

THE DIGITAL APP EXPERIENCE END TO END USABILITY STUDY

October 2, 2018



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Research Overview

Objective: Test the live Home Depot application for pain points with new and existing users.

1. Interviews

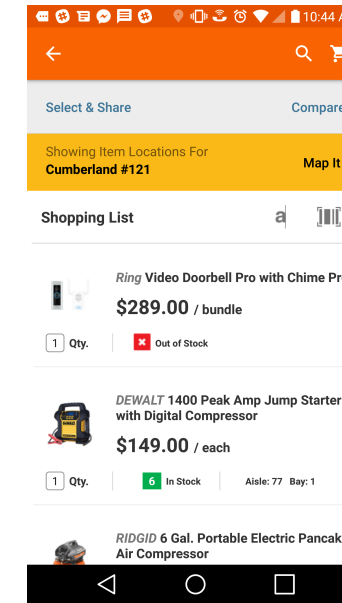
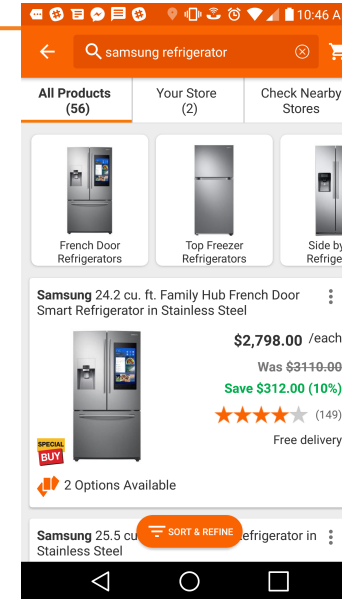
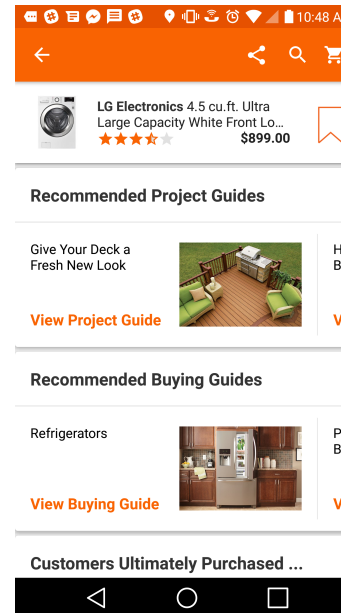
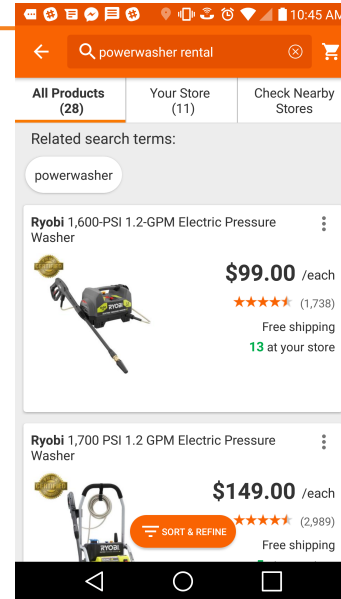
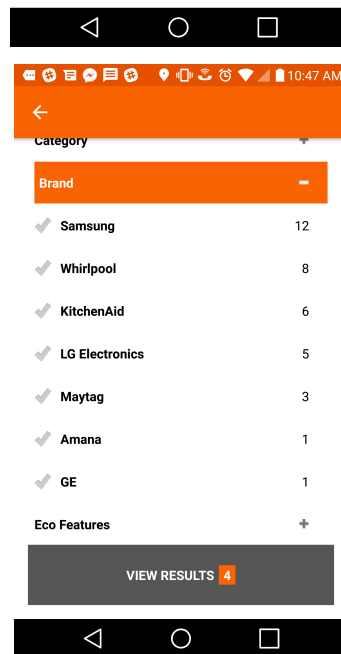
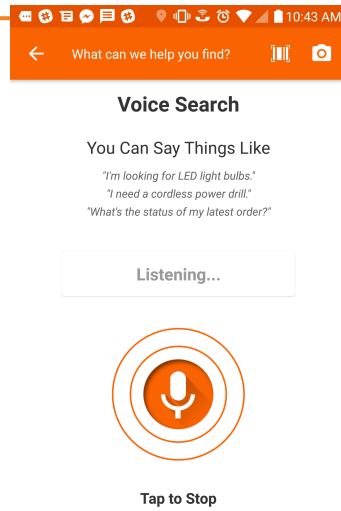
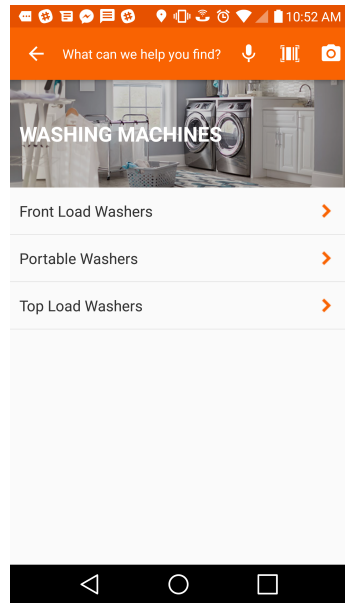
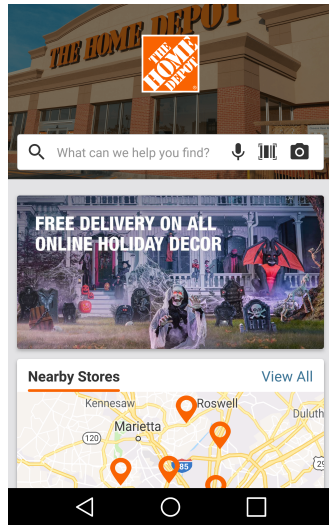
- 17 one hour interviews
 - **Operating System**
 - 9 iPhone Users
 - 8 Android Users
 - **Previous or New Home Depot App Users**
 - 10 Previous Users
 - 7 New Users
- Customers joined on both their phone and computer at the same time for the test. We were able to simultaneously record the screen of the users' mobile phone as well as their facial expressions on webcam.
 - This was a new method we were testing for Home Depot UXR to be able to test (already released) mobile content inexpensively and quickly with remote testing.
- Customers were asked to shop for their next project's needs. If time allowed at the end customers were given tasks which tested already discovered pain points.

