and recommendation already in the body of the app. This is redundant in terms of information and is questionable in scope.

There are certain behaviors that are not intuitive to the user. For instance, signing out of the app is not easy to do. The user has to navigate to Settings from the Main Menu in order to see the link to sign out.



Informal Heuristics

Skeleton

The back arrow, Amazon logo, search bar, menus, shopping cart, and camera option are all located at the top of the app. They handle a majority of the app's functions and remain visible to the user. These elements remain in effect until an item is selected at which point the search bar is minimized and the logo becomes more prominent.

Interface Design

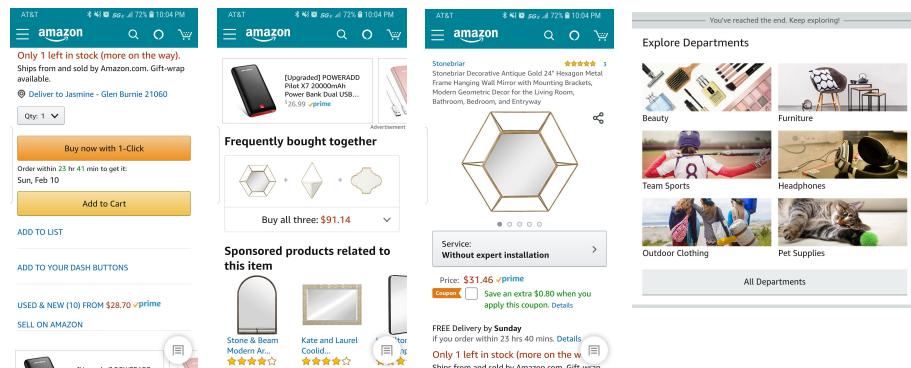
Departments are available to search in alphabetical order by only the drop-down menu or after the user has searched for an item in the “Filter” drop-down menu. In the website version, the user can pick a specific department to search to filter the results. The app version does not have this feature.

The use of icons would also be beneficial. The Add to List and Add to Dash Buttons options could be better presented through the use of icons and/or formatting. Names of products can also be unnecessarily long. There is hierarchy, but with no immediate logic to the order in which items are presented.

Dash buttons are not discriminatively placed on products.

Information Design

At the bottom of the home menu/screen are icons for some of the departments and it seems unlikely that most users will come across them. This is also the only time such icons exist. Other icons seem to be for ads.



Informal Heuristics

Skeleton con't

Ease of Navigation

The drop-down menu is also not easy to use. The menu has multiple screens, none of which can be customized by the user. However, users are able to view their current orders, rebuy items, view account, and locate specific departments. “Programs and Features” do not seem relevant but seem more like additional advertisements.



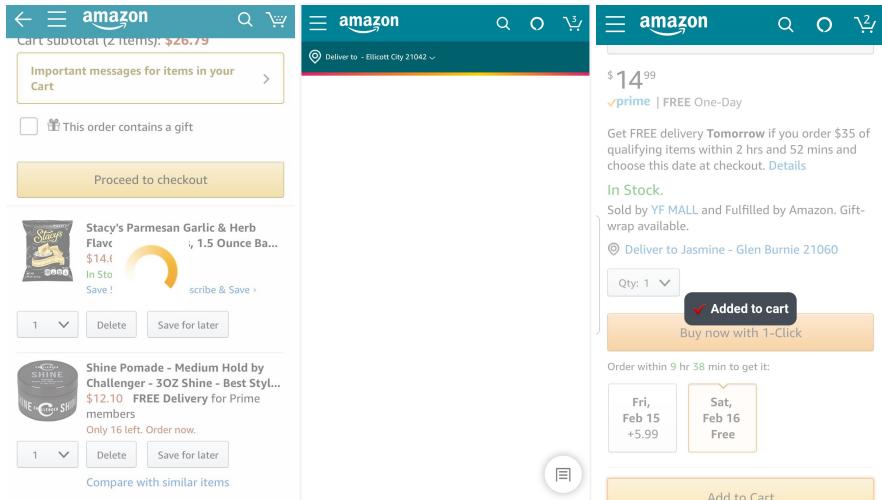
The home menu/screen, whether logged in or not, showcases a plethora of scrolling suggestions, groups of suggestions based on topics such as upcoming holidays, deals, and recent searches, and ads that are unrelated to searches the user. It takes up a significant amount of space. To get to the bottom of the screen, the user needs to scroll for a while. The layout seems random and overwhelming

Formal Heuristics Study

Formal Heuristics: Nielsen Heuristics

VISIBILITY OF SYSTEM STATUS

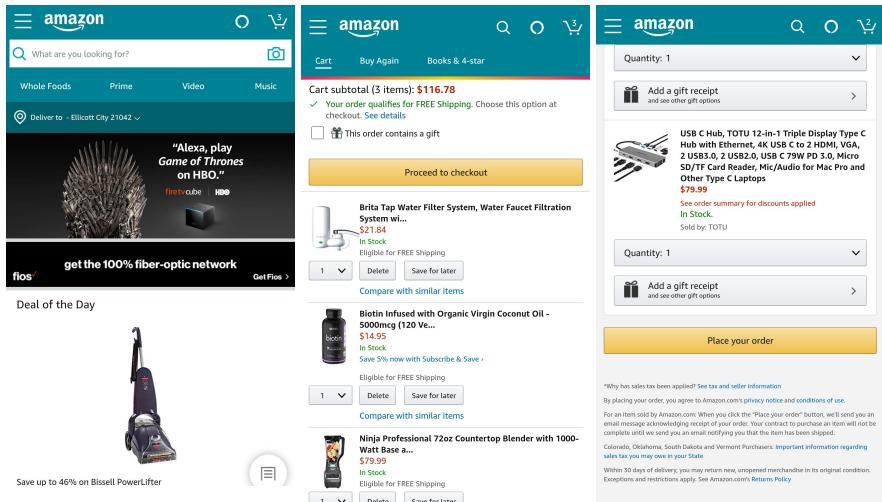
The Amazon Shopping e-commerce app informs users of system status in a variety of ways and does so fairly effectively. The visuals used in portraying system status to the user are often one of two designs with slight variations depending on the action being performed. When picking an item to add to the cart, the user is met with a swirling, blue, loading spinner icon. However, a swirling, yellow-orange, loading spinner icon appears when the user is going into checkout. When loading screens on the app, the user will see a thin, undulating golden line below the header of the app. On some screens, this line is blue. When items have been added to the cart, an "Added to Cart" icon appears with an overlay over the screen and content underneath. Cart information is always present.



Formal Heuristics: Nielsen Heuristics

MATCH BETWEEN THE SYSTEM AND THE REAL WORLD

More colloquial speech can be found throughout the app than technical jargon. The most prominent example of this occurs within the search bar on the homepage where it asks the user, “What are you looking for?” Other functions have shorter phrases, often segments rather than full sentences, like “Proceed to Checkout,” or “Place your order.” With exception to descriptions, reviews, and Amazon’s feature-specific guidance, there is little literature within the app more than five words long.

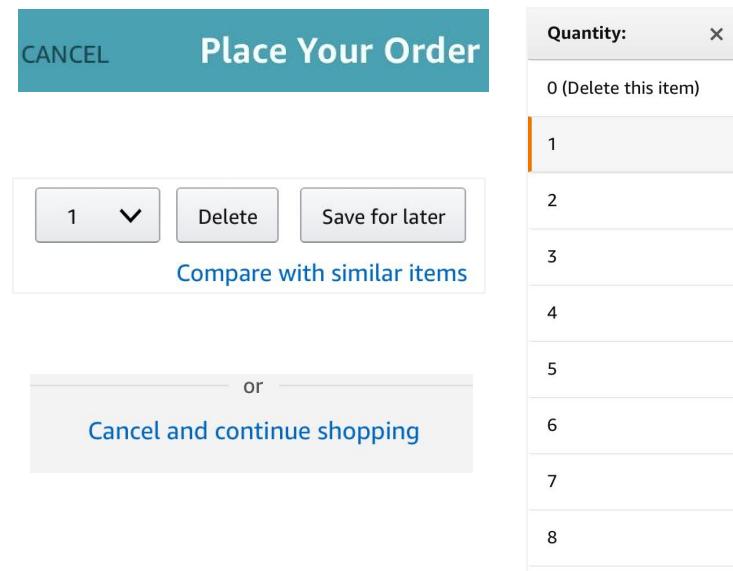


Formal Heuristics: Nielsen Heuristics

USER CONTROL AND FREEDOM

The most notable functions for user control and freedom, as well as, to some extent, error prevention, occur in the upper left-hand corner of the screen. In iOS, clicking the arrow located at the top, left-hand corner will take you back a single step. Additionally, when the Amazon logo is present in the header, the user can click it to return directly to the homepage. At checkout, the word “CANCEL” will appear in the same corner. Once pressed, this function will eliminate any changes made to the user’s checkout options such as shipping address, delivery option, and payment type. It should be noted that navigating between screens and the cart will not remove items from the cart. To do so, the user has to intentionally press the “Delete” option below the added item in the cart, or change the quantity of the item in the cart to, “0 (Delete this item).” There is also an option at the end of checkout to “Cancel and continue shopping,” which will halt the checkout process and return the user to the cart.

On Android devices, there is no back button and the user has to use the back function on their device to perform the action. Also, there is no “CANCEL” button. Again, the user has to use their devices back button to exit the order screen.



Formal Heuristics: Nielsen Heuristics

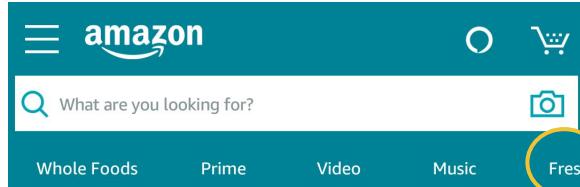
CONSISTENCY AND STANDARDS

The header of the Amazon app, for the most part, fits with design expectations of websites. The company logo and drop-down menu are both on the left. The cart icon is on the right. The search bar with magnifying glass icon is centered and spans the width of the screen. Also consistent with standards, the logo takes the user back to the homepage. Although most functions remain the same across devices and operating systems, in the Android app, the tab navigation menu is not consistent between initial app startup and returning to the homepage via the logo.

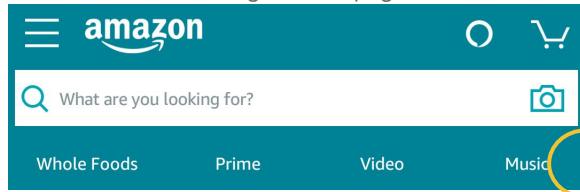
Android



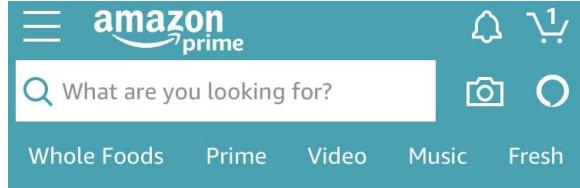
Header on initial startup of app



Header after returning to homepage



iPhone

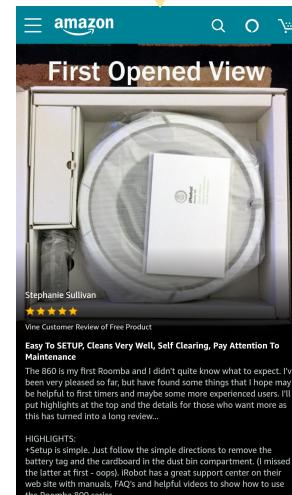
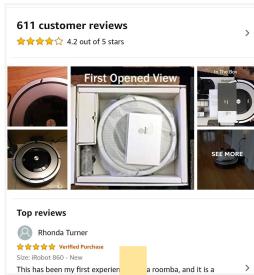


Formal Heuristics: Nielsen Heuristics

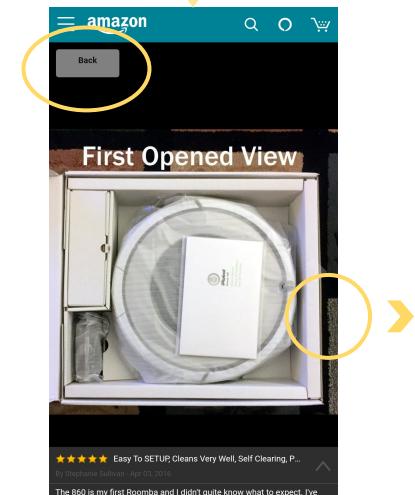
CONSISTENCY AND STANDARDS

There is no consistency when selecting an image from the photo gallery in the customer reviews section on a product's info page. Selecting on an image takes the users to the review associated with the image, where the user can scroll through the entire review. When the user selects "See more," they are taken to a photo gallery. From this point, selecting on an image again gives the review associated with it, however there are other functions available that were not before. There is now a back button that takes the user back to the gallery, as well as the ability to tab through to see the other images. The review is hidden, requiring the user to select the arrow icon to access it. Using the back button on an Android phone while in the this mode takes the user back to the main item page, back to the customer review section.

From product page



From the photo gallery

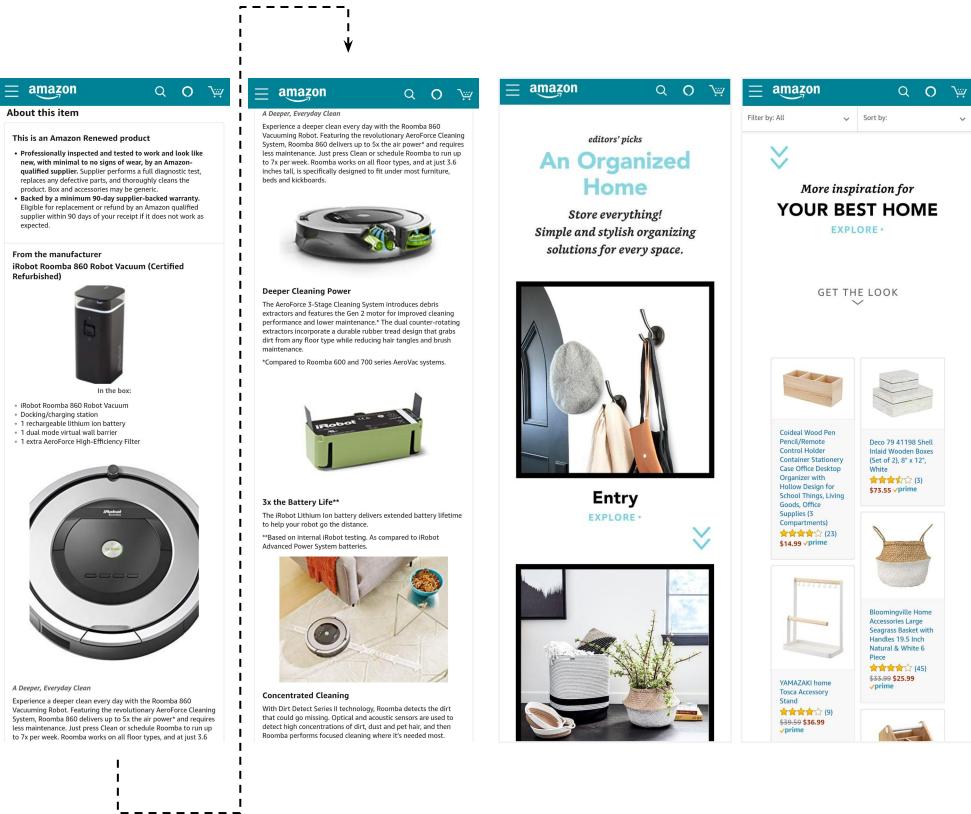


Formal Heuristics: Nielsen Heuristics

AESTHETIC AND MINIMALIST DESIGN

The homepage of the app is composed of modules of recommendations, from various topics or departments. The homepage's modules are visually sectioned off with a gray horizontal bar. However, the aesthetic is not consistent throughout various tasks and pages. The search results are shown in list format with text and information about the products. On individual product pages, “About this item” sections can be lengthy. While these pages are informative, they can feel more like advertisements. Often, they also inform the user of other products offered by the same company.

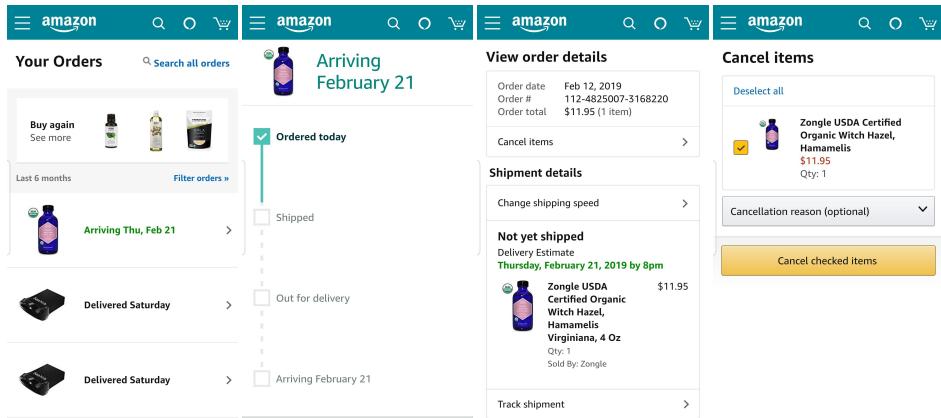
On other pages, the layout is often a combination of formats. Some sections of have side scrolling. Pages with two-column grid layouts and drastically inconsistent numbers of rows are most common. Some grids simply utilize vertical and horizontal lines to separate items. On nearly all pages, bold, enlarged text signals a change in module or section. In alternate layouts, products are staggered card stacks with padding between cards.



Formal Heuristics: Nielsen Heuristics

AESTHETIC AND MINIMALIST DESIGN

Areas where the design is stripped-down, uncluttered, and informationally relevant to the user are account, customer service screens, and order page. As an example, the order screens are easy to navigate. Clicking on an item for which you would like to view the status displays a screen with a simple timeline. Below the timeline, there are buttons to view order details and to cancel items. These pages are also simply designed and organized. There are no irrelevant units of information on these screens, in contrast to most other areas of the app.

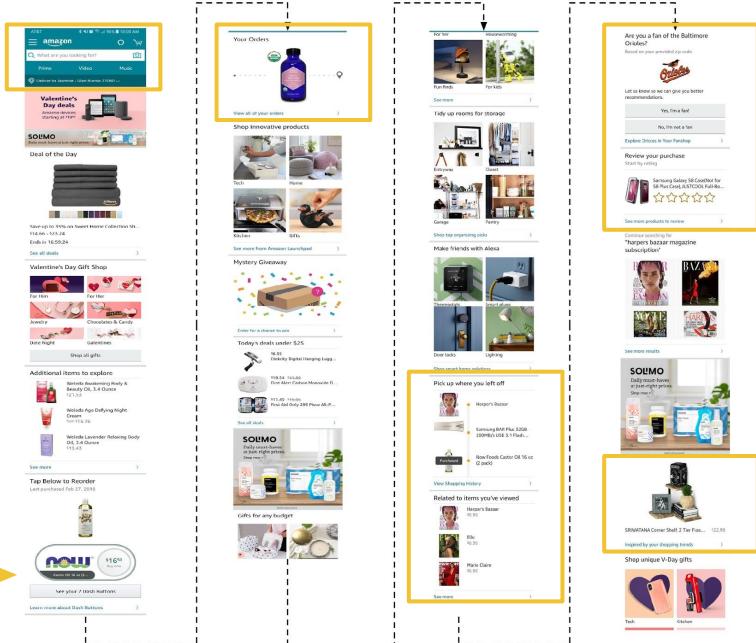


Formal Heuristics: Nielsen Heuristics

AESTHETIC AND MINIMALIST DESIGN

The homepage is filled with units of information that are not tailored to the user. Highlighted information is personalized to the user. The information is scattered and is not presented in order of priority. Dash buttons presented were never requested by the user. Overall, there is a large amount of irrelevant units of information that Amazon displays in between information that is tailored to the user.

Dash button that was never requested by the user



Formal Heuristics: Nielsen Heuristics

ERROR PREVENTION

One instance of error prevention occurs at checkout. When a user is inputting a new address, the Amazon app will not allow the user to proceed before required information, like street address and phone number, are valid. The app validates information from the bottom of the form upward. For example, if both the phone number and street address are invalid entries or skipped fields, the app will first flag the phone number and upon attempting to submit form information again, it will then flag the street address. Additionally, if the app does not recognize the address entered, it will validate it with one that closely resembles it. Although, the user can override this prevention and go with the original invalid address. Due to this override, the function becomes less effective.

The app also uses placeholder text in all form fields. This information serves to assist the user in inputting the desired information into the correct fields. Undisclosed to the user, the forms do not allow for missing information, but also do not mark the fields as “required.” A user thinking they can skip the phone number field for an order will, possibly unexpectedly, be met with an error message.

The image contains two screenshots of the Amazon mobile application. The left screenshot shows the 'Enter a shipping address' screen. It features several input fields with placeholder text: 'House number', 'Street address', 'Apt, Suite, Unit, Building (optional)', 'City', 'State', 'Zip', and 'Phone number'. Below the phone number field is a note: 'Please enter a phone number so we can call if there are any issues with delivery.' There is also a dropdown menu for 'Country' set to 'United States'. The right screenshot shows the 'Verify Address - Amazon.com Ch...' screen. It displays an error message: 'There's a problem with the address provided - we've marked our suggestions in red below. Please choose which version of the address you want to use, or click Edit next to the address you want to change.' It shows a list of suggestions, with the first one selected: 'Original address: [REDACTED]' and 'Suggested Address: 1420 W CHARLES ST, BALTIMORE, MD, 21201-5720, United States'. Below these are buttons for 'Edit', 'Deliver to this address', and 'Cancel and continue shopping'. The right side of the image also shows the Amazon navigation bar with 'Hello, [User]', a search bar, and a shopping cart icon.

Formal Heuristics: Nielsen Heuristics



RECOGNITION RATHER THAN RECALL

An important function of the app is to be able to search for products. Users recognize icons like the cart and magnifying glass upon convention. However, in regard to the magnifying glass, the search input form field with default placeholder text helps users understand what action to take. This caters to both novice and experienced users. Conversely, the Alexa icon is not readily recognized, especially for users who do not have an Amazon Echo home assistant device. While the Alexa icon might not be confused with the search icon, users would need to click it to discover its function.

Amazon places information for the current product adjacent to information for similar items, preventing the user from having to navigate back and forth to perform the comparison.

Compare with similar items



This item	Samsung BAR Plus 32GB - 200MB/...	Samsung MUF-32AB/AM FIT Plus 3...	k
RATING	★★★★★ 813 reviews	★★★★★ 239 reviews	1 8
PRICE	\$13.53	\$9.99	\$
SHIPPING	✓prime	✓prime	F €
SOLD BY	Amazon.com	Amazon.com	A

See more details

Have a question?

Find answers in product info, Q&As, reviews



Formal Heuristics: Nielsen Heuristics

FLEXIBILITY AND EFFICIENCY OF USE

The Amazon shopping app is, in nearly all aspects, optimized for the user that not only has an Amazon account, but also has an Amazon Prime account.

The user makes purchases with the “Add to Cart” button, which is designed for first time use of the app. After clicking the button, the item is transferred to the user’s shopping cart. By accessing the cart via the cart icon, the user can view items in the cart and proceed to checkout. From there, the user inputs necessary information such as a shipping address and payment information, or opts to select from previously stored information options. Then, the user agrees to complete the purchase. Once the user has their information stored, they can use the “Buy now with 1-Click” button, which takes the user’s information and effectively skips the checkout process. The quickest option for the user is a “Dash Button.” The Dash Button is a physical and/or digital button the user receives from Amazon that represents a specific item. When pressed, the user’s default shipping address and payment option are used to automatically purchase the item without the user having to search for the item again or endure any part of the checkout process.

How Dash Buttons Work

Quickly find and buy your favorite products.



[Learn more about Dash Buttons](#)

By using Dash buttons, you agree to the
[Amazon Dash Terms of Use](#).

Add to Cart

Buy now with 1-Click

1-Click options - Order within 15 hr 8 min to get it:

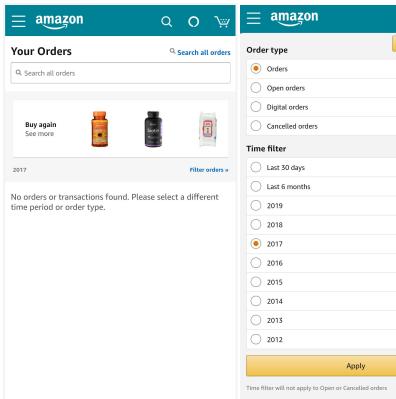
Formal Heuristics: Nielsen Heuristics

HELP USERS RECOGNIZE, DIAGNOSE, AND RECOVER FROM ERRORS

The app's search function for previous orders is lacking. There are two main filters, order type and time. While the time filter goes back to the beginning of the account, each incremental year is not necessarily relevant. Selecting the year "2017" results in no order transactions found. Having the option year 2017 in the previous page can confuse the user if they are trying to search for certain items purchased.

One less than helpful function the app provides after an error has occurred, is displaying an error message with accompanying images of a random dog. At the bottom, the user is presented a button that allows them to refresh the app. While fun to some, the error message is generally unhelpful and does not inform the user of the actually issue.

A helpful feature of the app is intuitive search capability. If search words are misspelled, Amazon informs the user of the discrepancy, reverts to the search it thinks the user intended to perform, and also gives the user the option to undo the suggestion in the event that they did indeed spell the search item correctly



UH-OH
Something went wrong
on our end.

PLEASE TRY AGAIN

Showing results for floating wall shelves. Search instead for floating wall shelf.

Showing selected results. See all results for floating wall shelves.

Sponsored by O&K Furniture

Quality Floating Wall Shelf to Spice Up your Wall

Acrylic Shelf | Book Shelves, Spice Rack & Floating Display for Toys and...
\$2799 prime FREE One-Day Delivery by Tomorrow, Feb 15
Get it tomorrow for FREE on qualifying orders over \$35
See more choices

Floating Wall Shelves (Set of 2), Handmade Shelf Made of Rustic Pi...

Formal Heuristics: Nielsen Heuristics

HELP AND DOCUMENTATION

Amazon has several customer service options. The app includes links to a formal user manual and user guide in downloadable, PDF format. The app also provides Q&A style assistance for common issues that may arise. Other forms of assistance include instructions and the ability to return an item, purchase or cancel various memberships, and troubleshoot your digital device. Another help option is contacting a representative either via phone or online chat.

In addition to all options mentioned, the user can submit questions to Amazon and provide feedback to Amazon about the app. The comment "We read, but don't reply to feedback about the app" informs users upfront that even though they do not get responses, their comments are received and acknowledged. This allows users to feel that their suggestions are important, despite the fact that Amazon has plainly, and logically considering their millions of users, stated that there should be no expectation for individualized replies.

Need more help?

Contact Us

Questions about an issue?

Chat with us

Call us

Question about your order?

Your Orders

View, Track or Cancel an Order

Have suggestions for the app?

Provide Feedback for the app

We read, but don't reply to feedback about the app

Additional Information

ASIN: B07M78HLJL

Customer Reviews: 4.2 out of 5 stars

Best Sellers Rank: 17

Shipping Weight: 11.25 pounds

Date First Available: January 7, 2019

[User Guide \[pdf\]](#)

[User Manual \[pdf\]](#)

Warranty & Support

Customer Service

Manage your orders



Your Orders

Track, edit, or cancel an order

Popular solutions



Returns & Refunds

Return or exchange items



Account Settings

Edit login info, email or password



Manage Prime Membership

Cancel or learn about benefits



Payment Options

Add or edit payment methods



Digital and Device Support

Troubleshoot issues or find help

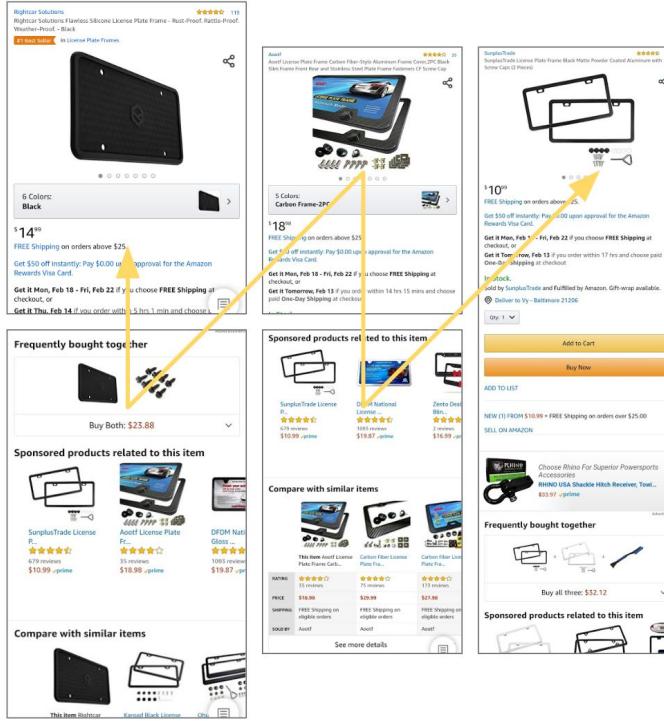


Browse All Help Topics

Formal Heuristics

USERS SHOULD KNOW WHERE THEY ARE (Douglas, 2017)

Navigating in terms of browsing products can be unclear. Exploring similar items, recommended items, and sponsored items displayed on product page or takes the users from one page to the next. Pages are stacked on top of one another. The app does not provide users an efficient way to get back to the initial search results. Pressing the back button, whether on the app or the user's mobile device, takes the user to the previously viewed page, and continues to do so until the user returns to the results page. As the only other alternative, the user can click on the Amazon logo to return to the homepage to start fresh.