2. App Reviews

- Both iTunes and Google Play store Home Depot App reviews were read for pain points.



The September 2018 Build of the Application



A User Experience Study of the Mobile App, End to End



Rating Severity of Usability Issues

Determining Factors for Severity of Issues

Factors	Definition
Frequency	The frequency with which the problem occurs: is it common or rare?
Impact	The impact of the problem if it occurs: Will it be easy or difficult for the users to overcome?
Persistence	The persistence of the problem: Is it a one-time problem that users can overcome once they know about it or will users repeatedly be bothered by the problem?

Severity Ratings

0

Customer preference: look at once extra time is available, doesn't affect usability

1

Low precedence usability problem: fixing this should be given low priority

2

Medium usability problem: important to fix, so should be given moderate priority

3

High impact usability problem: imperative to fix this as soon as possible

Worked Well

- **The overall aesthetics and tone.** Customers felt that the app supported their shopping without pressuring them or overwhelming them with information they didn't ask for. Some customers commented on liking the design and aesthetics as well.
- **Multiple forms of search available.** Customers liked how many forms of search were possible – the voice and barcode searches were used previously. The photo search hadn't been used by any of the customers prior to the test, but customers loved it once they tried it.
- **The live chat function.** Most customers were even surprised and delighted by how fast it was. But the time and expectation of how long it should take varied.
- **The store map.** To some customers this was a new feature they were delighted by, to others it was one of their most used functions for the application. A few customers had usability issues with the map, but for the most part it was an existing customer favorite.
- **The ability to see in store stock at their local store.** Experience taught most of them that this was an estimate rather than exact (ie: they might not have it if it shows 1 in stock but likely will if 3+ are in stock) but was still appreciated since many customers wanted to find it in store or do an in-store pickup.



Usability Issues

Key 0 Preference 1 Low 2 Medium 3 High

- 3 Filters need a usability rework.
- 3 Review Stars/Filters should be clickable.
- 3 iOS menu bar needs contrast increased to pass accessibility standards (WCAG AA compliance – which needs at least a 4.5:1 contrast).
- 3 Search should be more flexible to direct customers towards common questions.
- 3 Voice search errors out if customers follow instructions on screen
- 2 Customers are unaware of many of the incredible features of the Home Depot application.
- 2 Application needs more visual feedback.



- Issue: Customers are only able to select one filter option at a time. This was a common take away as something customers didn't like about the application
- Cumbersome to select multiple filters of the same section because they are being taken to the top of the page rather than the section they are already on
- Additionally ranges (for price) would be helpful rather than having customers select multiple filters that are under their budget for an item.
- Customer is directed to top of screen after selecting each filter
 - This is particularly an issue with price, because no easy way to select all items less than a certain price
- Having to remove a filter at the top rather than being able to hit the filter again to uncheck it wasn't intuitive to some users. Both options should function.

“I am not quite sure how to get back there if I want to put my color in or I want to put different things in there. I am just confused why I can't put in a few different refinements before I get shot back to this page.”



Filter Feedback/Visuals

3

Key 0 Preference 1 Low 2 Medium 3 High

- Issue: Many customers struggled to deselect filters, and a few were unclear whether a filter was selected or not (because of the grey checkmark).
- Customers didn't find the position of the filter at the bottom of the PLP intuitive and some misclicked the product it overlaid trying to click it.

“I thought that gray check mark by the option meant that it was already checked, so when I clicked exterior paint I thought I was unchecking the exterior.”

“I would expect the filters at the top of the results rather than the bottom.”

Brand		-
<input checked="" type="checkbox"/>	Samsung	12
<input checked="" type="checkbox"/>	Whirlpool	8
<input checked="" type="checkbox"/>	KitchenAid	6
<input checked="" type="checkbox"/>	LG Electronics	5
<input checked="" type="checkbox"/>	Maytag	3
<input checked="" type="checkbox"/>	Amana	1
<input checked="" type="checkbox"/>	GE	1
Eco Features		+

VIEW RESULTS 4



- Issue: Customers didn't have the expertise to know what some of the filter categories even meant.
- Additionally categories don't always match up with what is important to the user's decision making process.
- Customers desire example pictures of what certain filters/style type means, such as we have with browse/ suggested filters, to help them decide what filters to use.