Formal Heuristics: Critical App Reviews

Ads move buttons, cause mis-clicks Thu
★☆☆☆☆ jmknoble

Amazon has started putting ads in their app ... fine, ok, not unexpected.

They also follow good UI practice and display buttons and other info before the ad has loaded, and show the ad when it's loaded ... great, we expect that these days.

But now what's happening is after checking out, the "Continue Shopping" button displays, but then *moves out of the way* when the ad shows up a second later. So instead of tapping the button and continuing my shopping, I tap the ad.

This falls somewhere on the spectrum between "poor emergent UI design" through "disingenuous" all the way to the point of "utter dishonesty about registering ad clicks". It's gotten beyond annoying to me.

Connectivity errors Feb 3
★☆☆☆☆ 333M333

This app frequently gives me error messages. Often the app says I'm not connected to the internet even though I am. (I can connect with every other app — just not this app). Amazed that Amazon would have such unreliable app.

Can't copy and paste Wed
★☆☆☆☆ Fscoth1

Sometimes i see an item that is close to what I want and has key words that I want to use in my search. The website allow one to copy and paste but not the app! Really! The most basic function of any website, software, and app is to "copy and paste", except this one. What is it with today's programmers? Are you that out of tune with what people need or just stupid?

Today's Deal Frustration Fri
★☆☆☆☆ Brayheart

I find it very frustrating when I click on a Today's Deal and I have to scroll and scroll and most times don't find the deal. Am I doing something wrong? Brayheart

Ads and crap pushed on consumers Feb 2
★☆☆☆☆ Syntastic

Seriously Amazon... Stop advertising Chevy trucks in your app. I'm here to shop already. Why are you shoving bs in my face. And btw, I don't want a dot, or a echo, or any of the other Alexa devices. I swear if I even glance at them side ways, that's all you show me for the next week. I used to go to the store, find what I want, the. Order on amazon. Now I do the opposite. Because your such a dirt bag company.

Ad supported now? Fri
★☆☆☆☆ AndyN12345

I understand some apps need to show ads to support themselves, but seriously - this is an app to buy stuff, and I buy a lot from Amazon. So now you need to show ads too? Are there no limits to Amazon trying to take advantage of their customers? I'm not talking about the suggested/ sponsored items you see on their website, I'm talking about raw, unrelated mobile ads for things like chevy trucks? Not stuff I can buy on Amazon, just crappy ads!

The chat feature is useless Feb 3
★☆☆☆☆ MegAndyH

In an attempt to get help quickly, I used the chat feature to speak with customer service and was on it for over 40 minutes with the intention of quickly obtaining information on how to return a gift. The customer service reps on the other end dropped the chat two times, starting over with a new rep each time. They took over 5 minutes or more to respond to each text sent. It was a frustrating experience. Their responses were not consistent nor did they help. It took a long time, and I still never found resolution. It was very disappointing. I would prefer a phone call unless they were able to provide real assistance in a somewhat timely manner.

User Personas and Scenarios



Michelle Foster

"I have better things to do."

30

Dental hygienist

Married

Busy consumer

Michelle Foster is a married mother of two, ages 2 and 4. Michelle is a busy, dedicated mother, who is upbeat and energetic. However, she can be intense at times because she puts a lot on her plate, and is agreeable until her efficiency is jeopardized. She values convenience, efficiency, punctuality, and accuracy. She likes to get what she needs and move on to the next task, but she also values assistance and informed suggestion.

SKILLS AND APTITUDES

Multitasking, creative thinking and solutions, time management, scheduling, moderately tech savvy

CONCERNS

- Not receiving items by the date they are needed
- Being financially irresponsible, negatively affecting the household

MOTIVATIONS AND GOALS

- Needs to be able to navigate through the app swiftly
- Needs to be sure she is spending money wisely because she has a family to help support
- Wants to spend as much time with her family as possible so she needs her interactions to be productive
- Wants to be able to provide for her family so she needs the app to be accurate and reliable

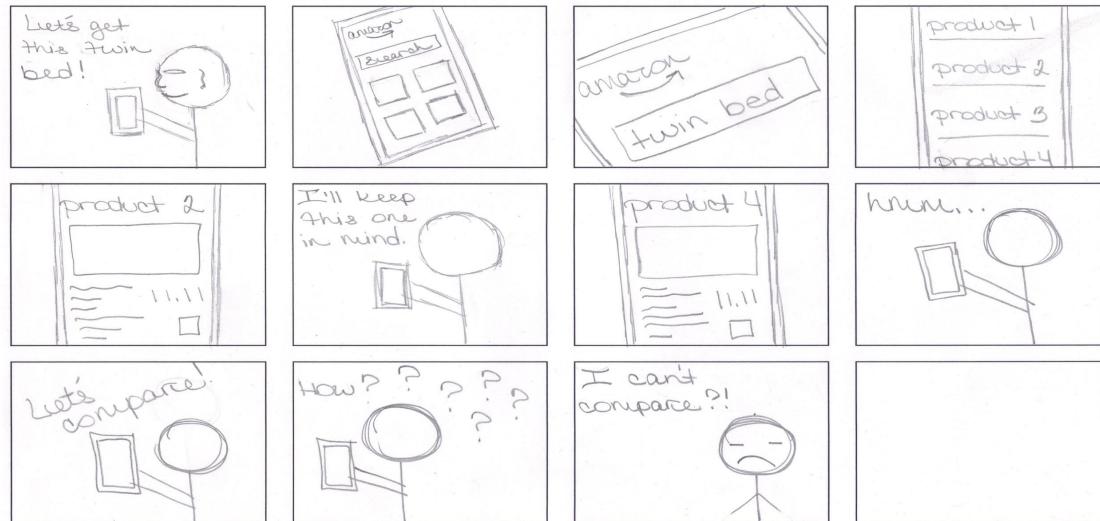
CONTEXTUAL

- Likes to make lunch breaks productive so she may purchase a few items to be delivered in the evening, or continue planning an event.
- Spends some free time shopping on the app at home
- Leaves little room for error during interactions with the app
- Does not enjoy deep dives for bargains or price comparisons

Scenarios

Goal 1) Needs to easily compare products listed to make informed decisions

Michelle opens the app to begin searching for a new bed for her oldest child. She has set aside the time required to do a little research prior to purchasing. Upon opening the app, she heads straight for the search bar. She inputs “boys twin bed” and briefly scrolls through the initial results. She decides to filter the list by color and material. She views the product page for the first result and scrolls to the “compare” module. One of the other beds in the list isn’t a contender. She wants to compare. She cannot perform the action.



Scenarios

Goal 2) To keep track of search results

Michelle is searching for a floor lamp. She scrolls through the search results and selects a product. From the product page, she clicks to view a product ultimately purchased by others. From there, she views a sponsored item. Frustrated, feeling that she is spending too much time on the app, she decides to return to the original list of search results. There is no link for her to do so.



Scenarios

Goal 3) Needs time spent shopping to be effective

Michelle is watching a movie with her family and remembers she needs to buy a gift for one of her children's birthday. She grabs her phone and opens the app. She knows of a toy her child wants but she decides to take a moment to browse. She shops by department, searches by age, and scrolls through the results. She locates an item eligible for Prime and opts for 1-Click checkout.

Goal 4) Wants to be able to quickly find items and add to lists.

Michelle is at a baby shower. The mom-to-be says she purchased the party favors from Amazon after performing an exhaustive internet search to find the product with the best quality for a reasonable price. While the kids are eating pizza, she quickly opens the app. She searches for the item using the search bar. Once the item is found, she adds the item to a list titled, "Birthday," and closes the app.

Goal 5) To stay informed and up-to-date regarding items she has purchased

Michelle arrives home and notices her package did not arrive as expected. After she puts down her keys and purse, she opens the app. She navigates to her orders and sees that the package is scheduled to be arrive by 8PM—the time is currently 7:15PM. She closes the app.



Mason
Chung

“Is there a faster way to do it?”

41

Test technician

Single

Frequent consumer

Mason loves shopping on Amazon for the convenience. He finds going to the store a waste of time, with the driving and waiting in line. He can also be quite the impulse shopper, going on the app when he wants to buy something. He also uses the app to research products and prices. He searches on Google as well and recently has been using Ebates as well, in order to get cash back from his purchases. As a prime member, he also enjoys the free and fast shipping.

SKILLS AND APTITUDES

Tech savvy. Knows shortcut keys on the computer. Good at ex

CONCERNs

- Does not like to return items like shoes and clothes if they do not fit. Ends up wasting money in that case.
- Annoyed when packages do not arrive on time as promised.
- Feels it should be easy to find exactly what he wants

MOTIVATIONS AND GOALS

- Wants to be able to quickly find products that he is searching for
- Wants to be able to purchase the best product at the best price
- As long as quality and perceived value of products are high, price is not an issue
- Likes to compare prices and specs of items when he is planning to make a purchase
- Wants his life to be more convenient with the help of the app, technology

Scenarios

Goal 1) Needs to efficiently reorder items

Mason notices that he needs to order more water filters. He grabs his phone and gets on Amazon. Initially he clicks on “Buy Again”, but what he is looking for isn’t listed. He goes to his previously placed orders. He checks the filter option, but decides he doesn’t remember when the last time he made the purchase. He decides to go back and do a search instead and gets no results because of a misspelling. He is annoyed that the search didn’t recognize his intention. He corrects it and finds the item.



Scenarios

Goal 2) Easily search for item to make purchase

The next day, Mason's supervisor talks about how great his new power washer is. Interested in a power washer for himself, during lunch, Mason searches on the app for similar items. He finds himself clicking on related items and compared items, which takes him to one new page after another. After several clicks, he wants to go back to his original search results, but there is not direct way. He uses his phone's back button, until he decides to just perform the exact same search again.



Scenarios

Goal 3) Needs to find reliable product information and reviews

The range hood above his stove is old. This past weekend it stopped working, so he decides it is time to upgrade. He searches for fans on the app. He checks out different models and brands. He reads the reviews. He looks at photos of fans that other customers have bought, but is frustrated that he has to keep going back to the previous page to select another image. He tries to remember how he accessed the image gallery before.





Eugene Daniels

"I want the best value."

66

Retired English Professor
Married
Patient Researcher

Eugene and his wife have recently retired to a place close to Fort Myers, Florida after teaching English courses for nearly 40 years. Their current home is near one of their adult children. Eugene is also excited for his first grandchild, a granddaughter. When he's not taking care of day-to-day errands, Eugene can be found reading or working on his writing. He will often buy books online to help with his craft, and he will thoroughly investigate into the best price option. He hopes to publish his first novel outside of academia. Eugene is also interested in getting into the literary community around their new home, often checking social media for readings or open mic events.

SKILLS AND APTITUDES

Moderately tech savvy. He is patient, taking his time researching and making decisions.

MOTIVATIONS AND GOALS

- Wants to be responsible with his budget without sacrificing quality. He aims to get the best value for the lowest price.
- Wants to be meticulous in his research. He needs to be able to compare items to ensure he's making the best choice.
- Wants to get the best for his family. He needs to be able to find the exact item in order to read reviews.
- Wants an app on the go that works equal to or better than the website without hindrance.

CONCERNS

- Does not want too many advertisements
- Gets annoyed by complex and redundant navigation systems

Scenarios

Goal 1) Wants to be able to compare items to make sure he's making the best choice.

Eugene decides, before going out to buy a lawnmower, to check the Amazon app via the departments in order to determine what his best options might be. Going through Home and Garden, he finds the top ranked lawn mowers. Once there he can't compare them to each other nor do any filtering to match his specifications.



Scenarios

Goal 2) Wants to purchase the highest quality item for the lowest price

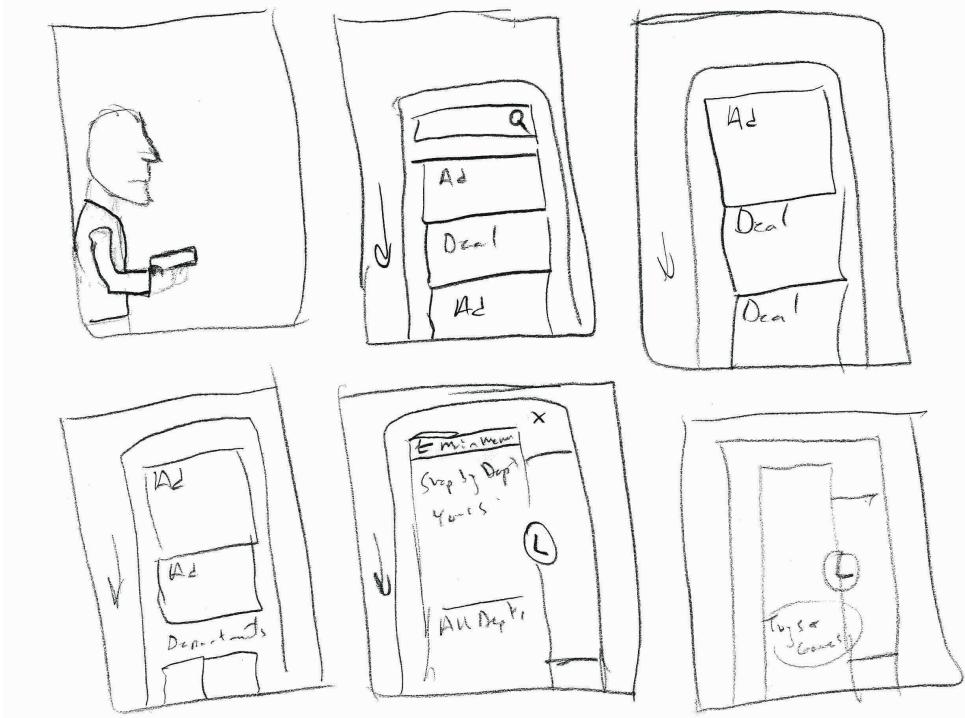
Eugene heads to a local store to look at lawnmowers. While he's there, he decides to look up other lawnmowers, filtering out poorly reviewed ones and those not in his price range. He tries to individually compare the in-store lawnmowers to the ones he finds on the app.



Scenarios

Goal 3) Wants to be able to use an app on the go that works equal to better than website without hindrance

Eugene isn't sure what else to purchase for his granddaughter and decides he would like to search through departments on the Amazon app. Upon opening it, he finds there are no obvious links. He scrolls down the entire home page finding only a handful of relevant images. He tries other menus, which takes him through several more steps. By the time Eugene finds what he's looking for, he decides it would be easier to search through specific departments online.



Scenarios

Goal 4) Wants to be able to find the exact item in order to read reviews and make comparisons

Looking for a gift for his granddaughter, Eugene first looks at Walmart's for baby toys. When he finds one he likes, he also checks for the exact product on Amazon, putting the name of the product into the search bar. He is met with a message that says, "No results," and the app, instead, is showing results by using fewer words from the original search. They are items from the same company, but nothing comparable to what he was looking for. Eugene decides to buy from Walmart.



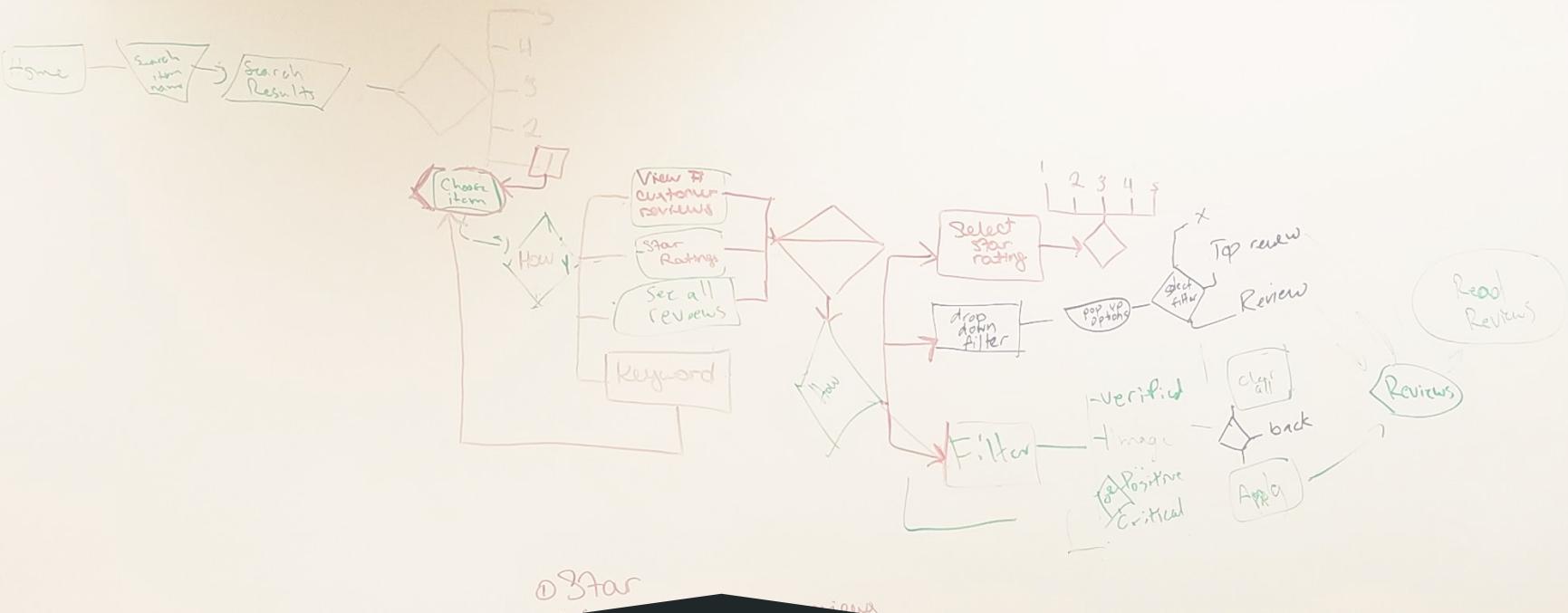
Scenarios

POSSIBLE TASKS

- Check out using 1-click checkout
- Reorder previously purchased products
- View/read product reviews
- Navigate through screens (general)
- Compare products for purchase
- Find products via search
- Filter and sort search results
- Search Amazon-suggested products
- Track orders
- Search for items and add to shopping list
- Look at customer-uploaded product images
- Shop by department
- Window shop

Scenarios

TASKS SELECTED FOR FURTHER EXPLORATION	Applicable Heuristics	Garrett's Plane
Do a general search for blenders (without having to repeatedly backtrack or redo search)	User control and freedom, flexibility and efficiency of use	Navigation design
Compare three blenders (allow the user freedom to choose which products are reviewed)	Flexibility and efficiency of use, Aesthetic and minimalist design	Functional specification, interaction design
View negative product reviews for a blender	Aesthetic and minimalist design	Navigation design, information architecture
Look at customer-uploaded product images of blenders (with a way to navigate through images that doesn't hinder the user)	Consistency and standards, flexibility and efficiency of use	Navigation design
Go to the Home Decor category in the Home Department	Aesthetic and minimalist design, recognition rather than recall	Navigation design, information architecture
Reorder previously purchased product, i.e water filters	Flexibility and efficiency of use, aesthetic and minimalist design, recognition rather than recall	Interaction design

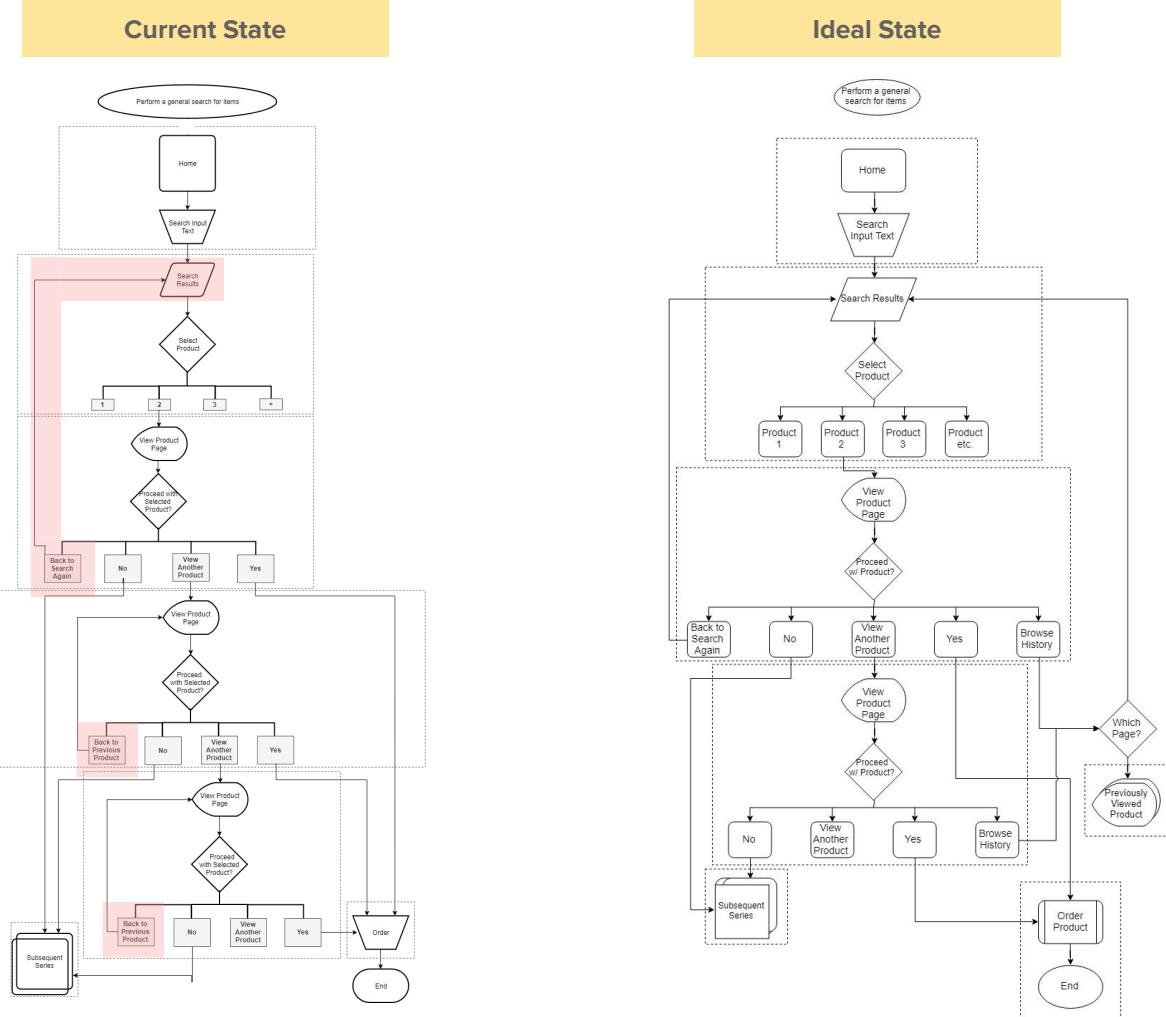


Flowcharts and Storyboards

GENERAL SEARCH

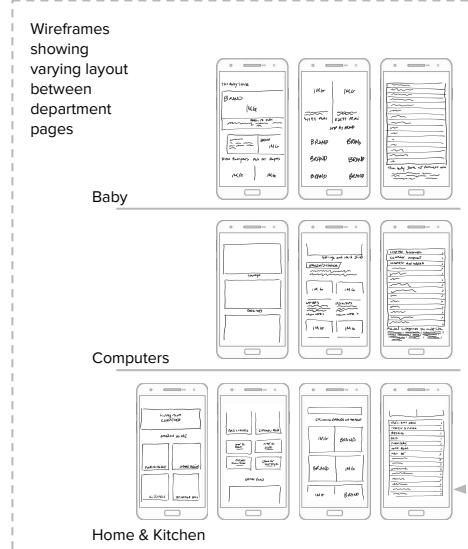
From Homepage perform a search for blenders, use the browse history functionality to browse previously viewed blenders.

In order to get back to the search results, the user must cascade backwards through all pages viewed after the search results.

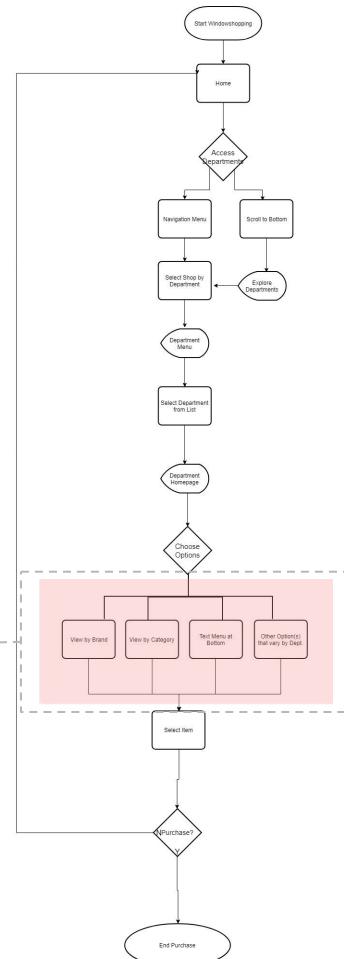


SHOPPING BY DEPARTMENTS

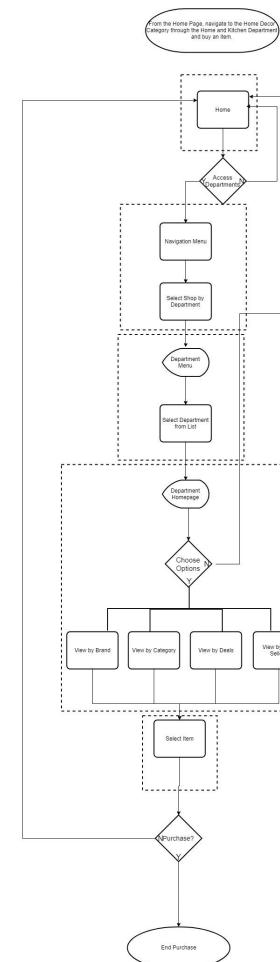
From the Home Page navigate to the Home Decor category of the Home and Kitchen Department.



Current State



Ideal State



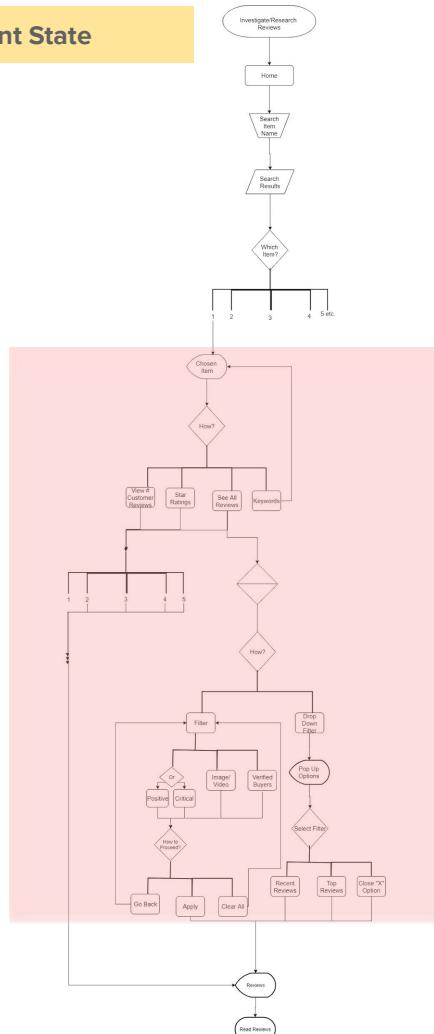
On any screen, the user is not supplied information on where they are in the app.

The user cannot expect to find similar information on department pages to be in the same locations.

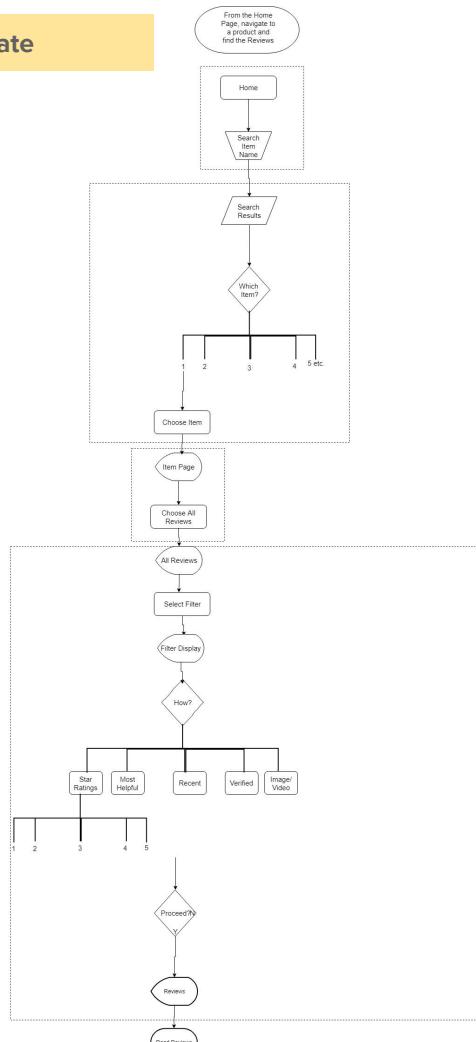
REVIEWS

From the Homepage, navigate to a product and find the reviews page.