Knob Shape	
✓ Bar	42
✓ Birdcage	68
✓ Egg	33
✓ Geometric	133
✓ Novelty Shape	138
✓ Oval/Oblong	370
✓ Rectangle	234
✓ Round	2582

VIEW RESULTS 2567



“It would be great to have a picture of what each filter meant. So if you didn't know, you'd be able to look at them and know by the picture : yes I like that or no I don't ”



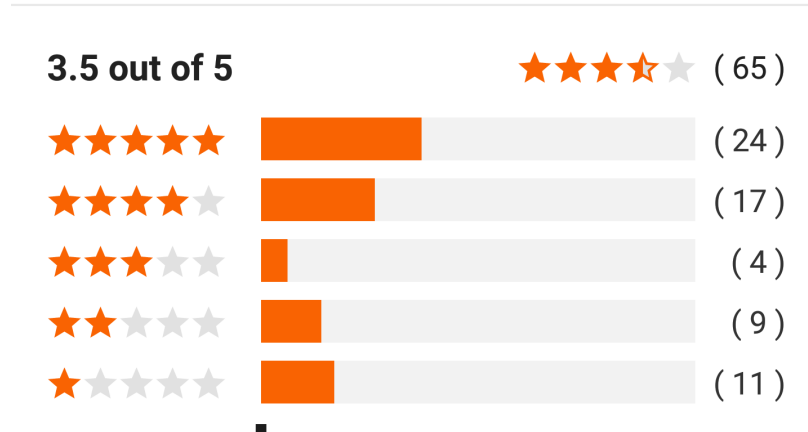
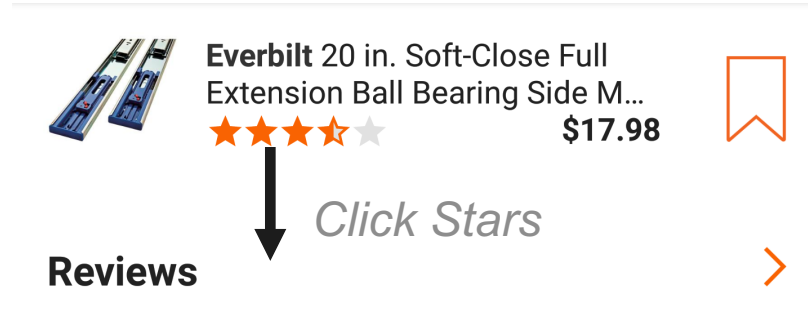
Review Stars Not Clickable

3

Key 0 Preference 1 Low 2 Medium 3 High

- Issue: Customers expected the review information to be clickable shortcuts.
- Most customers tried to reach the review section by clicking the stars on the PIP
- Customers also commonly tried to sort reviews by clicking on the text on the graph to refine reviews down to those with a certain star rating.
 - Most customers didn't notice or utilize the "Sort and Filter Reviews" tab despite expressing interest in filtering reviews to support their purchasing behaviors.

"My biggest wish is that they fix the star thing. I couldn't click on the stars at top and be taken to place that has those reviews"



Click anywhere on 1*, the bar, or (11)



Customer Expected Flow

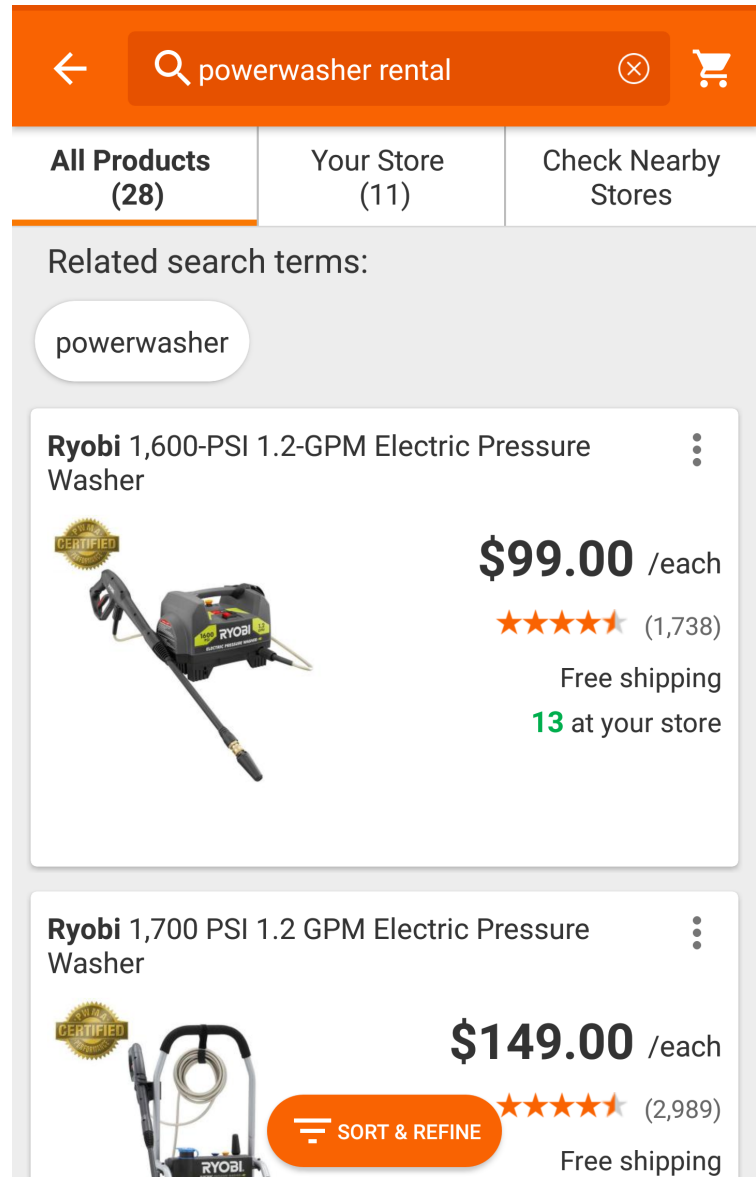


Search: "How to..." / "...Rental"