Current State



Ideal State

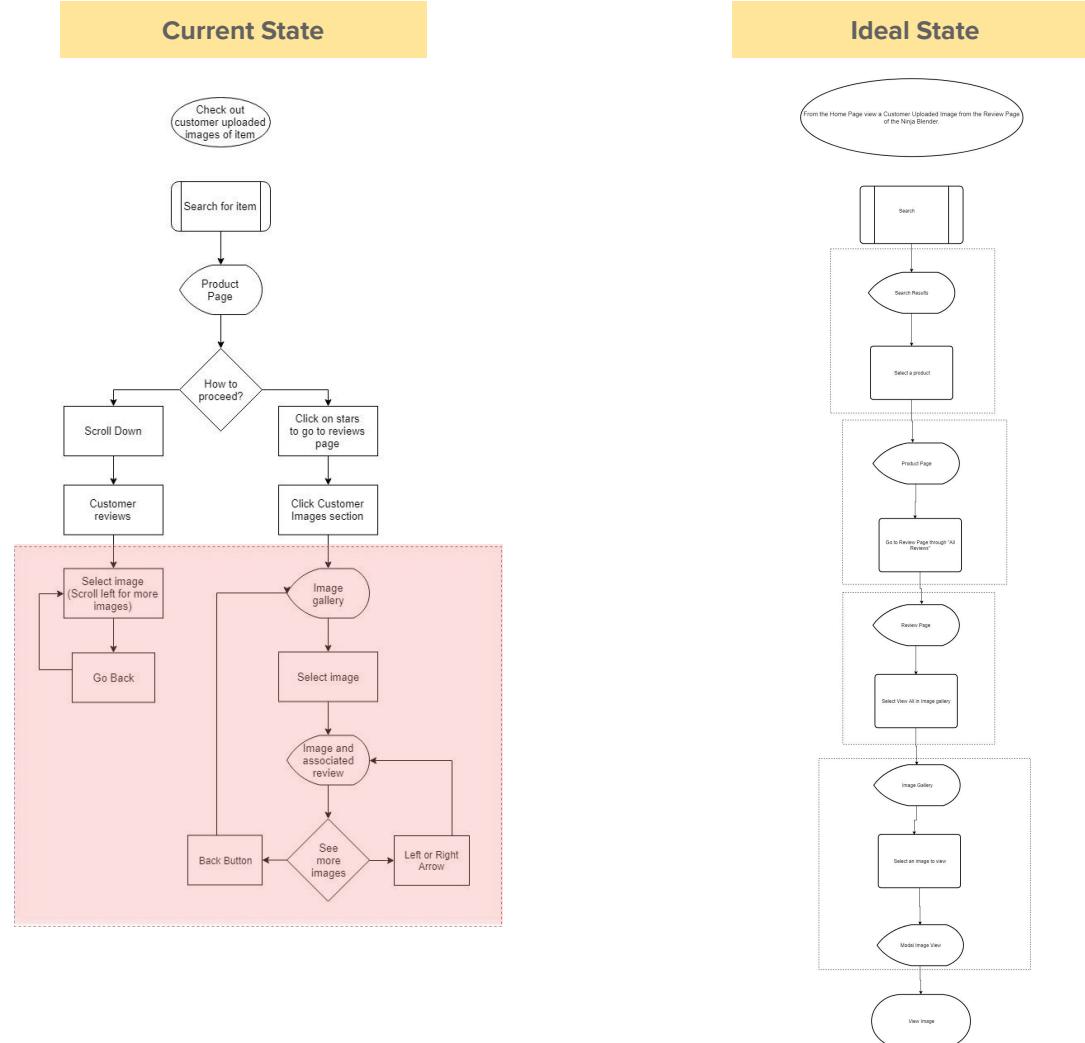


Due to too many and/or redundant options, users were finding it difficult to navigate the reviews, and some were left confused.

LOOKING AT CUSTOMER UPLOADED IMAGES

From the Home Page view a Customer Uploaded Image from the Review Page of a Ninja Blender.

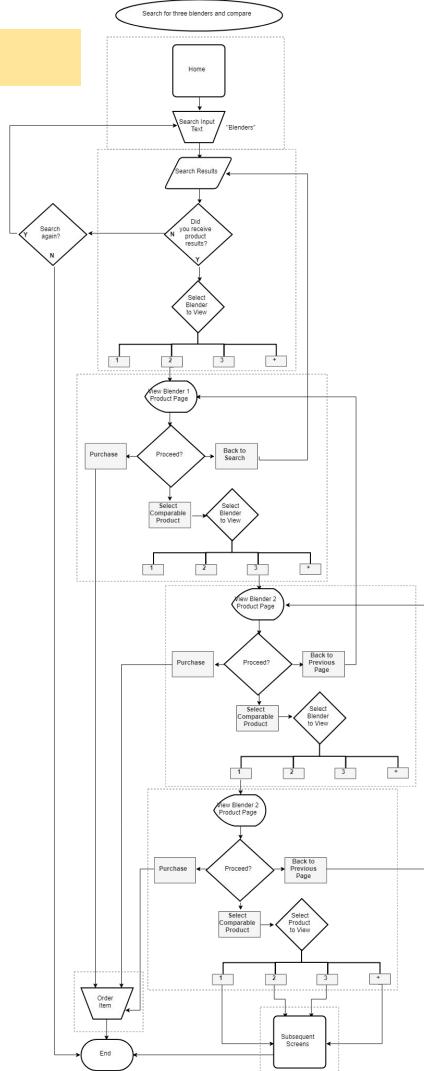
Navigation through customer uploaded images is not consistent. In left instance, users cannot navigate to other images without needing to go back to the previous page. There are two different back functions from the image gallery, one taking users



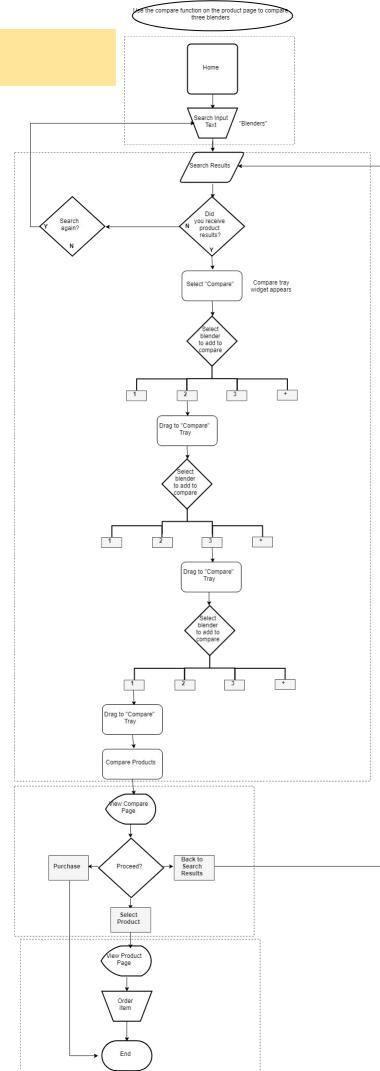
FIND AND COMPARE

From the Homepage, use the compare function on the search results page to compare three blenders.

Current State



Ideal State

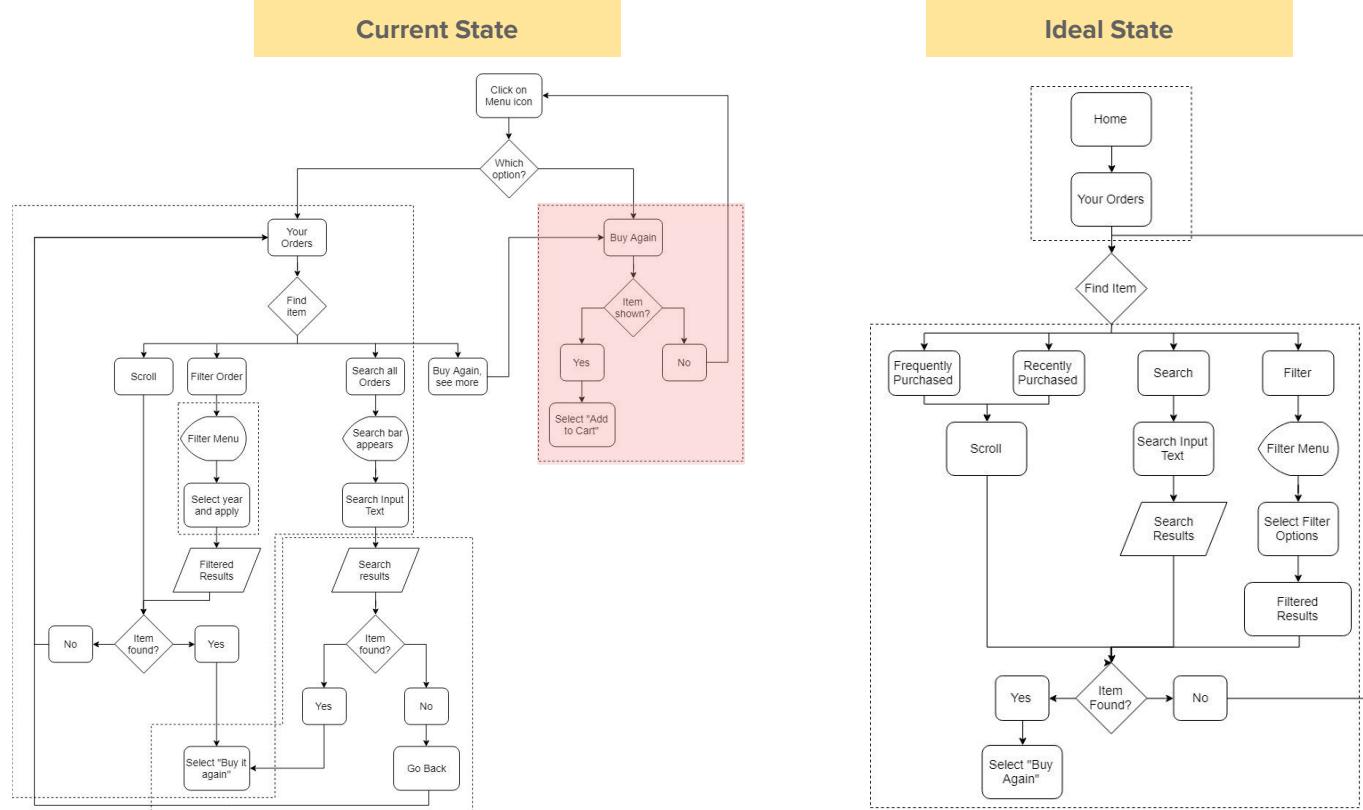


There is no formal way for the user to compare items of interest. Currently, the user must remember details while switching between product pages.

REORDERING ITEMS

From the Home Page, use the Your Orders function to add the Frequently Purchased water filter to your Cart.

"Buy Again" functionality is limited. Users cannot filter or search for items and products listed seems arbitrary.





Prototypes

Proposed Solutions

Interaction Design | Provide fitting order history functions

Solution

Improve hierarchy and remove redundancies to enhance user experience.

Functional Spec./Interaction Design | Enable compare

Solution

Extend the established in-app shopping list widget to function as a drag-and-drop compare widget, generating a list of items to be compared on separate screen.

Information Architecture | Condense the product pages

Solution

Introduce collapsible sections to cut the overwhelming length of the product screens.

Navigation Design | Easily navigate reviews and images

Solution

Condense filter/sort options into one menu, matching conventions set on other screens. Incorporate consistent back button functionality and occurrence.

Surface | Declutter the home page

Solution

Incorporate side-scrolling to condense the home page. Prioritize department links to assist the user and decrease reliance on the search function.

Navigation Design | Provide navigation information

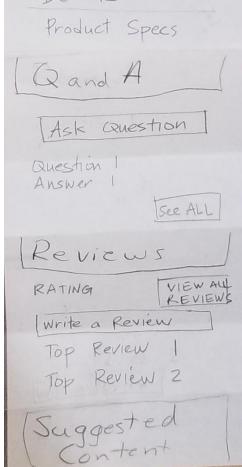
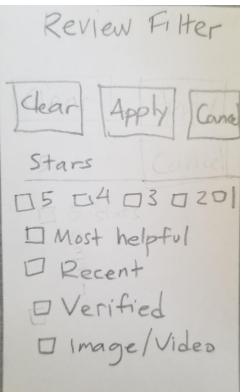
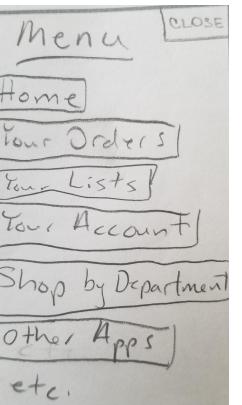
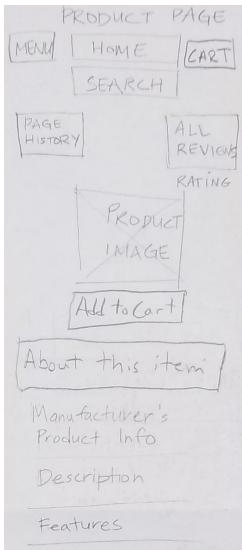
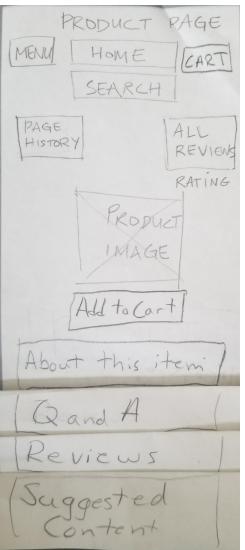
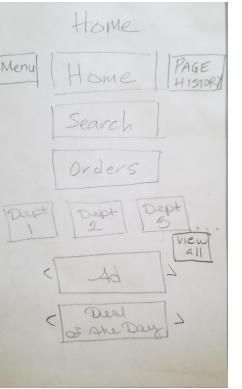
Solution

Introduce browsing history retrieval and a link to the search results to assist the user in keeping their place in the app.

Lo-Res Paper Prototype

Lo-res browser link:

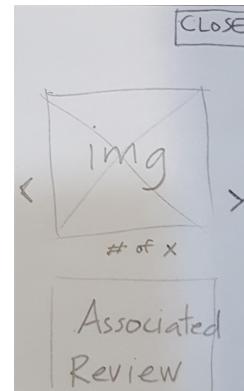
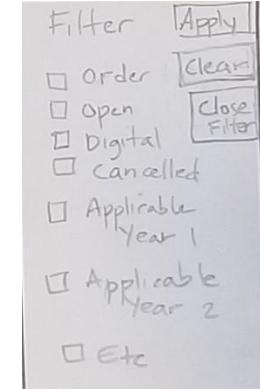
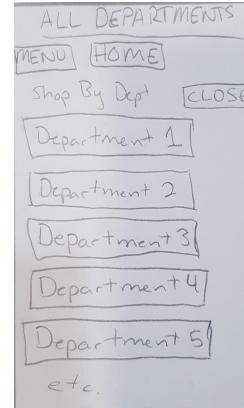
<https://marvelapp.com/bb58a04>



Lo-Res Paper Prototype

USER FEEDBACK AND INSIGHT

- Wording for “page history” changed to “browse history”
- Specifying titles in browse history
- “About” section on product page expanded from original idea of collapsed sections
- “Prime” added to Compare List.
- Ability to delete items from compare list and tray.
- Clarified instructions for compare tray
- User commented that home page should be more personalized to user. Ads and departments should reflect the user. Departments should be ones user often use.



Med-Res Paper Prototype

Med-res browser link:

<https://marvelapp.com/4ja942h>

The image shows two hand-drawn wireframe prototypes side-by-side.

Left Wireframe (Main Menu):

- Home
- Your Orders
- Your Lists
- Your Account
- Shop by Department
- Programs and Features
 - Gift Finder
 - Bargain Finds

Right Wireframe (Search Results):

Search bar: Search

Filter buttons: Prime, Video, Music, Fresh, Browse History, Your Orders

Advertisement section:

- Books
- Electronics
- Toys and Games

View All

Deal of the Day:

- Ninja Professional 72 oz Blender \$79.99
- NutriBullet NBR-1201 High Speed Blender \$48.88
- Hamilton Beach Multi-Function \$24.99

The image shows three hand-drawn wireframe prototypes stacked vertically.

Top Wireframe (Product Details):

Product image: Ninja Professional 72 oz Blender \$79.99

Buttons: Add to Cart, About this item, Manufacturer's Product Info, Description, Features, Details, Product Specs

Middle Wireframe (Product Details):

Product image: NutriBullet NBR-1201 High Speed Blender \$48.88

Buttons: Add to Cart, About this item, Manufacturer's Product Info, Description, Features, Details, Product Specs

Bottom Wireframe (Product Details):

Product image: Hamilton Beach Multi-Function \$24.99

Buttons: Add to Cart, About this item, Manufacturer's Product Info, Description, Features, Details, Product Specs

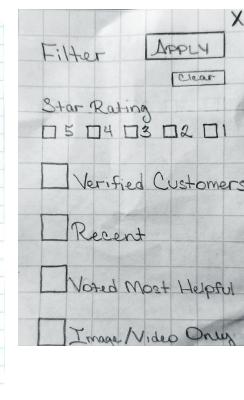
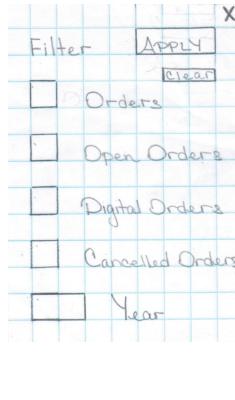
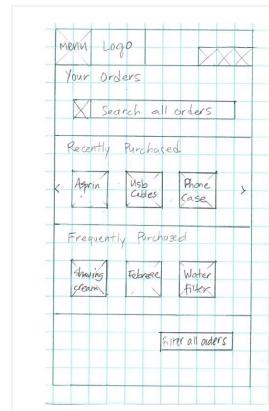
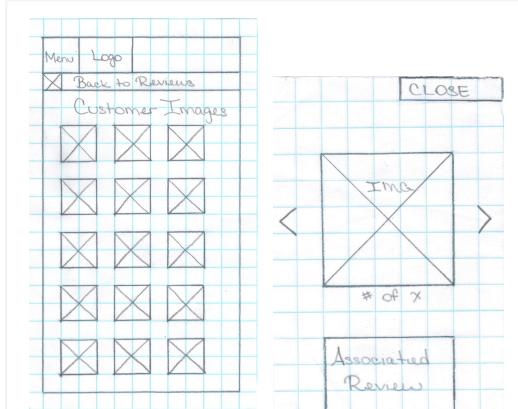
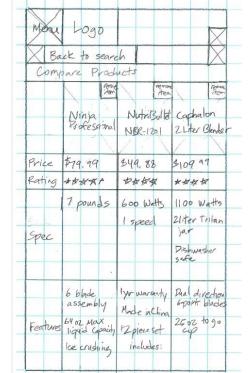
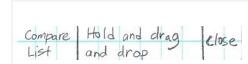
Rightmost Column (Reviews):

- Write a review!
- See All
- Reviews Rating
- Ask Product
- Top Review 1
- Top Review 2

Med-Res Paper Prototype

USER FEEDBACK AND INSIGHT

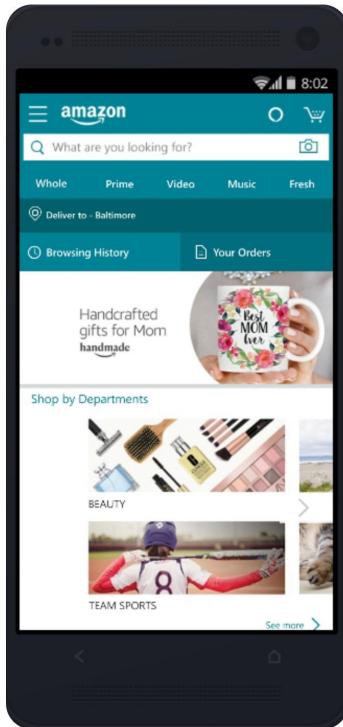
- More specificity in wording for menu links
- Create more screens to simulate actions
- Create Home Decor page to show consistency in page layout for shopping by department
- Make “view all” more noticeable on homepage under Shop by Departments section
- User commented on missing stars on reviews page
- User commented that checkboxes would feel more intuitive for comparing items



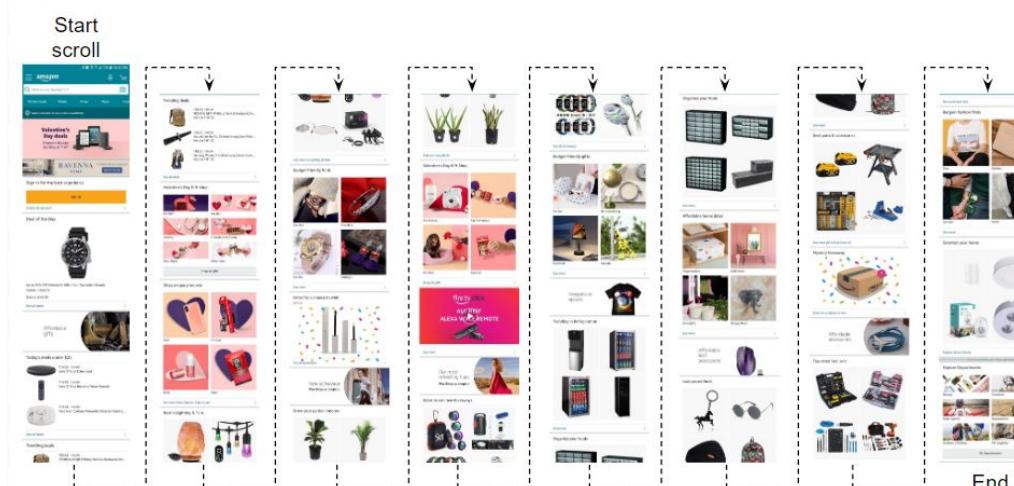
Hi-res Prototype

Hi-res browser link:

<https://invis.io/JKRYWSOM3QB>



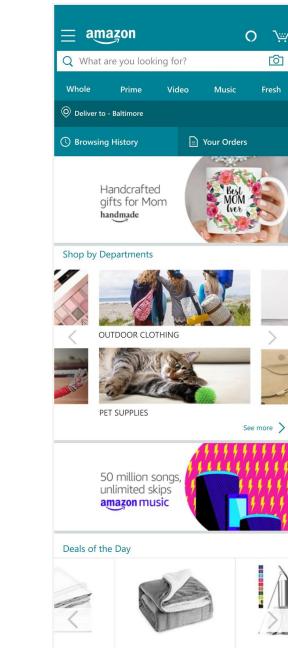
Before



Start scroll

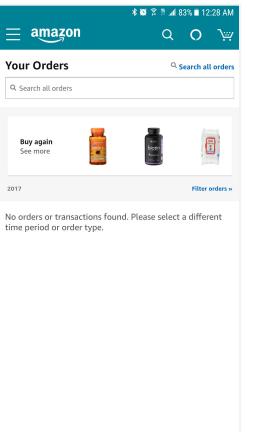
End scroll

After

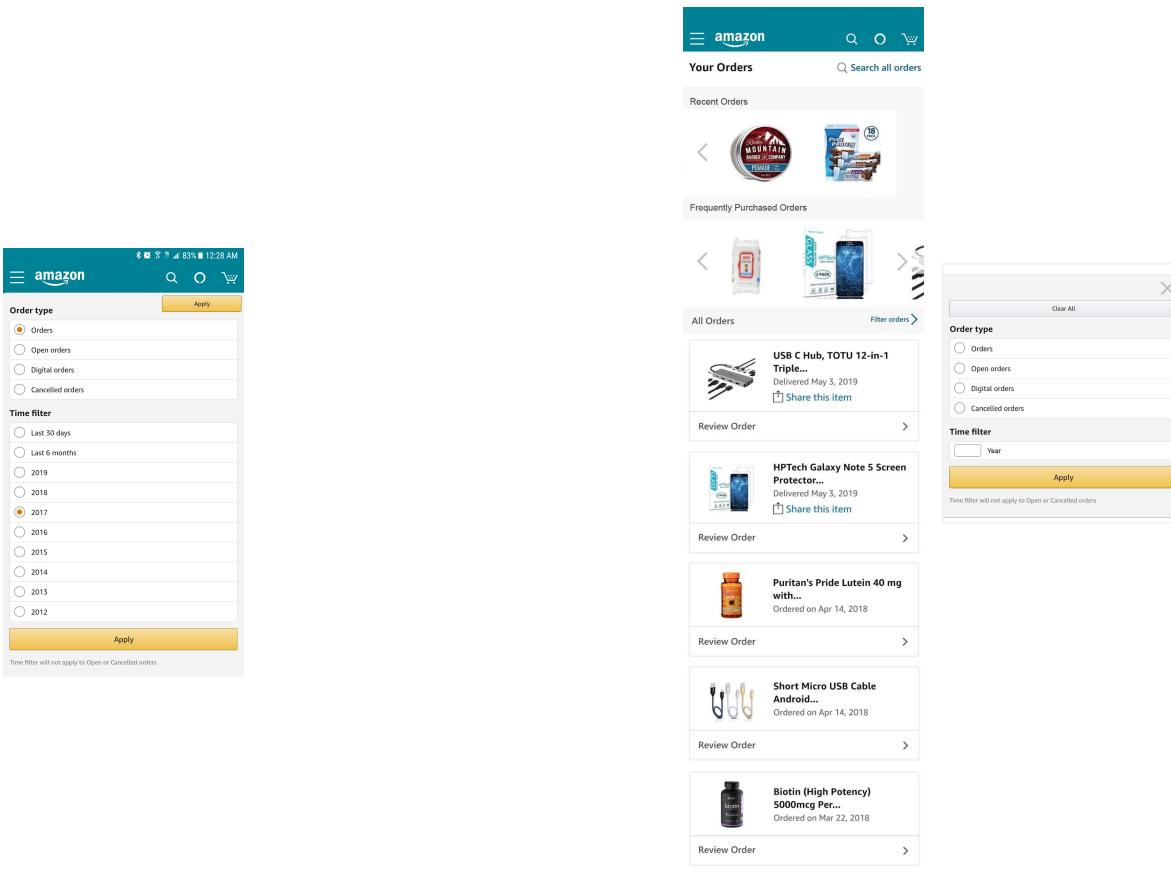


YOUR ORDERS

Before

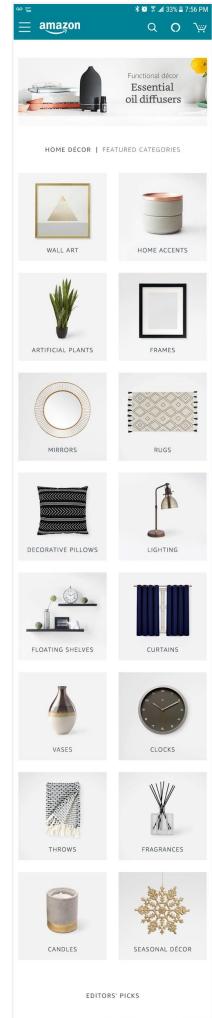
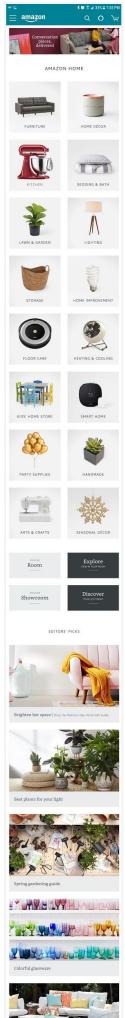


After

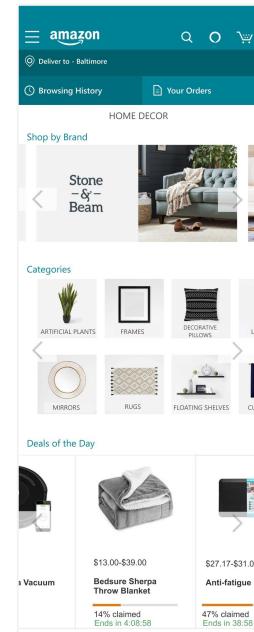
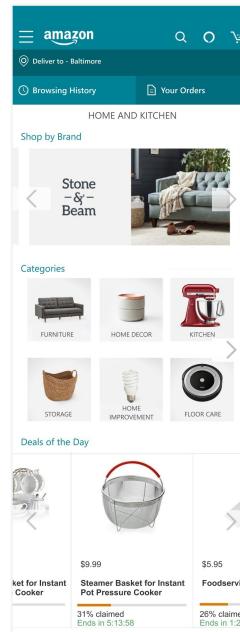


DEPARTMENT PAGES

Before



After



PRODUCT PAGES

Before

After

Collapsible sections to condense product page

The diagram illustrates the transformation of a complex product page into a more concise version by collapsing several sections into a single, expandable area.

Before (Complex Product Page):

- Top Section:** Price (\$74.99), Shipping (\$14.99), and a large image of the blender.
- Product Description:** Detailed description of the Ninja Professional 72oz Countertop Blender.
- Buy Options:** Buttons for "Buy Now" and "Add to Cart".
- Shipping & Returns:** Information about shipping and returns.
- Gift Wrap:** Option to add gift wrap for \$9.99.
- About this item:** Section containing "From the manufacturer" information and a detailed description of the blender's features.
- Customer Questions:** A section for asking questions and searching answers.
- Customer Reviews:** A section showing 1,306 reviews with a 4.0 out of 5 stars rating.
- Gift wrap available:** Information about gift wrap and its cost.