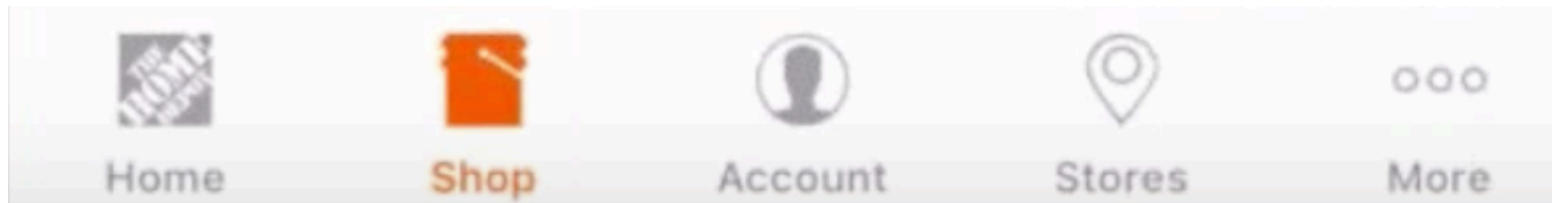
3

Key 0 Preference 1 Low 2 Medium 3 High

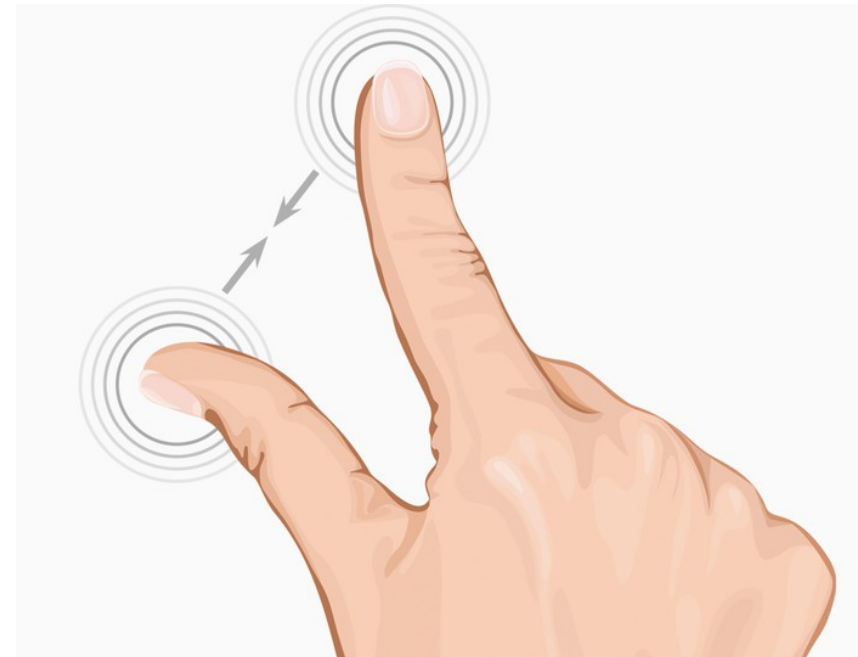
- Issue: Rental information is difficult to find in its current form, and search was a common first step to try and locate information. Home Depot should direct customers to the rental page when that is put into a search.
 - Customers had difficulty finding "how to" and "rental information" on the app.
 - Some customers tried to search for this, others ended up on mobile web.
 - A few customers used the chat function after their search failed
- Customers who wanted to rent tools were really frustrated they couldn't reserve from the app



- Issue: Text was too small for some customers to read and weren't able to zoom in
- iOS Bottom Menu doesn't have enough contrast for some customers to read
 - We are not 2A compliant with the current menu bar (shown below)



“These descriptions are too little, it’s tough finding things on here for me. I’m new to this being blind. I’d like to be able to expand things by putting my fingers on it and expand it.”



FIXED!

- Issue: Customers were unable to remove items from their shopping list.
- Even when customers saw the introduction tutorial at the beginning of the section, very few users remembered this mechanism later in the test
- A common way users tried to remove items from their list was by changing the quantity to “0” – which didn’t work

Shopping List

a

Ring Video Doorbell Pro with Chime Pro

\$289.00 / bundle

Clicking on the X takes you to the product page

1 Qty.



Out of Stock



DEWALT 1400 Peak Amp Jump Starter with Digital Compressor

\$149.00 / each

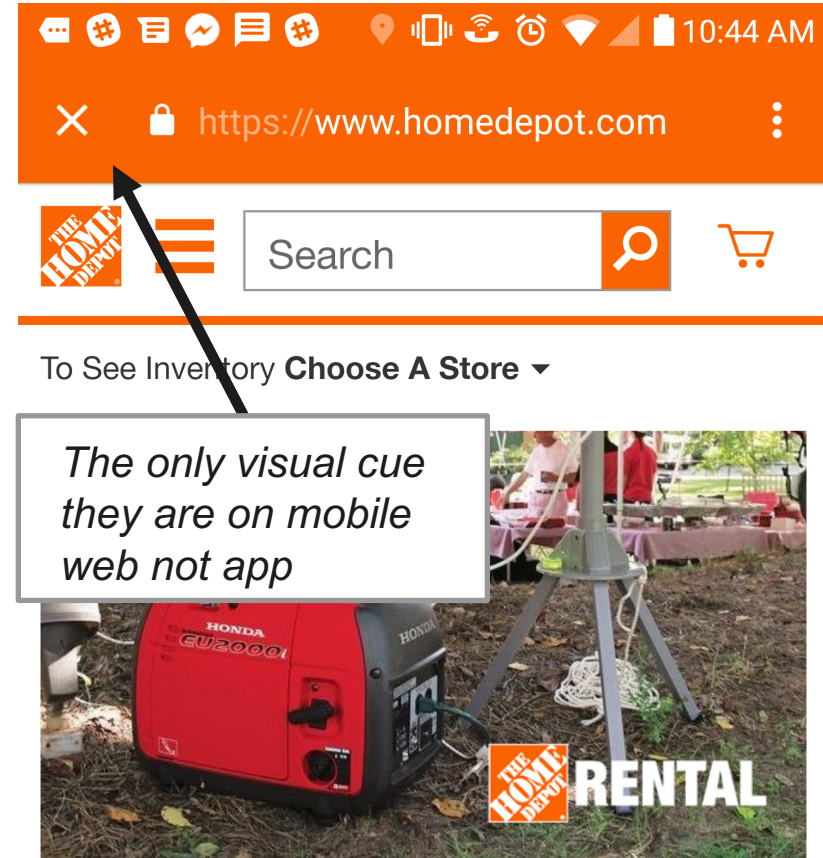
1 Qty.

6

In Stock

Aisle: 77 Bay: 1

- Issue: After clicking on portions of the app that take them to mobile web (ex Tool Rental) customers didn't realize they had left the app and continued to browse there instead



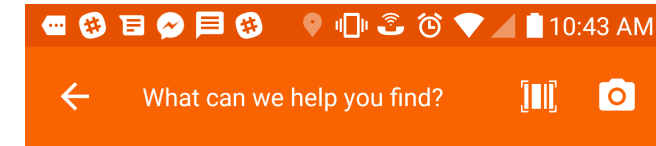
ALL YOUR RENTAL NEEDS IN ONE PLACE

Power your appliances, Pro tools and more with a generator



“This is kind of funny down here at the bottom. It says ‘download our app’, when I am actually using the app.” – Customer who had been taken to mobile web from tool rental link

- Issue: Clicking on the voice search icon when you are finished (as instructed with the 'tap to stop') results in a failed voice search.
- To get the voice search to work properly, customers need to stop talking and wait without pressing the screen, contrary to instructions.



Voice Search

You Can Say Things Like

"I'm looking for LED light bulbs."

"I need a cordless power drill."

"What's the status of my latest order?"

Listening...



Tap to Stop



- Issue: The image from the PLP isn't always indicative of the product color or consistent among different colors of the same product. This wasn't a common error, but it had a huge impact on those it affected

“The same stain that I ended up liking and wanting to purchase was the same product as the white, but they showed completely different pictures... That was hard to tell and I almost made \$100 mistake!”

The image shows a screenshot of a Home Depot product page for curtains. The product is titled "Home Decorators Collection Semi-Opaque Gray Room Darkening Back Tab Curtain". The price is \$24.97 /each, and it has a 4.5-star rating from 31 reviews. The page also indicates "Free shipping with \$45 order" and "17 at your store". A note at the bottom says "14 Options Available".

Annotations on the left side of the image include:

- "Hard to see and vague" with an arrow pointing to the "14 Options Available" icon.
- "Single Color" with an arrow pointing to the product title.
- "Many Sizes" with an arrow pointing to the size selection options.

Annotations on the right side of the image include:

- "Single Color" with an arrow pointing to the product image.
- "Many Colors" with an arrow pointing to the color selection swatches.

The size selection options are:

84	50 x 95	54 x 108	54 x 84	54 x 95
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The Home Depot logo is visible in the bottom right corner.



- Issue: It wasn't clear to some customers that an item is available in multiple colors from the PLP.

“On a cellphone interaction, it's really hard to pay attention to the details of the text.”

The image shows a screenshot of a Home Depot product page for curtains. The product is titled "Home Decorators Collection Semi-Opaque Gray Room Darkening Back Tab Curtain". The price is \$24.97 /each, and it has a 4.5-star rating from 31 reviews. A note says "Free shipping with \$45 order" and "17 at your store". At the bottom, it says "14 Options Available".


Annotations with arrows point to various elements:

- "Single Color" points to the product title.
- "Single Color" points to the product image.
- "Many Colors" points to the color selection swatches (Gray, Dark Blue, Medium Blue, Light Blue, Tan, Brown).
- "Many Sizes" points to the size selection options (84, 50 x 95, 54 x 108, 54 x 84, 54 x 95).
- "Hard to see and vague" points to the "14 Options Available" text.




- Issue: Customers did not notice or click on the AR banner from product PIP
- A few customers even mentioned that they'd like a feature like this, but didn't notice it until it was pointed out to them

Clopay Gallery Collection 16 ft. x 7 ft. 18.4 R-Value Intellicore Insulated Ultra-Grain Walnut Garage Door with ...