After (Condensed Product Page):

- Top Section:** Price (\$74.99), Shipping (\$14.99), and a large image of the blender.
- Product Description:** Detailed description of the Ninja Professional 72oz Countertop Blender.
- Buy Options:** Buttons for "Buy Now" and "Add to Cart".
- Shipping & Returns:** Information about shipping and returns.
- Gift Wrap:** Option to add gift wrap for \$9.99.
- About this item:** Section containing "From the manufacturer" information and a detailed description of the blender's features.
- Customer Questions:** A section for asking questions and searching answers.
- Customer Reviews:** A section showing 1,306 reviews with a 4.0 out of 5 stars rating.
- Gift wrap available:** Information about gift wrap and its cost.
- Bottom Collapsible Area:** This area contains the collapsed sections from the 'Before' state: "About this item", "Customer Questions", "Customer Reviews", and "Gift wrap available". It also includes a "Helpful" link and a "Report" button.

COMPARE PAGE AND TRAY

After

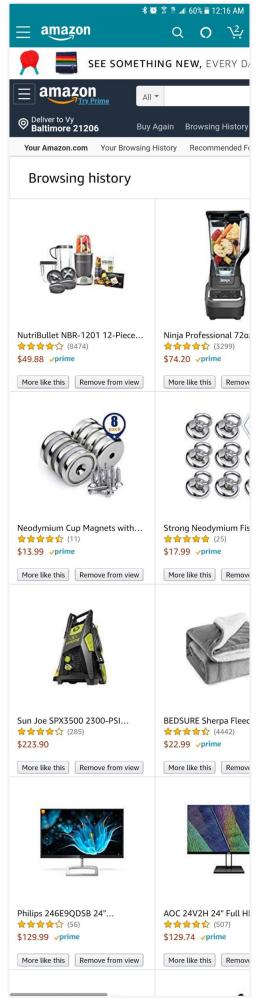


A screenshot of the Amazon compare page showing the original, more complex comparison tray. It includes a search bar, delivery location dropdown, and a "Browsing History" link. The main area displays two products: the "Oster Versa Pro Series Blender" and the "Ninjia Professional 72oz Countertop Blender". Each product listing includes an image, title, price, and a "Compare" button at the bottom.

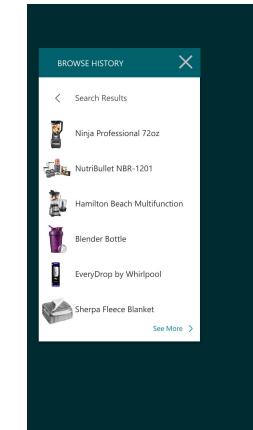
A screenshot of the Amazon compare page showing the simplified comparison tray again. The main area displays the same two blenders as the previous screenshot, but the tray itself is now a clean, minimalist white space with a "Compare" button at the bottom.

BROWSE HISTORY

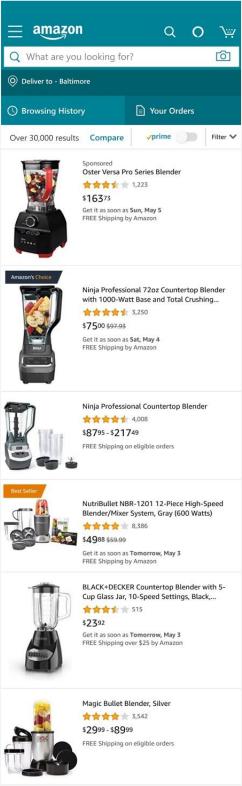
Before



After



Hi-res Prototype



A screenshot of the Amazon mobile product review page for the Ninja Professional 72oz Countertop Blender. The top navigation bar says "Back to Reviews Page". The review section shows a 4.5-star rating from 1,223 reviews. A user review by "Leah McFad" is highlighted, stating it's a "horrible blender". Below the reviews is a grid of "Customer Images" showing various uses of the blender.

A screenshot of the Amazon mobile navigation menu. The header says "Good Evening". The menu includes links to Home, Your Orders, Your List, Your Account, Shop by Departments, Settings, Customer Service, Programs and Features, Bargain Finds, Today's Dels, and Gift Finder.

A screenshot of the Amazon mobile navigation menu. The header says "Good Evening". The menu includes links to MAIN MENU, Shop by Department, Appliances, Cell Phones & Accessories, Computers, Digital Music, Electronics, Grocery & Gourmet Food, Health & Household, Home & Kitchen, Kindle Store, Luggage & Travel Gear, Luxury Beauty, Magazine Subscriptions, Movies & TV, Musical Instruments, Office Product, Patio, Lawn & Garden, Pet Supplies, Prime Pantry, Prime Video, Software, Sports & Outdoors, Tools & Home Improvement, Toys & Games, Vehicles, and Video Games.

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Appendix

Demographics

EPSILON

AMAZON SHOPPER PROFILE



Demographics

- 45-54 years old
- Married
- Over half have children
- Nearly half have a college education



Financials

- Income > \$100,000
- Over 80% own their home
- Over half have a net worth of \$500,000+



Lifestyles & interests

- 2x more likely to have a travel & entertainment card
- Preference to do internet research before shopping
- Best marketing profitability: pay their bills because they have disposable income

WHY CONSUMERS DO (OR DON'T) SHOP ON AMAZON

What compels shoppers to buy on Amazon

SHIPPING AND CONVENIENCE



TWO-DAY OR NEXT-DAY SHIPPING



HAVING A "ONE-STOP SHOP"



AMAZON'S RETURN POLICY



AMAZON'S CREDIT



Conversant LLC & Epsilon Data Management LLC. "How to win in the Amazon era." Epsilon, 2018, <http://engage.epsilon.com/how-to-survive-and-thrive-in-an-amazon-world>.

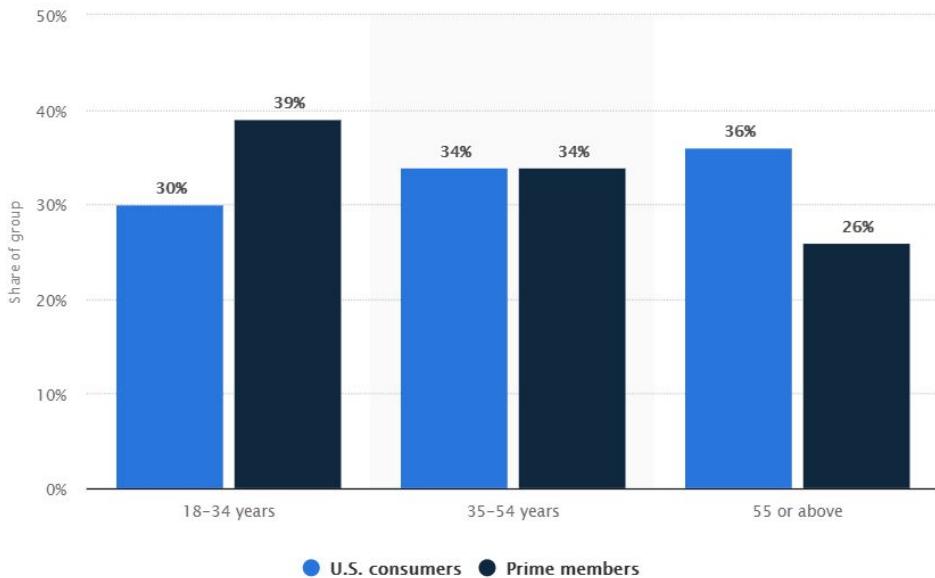
Demographics

According to Statista report, 95 million Prime users in USA, 100 million globally.

Estimated 59 % of Amazon users are Prime members

Prime users spend \$1400 annually,
non-members spend \$600 annually

Top categories of products: electronics and physical books, e-books and personal care products.



Statista. "Distribution of Amazon Prime members in the United States of March 2017, by age group." Statista, 2018. <https://www.statista.com/statistics/304940/amazon-prime-us-age-distribution/>.

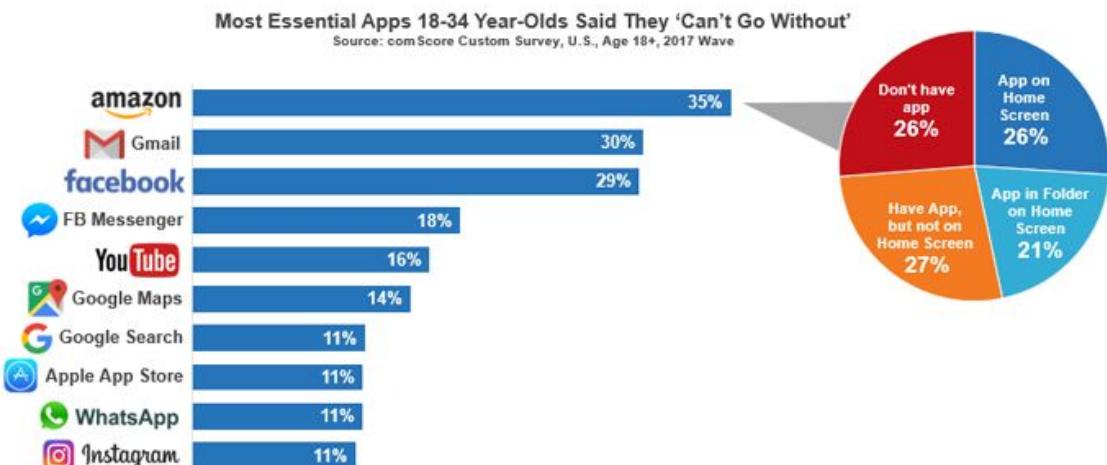
Demographics

In a survey by ComScore, Amazon was ranked as the #1 app millennials can't live without.

They were asked to select the three apps most essential to them and that would be most difficult to go without.

The results: Amazon, with 35% of 18-34 year-olds, followed by Gmail (30%) and Facebook (29%)

Nearly half of all Millennials have their Amazon app accessible on their home screen.



Comscore. "5 Interesting Facts About Millennials' Mobile App Usage from 'The 2017 U.S. Mobile App Report.'" Comscore, 2017.
<https://www.comscore.com/Insights/Blog/5-Interesting-Facts-About-Millennials-Mobile-App-Usage-from-The-2017-US-Mobile-App-Report>.

Persona sheet 1

INTERACTION DESIGN – PERSONA SHEET			
Name	Michelle Foster		
Title	Dental Hygienist		
Age	30	Sex	Female
Tag line	"I have other things to do."		
Description	Married Mother of two children, ages 2 and 4 College educated Lives near parents Not satisfied with just "okay"		
MOTIVATIONS AND GOALS	ACTIVITIES		
Experience goals	Work place -Friendly, busy dentist office -No time to handle personal business -One patient after the other -Handles tools and equipment, data entry on computer		
End goals	Typical activities -Planning outings and events for the children -Ordering housewares, decor, and event supplies -Making lists -Uses the app to make the kid's Christmas and birthday wish lists for other family members		
Life goals			
Business- and organisational goals	Important atypical activities -Says groceries on Amazon more than at the grocery store -Does not enjoy deep dives for bargain pricing or price comparisons		
Technical goals			
SKILLS AND APTITUDES	Challenges, breakdowns and annoyances -Wasting time and redoing tasks -Multiple options for one product, taking leap of faith -Inaccurate information and dates -Returns that are the fault of poor communication		

Mattias Arvola, 2009-12-09.

An ordinary day	
Up at 6AM. Gets kids ready for preschool and daycare with her husband. Husband takes kids to their destinations. At work by 8AM. Works until 5PM. Has a fairly easy day. One patient was a young child that wouldn't stay still. Picks youngest child up from daycare. Helps cook dinner and does a little work in the house. Takes oldest child to gymnastics practice. May spend some time on her phone. Get children ready for bed at 8PM. Has a little free time to watch television and peruse the apps on her phone (social media, news, shopping). In bed by 11:30PM.	
PERSONAL DETAILS	
Personality traits -Upbeat, energetic -Smart, quick thinker -Intense at times because she puts a lot on her plate -Agreeable until her efficiency is jeopardized	
Values -Clear communication -Making informed decisions -Convenience -Product availability	
Places where the product or service is used -Work (lunch breaks) -Home (office, bed, living room) -When children are in other's care (e.g. gymnastics practice)	
Worries and fears -Not receiving items by the date they are needed -Being financially irresponsible, negatively affecting the household.	
Constraints and principles -Punctuality -Leaves little room for error during interactions	
General activities at work, at home and during leisure time	
-Likes to make lunch breaks productive. May purchase a few items to be delivered in the evening, or continue planning the next event. -Spends some free time shopping on the app at home -Will and can buy nearly anything on the app because she lives near a distribution center and a Whole Foods	
ATTITUDES AND MENTAL MODELS	
Social relations -Plays active role in oldest child's school activities -Tries to attend or plan family festivities with extended family -Has regular girl's night out to maintain sanity	

Mattias Arvola, 2009-12-09.

Persona sheet 2

INTERACTION DESIGN – PERSONA SHEET			
Name	Mason Chung		
Title	Test technician		
Age	39	Sex	Male
Tag line	Is there a faster way to do it?		
Description	Single, work-oriented, quiet, might be an online shopaholic		
MOTIVATIONS AND GOALS	ACTIVITIES		
Experience goals	Work place Logistical and manufacturing environment, hands on/physical work, use of computer programs to aid job duties.		
End goals	Typical activities Wants to be able to quickly find products that he is searching for.		
Life goals	Typical activities Wants to be able to purchase the best product at the best price.		
Business- and organisational goals	Important atypical activities		
Technical goals	Important atypical activities Wants his life to be more convenient with the help of the app, technology.		
SKILLS AND APTITUDES	Challenges, breakdowns and annoyances Skills Tech savvy. Knows shortcut keys on the computer. Good at Excel.		

Mattias Arvola, 2009-12-09.

An ordinary day	
Usually wakes up early for work during weekdays, but on weekends, tends to sleep in. Does not eat breakfast, but will stop by Wawa on way to work to get coffee. Work hours 7-4. When at home, usually surfing YouTube videos. Especially enjoys watching America Got Talent and similar talent shows. Takes his dog out occasionally. Often just lets his dog out into backyard. Some nights cook dinner, takeout, or will eat leftovers from lunch. Goes to bed late.	
PERSONAL DETAILS	CONTEXT
Personality traits	Equipment Google Pixel, Lenovo laptop
Values	Places where the product or service is used At home or even at work if co-workers mention a product recently bought or need. Anywhere, if there is a want to see relevant products brought up in conversation.
Worries and fears	General activities at work, at home and during leisure time Buying an inferior product. Items lost or damaged during shipment.
Constraints and principles	Atitudes and mental models As long as quality and perceived value of products are high, price is not an issue.
Social relations	Likes to socialize with friends. Has a large social circle, but has core group of male friends he hangs out with more often than others. Sees friends weekly.

Mattias Arvola, 2009-12-09.