SEE IT IN YOUR HOME WITH 2D AUGMENTED REALITY




Customers didn't see this unprompted



Specifications

Appliance Type: Side-by-Side Refrigerator
Capacity (cu. Ft.) - Freezer: 8.8
Capacity (cu. Ft.) - Fresh Food: 15.7
Capacity (cu. ft.) - Refrigerators: 24.5
Capacity (cu. ft.) - Total: 24.5
Certifications and Listings: 1-UL Listed

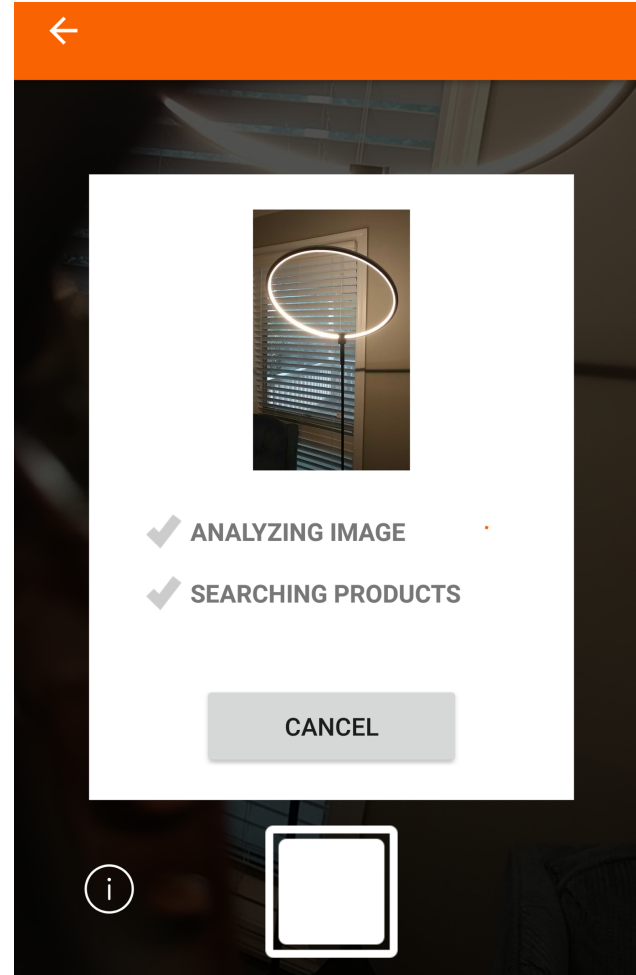
[See All Specifications](#)

 **NEED HELP?**
CHAT WITH A HOME DEPOT EXPERT

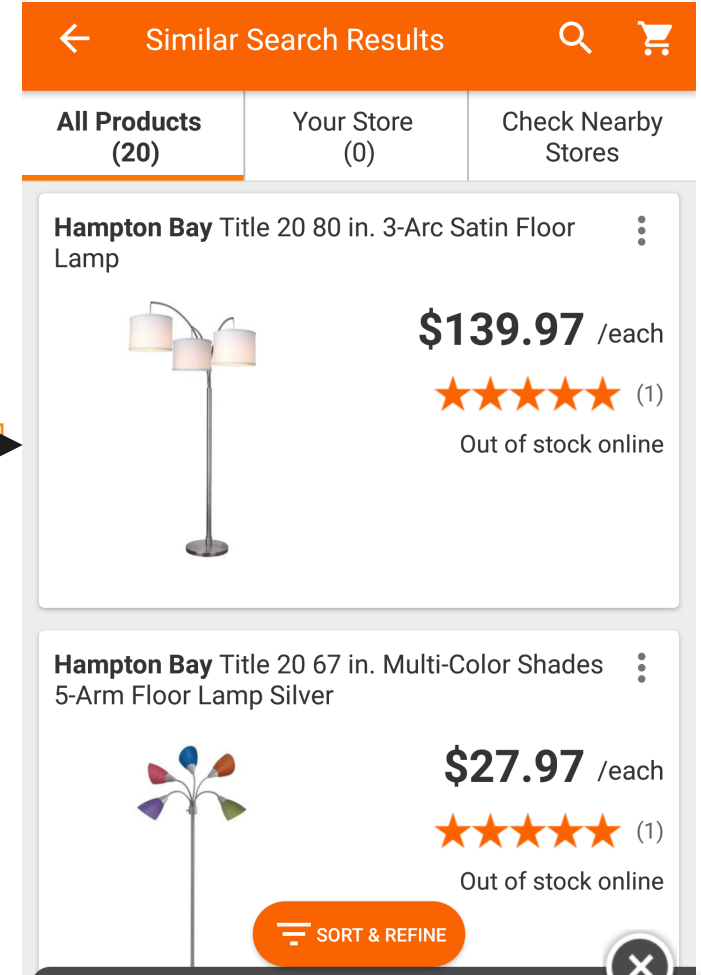
Quite a few customers saw and used this unprompted and was further down on the PIP



- Issue: A few customers were disappointed that the photo search function didn't take style into account in the search perimeters
- Many customers mentioned that an intended use was to take pictures of items (at a friend's or on Pinterest) they like to find similar ones



LOADING...
■ □ □ □ □ □ □ □ □



Barcode Search = Self Checkout

2

Key

0

Preference

1

Low

2

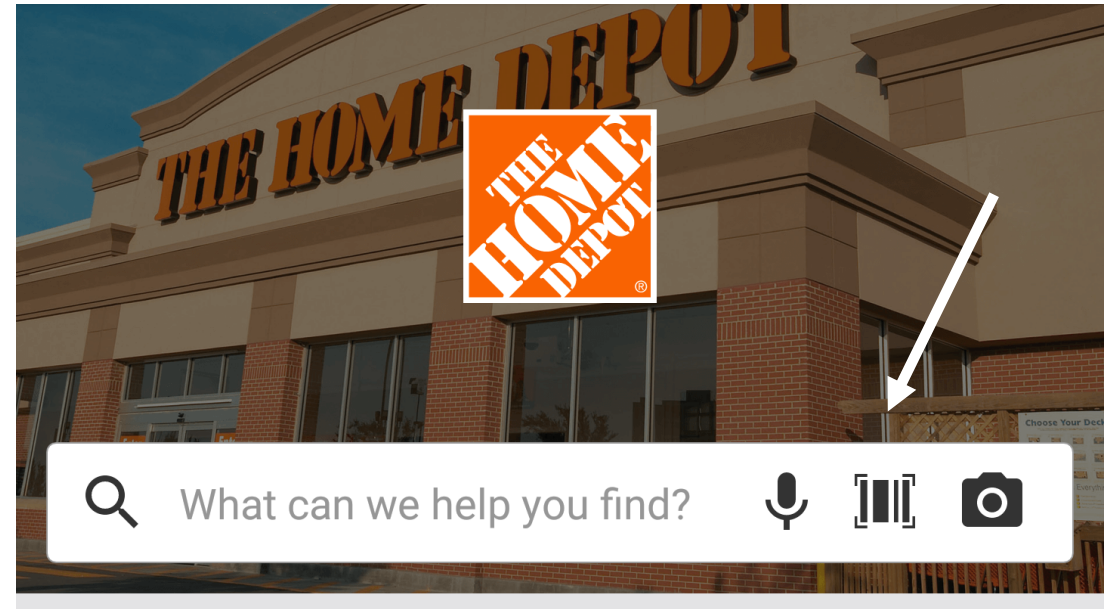
Medium

3

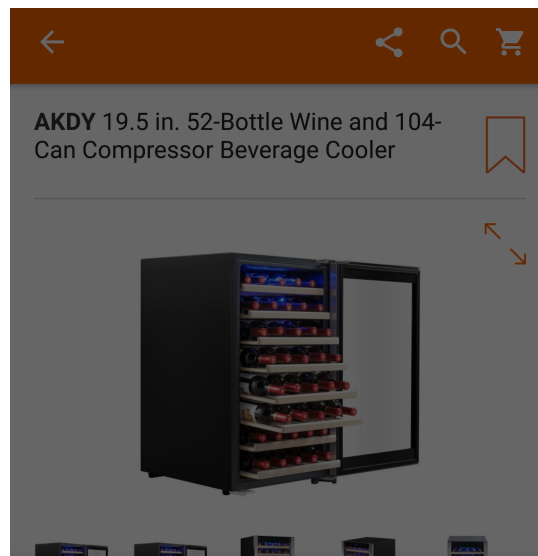
High

- Issue: A few customers thought the barcode scanner search function implied a self checkout like Sam's Club has

“Then this way I can just got to the store and scan things as I put them in my cart. Hopefully they have it so you can checkout and just walk right out. They market it as Sam's club, but I didn't know Home Depot had that!”



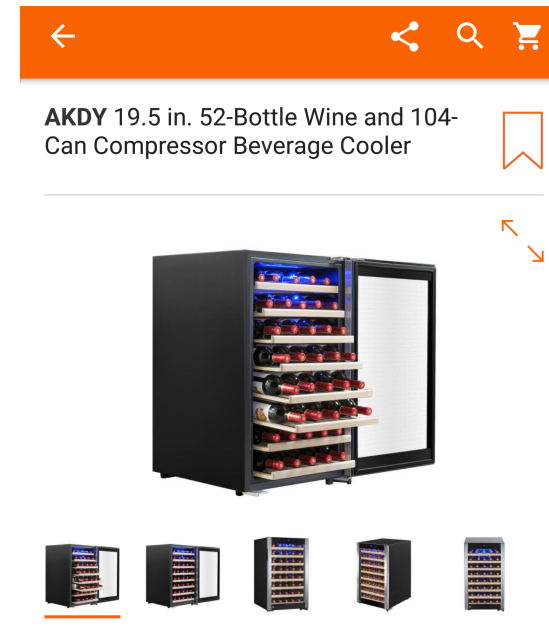
- Issue: Customers wanted to see visual feedback (the “bookmark” filled in) once they added an item to their list



Item successfully added to shopping list.

[View List](#)

[Continue Shopping](#)



SPECIAL BUY Was \$582.99
\$524.69 /box

Save \$58.30 (10%)
Valid Through 9/30/2018 +



- Issue: Customers wanted some of the expertise they seek in store from associates on the application. Such as suggesting relevant bundle items for completing a project, or what type of item is best for a purpose.
- Customers wanted to see bundles of what they'd need to complete a project. Especially in cases they might not know of special items or steps needed for a product or process.
- Current suggestions from the PIP were often seen as irrelevant.

“I would love to see a suggestion like: you just replaced your range, have you thought about countertops. Or I see you bought this color, have you thought about matching it with this one?”

“If you could add in with the product, hey these are the other things that go with this product that you may want to consider purchasing, that would be a fantastic tool for me. Because then I can order things right there and not have to relook for things. Or maybe I didn't read the instructions completely and know I needed a special applicator or primer for that product.”



Deal Lingo Confusion

2

Key 0 Preference 1 Low 2 Medium 3 High

- Issue: Customers didn't understand the difference between "local ad", "coupon", "special offer" phrasing and why they were on different pages
- Customers tried to use the search function to find items on sale. Common from search data: "... on sale", "...sales", "on sale"
- Customers were also confused by some pictures when they feature multiple items in it with a single listed price

"I don't know what the difference is between the local ad and the specials and offers. Are those just like online?"