Persona sheet 3

INTERACTION DESIGN – PERSONA SHEET	
Name	Eugene Daniels
Title	Retired English Professor
Age	66
Sex	M
Tag line	
Description Older man with more time and some income to spend.	
MOTIVATIONS AND GOALS	
Experience goals	<p>Wants it to be simpler and faster than going on the computer.</p>
End goals	<p>Can order stuff wherever they are; check prices wherever they are</p>
Life goals	<p>To write and publish a book.</p>
Business- and organisational goals	<p>Important typical activities</p> <ul style="list-style-type: none"> - Doesn't communicate to customer service or other customers usually. - Wouldn't shop for clothes (on Amazon). Exception is occasionally checking prices.
Technical goals	<p>Be able to get through the app without running into an issue/error.</p>
SKILLS AND ABILITIES	
<p>Writing and editing.</p> <p>Moderate technical skills; won't typically get confused by most jargon.</p>	
<p>Challenges, breakdowns and annoyances</p> <ul style="list-style-type: none"> - Having to always have his phone with him (to use the app), although this is when it's most convenient to have the app. - Too many advertisements. - Frustrated with navigation options. Also not sure why separate apps' icons are taking up space in home page. 	
Picture	

Mattias Arvola, 2009-12-09.

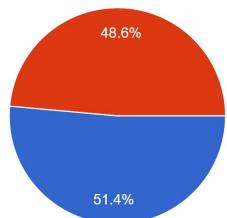
An ordinary day	
<p>Wakes up at 7AM. Has breakfast while watching the news. Takes care of errands. Will search online for the best prices if one of his errands involves needing to purchase something.</p>	
PERSONAL DETAILS	
<p>Personality traits</p> <p>Intelligent, thoughtful, outgoing, task oriented, goal oriented.</p>	
<p>Values</p> <ul style="list-style-type: none"> - Responsible use of money. 	
<p>Worries and fears</p> <ul style="list-style-type: none"> - Overspending. - Ordering poor quality item. 	
<p>Constraints and principles</p> <p>General activities at work, at home and during leisure time</p> <p>Will read the news online while at computer. Also reads books. Writes poetry. Does sometimes partake in consuming alcohol.</p>	
ATTITUDES AND MENTAL MODELS	
<p>Social relations</p> <p>Has a wife and two grown children who do not live at home. Goes to church and participates in events there. Also uses social media to find readings nearby to interact with the local writing community.</p>	

Mattias Arvola, 2009-12-09.

Google Survey Results and Answers

Are you Male, Female, or Other?

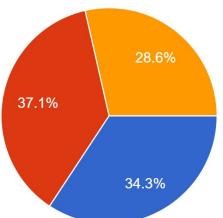
35 responses



How old are you?

35 responses

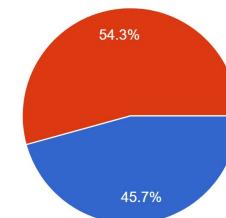
- Male
- Female
- Other



What kind of phone do you use?

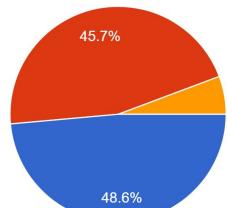
35 responses

- 18-34
- 35-54
- 55 and older



Are you married, single?

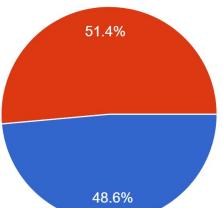
35 responses



Do you have children?

35 responses

- Married
- Single
- Other



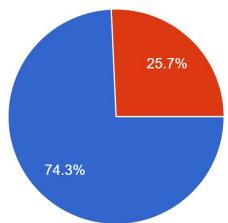
Results link:

https://docs.google.com/spreadsheets/d/1GV_Tpk6fCGew6uml0FqJkbZ5p16wldfok7pHS_GyV3es/edit?usp=sharing

Google Survey Results and Answers

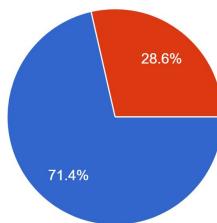
Do you have an Amazon Prime account?

35 responses



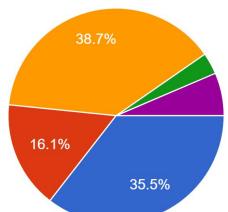
Do you have the Amazon (Shopping) App on your phone?

35 responses



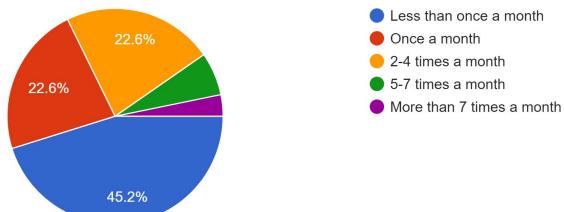
How often do you use the app?

31 responses



How often do you make purchases on the app?

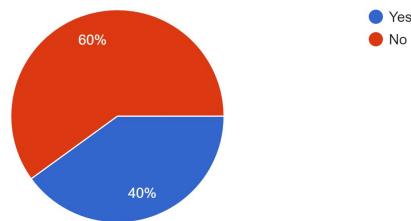
31 responses



Google Survey Results and Answers

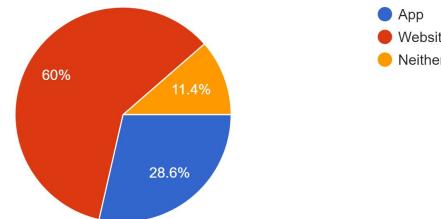
Have you ever purchased an item recommended to be purchased in conjunction with the product you were viewing?

35 responses



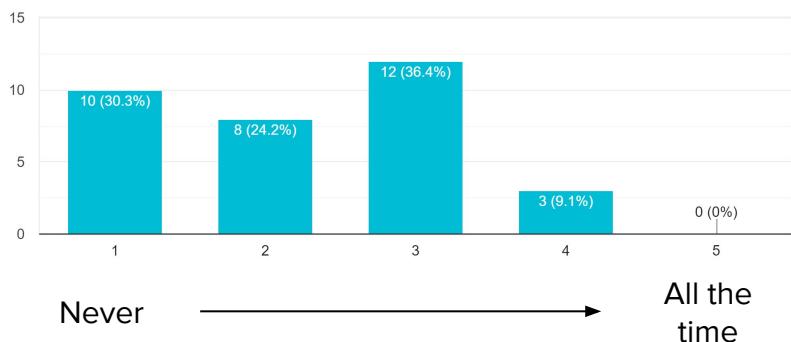
Do you prefer the app or the website when shopping on Amazon?

35 responses



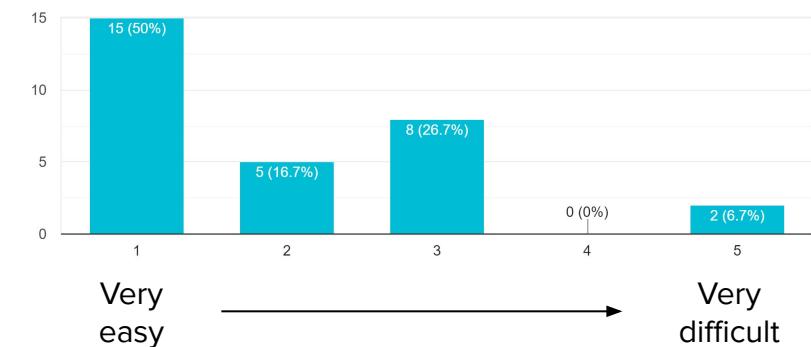
How often do you scroll through the content on the main page?

33 responses



Do you find the app easy to use?

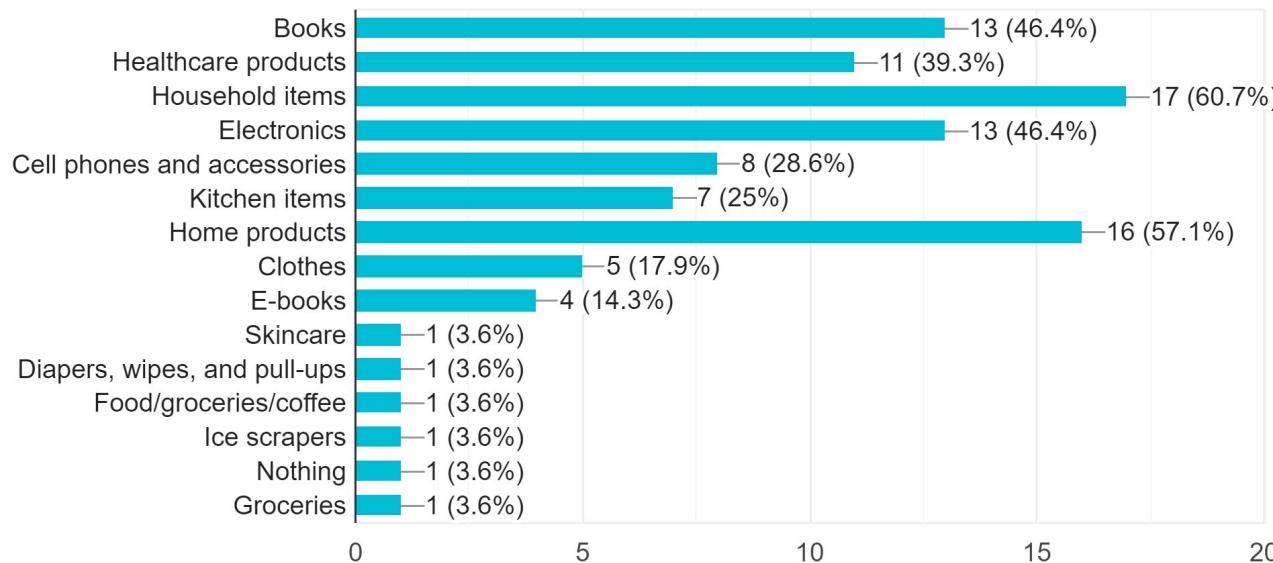
30 responses



Google Survey Results and Answers

If you have used the app, what sort of items do you usually buy? Select all that apply.

28 responses



Google Survey Questions and Answers

What features do you like about the app?

Search bar	Convenience	It's super easy to use.	Easy to navigate
Search	Convenient	The ease of uninsy	Can find items not in stores
ability to find what I am seeking	Only that it is with me when my computer isn't	Ease of ordering	Prime
Works similar to the website. Can be on my phone	Convenient	Easy to use, clear	Filters
ease of using customer service	Convenience	Simplicity	Remembers past purchases
Recommended for you	The size of the selection buttons	The ease of reordering items.	

Google Survey Questions and Answers

What features do you not like about the app?

Sometimes doesn't show what i'm looking for	To easy to buy stuff	Can't tell in advance if the color or design option you want is in the size you want
The layout	It's too easy to use (one click purchase) haha	Slower to browse than through website, but mainly due to size of screen of a phone, not due to functionality problems
Customer service is difficult to process	Too many vendors	The recommendation d("Customers who bought this..."). Too many category/section options to scroll through on the main page.
		Too much advertising on home screen

Google Survey Questions and Answers

Overall, how does the experience of using the app make you feel?

Secure	Pretty good due to it being simple	Okay	Alright	Distracted, and wishing for a bigger screen
confident	It's just easy to use. Doesn't evoke a feeling.	Ok	Good	That the website is better.
Convenient	It simple and fairly straight forward	Satisfied	Good	Not much. There are other, better alternatives
Productive	It gets the job done.	Satisfied	The app feels cluttered. I feel overwhelmed by the amount of content (lists, pullouts, and dropdowns). I know all the areas and categories exist, so if I use Amazon enough to have the app, a simple side menu or even being able to designate favorite categories on the main interface would be nice.	
Productive	Accomplished	Fine		
		OK. Perfectly functional app.		

Informal Interview Notes

Question 1: What do you use the Amazon Shopping app for?

P1 (male / 35 / single):

- Depends, but usually for an impulse buy, when he knows he wants to make a purchase

P2 (male / 48 / married / children):

- When he needs something, such as for the house
- Everything is there, whatever it is
- Prime member, so he likes the free and fast shipping, which is more reason to use the app

P3 (male / 61 / divorced / children / grandchildren):

- Window shopping
- When he needs something specific
- Look for reviews, as part of research for best product/price
- Purchase repeat items, such as water filters

Question 2: Are there methods of online shopping that you use?

P1:

- When he is looking for brand specific items, he will go to the brand's website, such as Nike
- Doesn't like eBay

P2:

- Uses Google for general search of what places might sell the item
- Recently started using Ebates for their cash back program. Also there is no membership fees

P3:

- Goes to the stores
- Other websites

App Usability Testing Sheets

Welcome and Purpose

Thank you so much for participating today. I wanted to give you a little information about what you will be looking at and give you time to ask any questions you might have before we get started.

Today we are asking you to serve as an evaluator of a mobile app and to complete a set of tasks. Our goal is to see how easy or difficult you find the app to use.

Test Facilitator's Role

I am here to record your reactions and comments of the app you will view.

During this session, I would like you to think aloud as you work to complete the tasks. I will not be able to offer any suggestions or hints, but from time to time, I may ask you to clarify what you have said or ask you for information on what you were looking for or what you expect to happen.

Test Participant's Role

- Today I am going to be asking you to look for some information on the site and tell me how easy or difficult it was to find the information. These activities are all about how easy we have made it for people to use the site.
- There is no right or wrong answer. If you have any questions, comments or areas of confusion while you are working, please let me know.
- If you ever feel that you are lost or cannot complete a task with the information that you have been given, please let me know. I will ask you what you might do in a real-world setting and then either put you on the right track or move you on to the next scenario.
- As you use the site, please do so as you would at home or your office. I would ask that you to try work through the tasks based on what you see on screen, but if you reach a point where you are not sure where or how to find something, please feel free to use 'Search'.
- We will be recording this session and taking photographs for reference if needed. We are capturing your face, your voice and what you see on the screen. Your name will not be associated or reported with data or findings from this evaluation.
- I may ask you other questions as we go and we will have wrap up questions at the end.

Do you have any questions before we begin?

Consent Form

I agree to participate in the study conducted by the Vy Dinh, Nathan Hollaway, and Jasmine Loyal for their Spring 2019 PBDS 662 class at the University of Baltimore.

I understand that participation in this usability study is voluntary and I agree to immediately raise any concerns or areas of discomfort during the session with the study administrator.

Please sign below to indicate that you have read and you understand the information on this form and that any questions you might have about the session have been answered.

Date: _____

Please print your name: _____

Please sign your name: _____

Thank you!

We appreciate your participation.

App Usability Testing Sheets

Task 1: General Search
Browse for a item that you are interested in.

Task 2: Comparing items
You are looking to buy a new blender. Use the Amazon Shopping App to compare three blenders. (How are you comparing the items?)

Task 3: Filtering/Sorting Reviews
Pick one of the blenders you are looking at. Now look for bad reviews.

Task 4: Look at customer-uploaded product images
Browse through customers images of blenders.

Task 5: Shopping by department
Go to the Home Decor category in the Home Department.

Task 6: Reordering item
Reorder a [product] that was previously purchased through app.

Task 7: Homepage design
Scroll through the homepage and tell me what information is interesting to you.