Local Ad Pro Local Ad

Showing products in
Cumberland #121 [Change >](#)

[Shop Our Print Ad](#)

Weekly Ad
7 days left to save



BREEZE INTO FALL
Keep your indoor air comfortable with ceiling fans

\$227 ⁹⁹	\$99 ⁹⁹	\$179
\$149	\$229	\$49 ⁹⁹

THE NEXT GENERATION OF MORE DOING

BUY \$89⁴⁰

SPECIAL FINANCING



SPECIAL BUY OF THE DAY

UP TO 50% OFF TODAY ONLY SAVINGS

While Supplies Last

[Shop Now >](#)



BATH SAVINGS >



LIGHTING & CEILING FANS SAVINGS >



UP TO 35% OFF WITH APPLIANCE SPECIAL BUYS



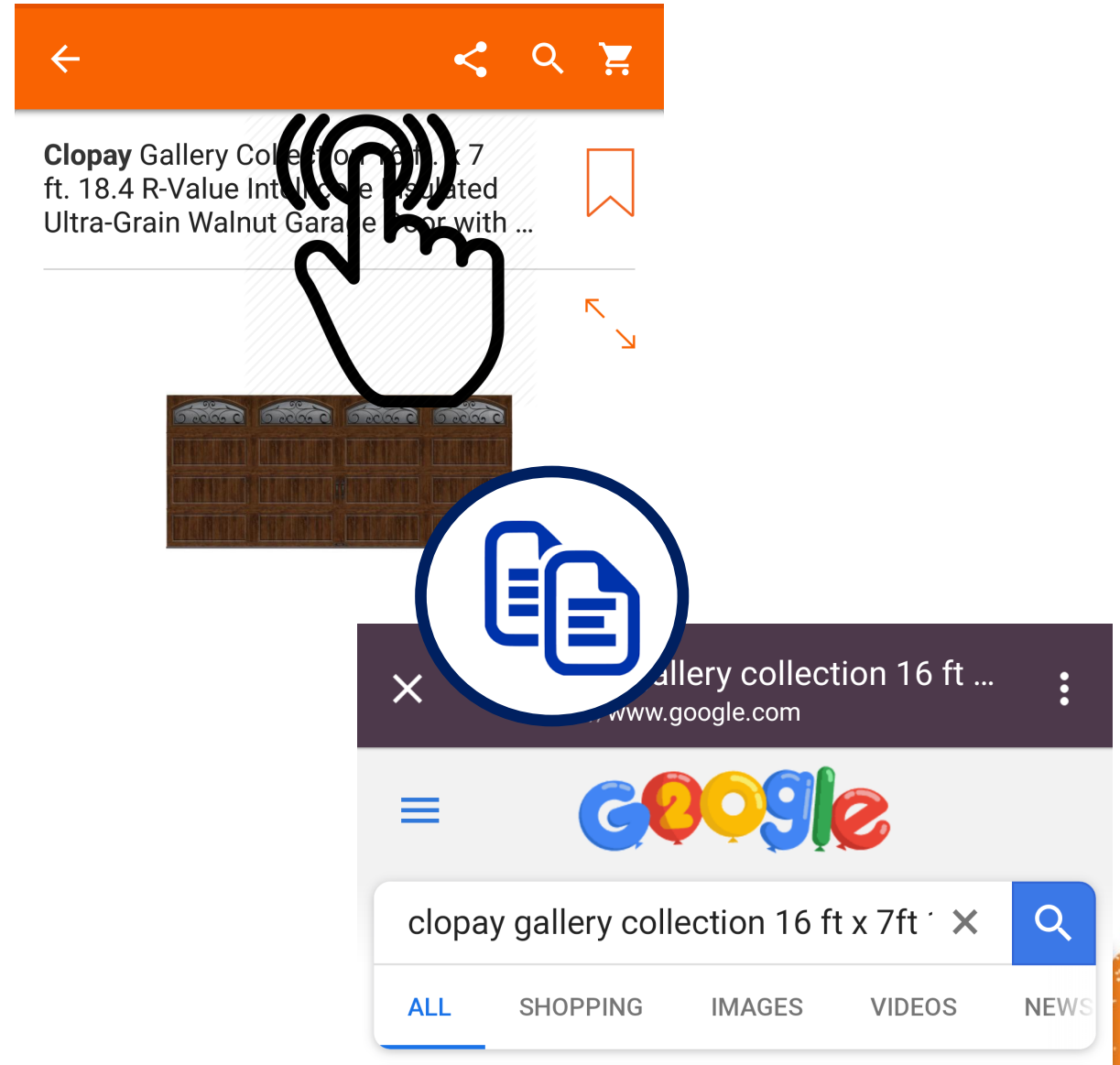
Tap to Copy Product Name

1

Key 0 Preference 1 Low 2 Medium 3 High

- Most customers currently rely on their computer for product comparison
- When asked to do it from mobile they wanted to be able to copy and paste the item name to search in Google, going back and forth to type it in was frustrating and inaccurate

“What I wanted to do was double tap so I could highlight the name, just to save time from having to type it all into the search, but it is not allowing me. Is there a way to copy it without having to input it all onto Safari? That would be so useful.”



Near By Stores

1

- Customers were trying to find out what stores near them (that weren't their store) carried

Your preferred store: **Cumberland #121** ×

Change your preferred store?


City, State, ZIP or Store # 📍

Check up to 5 nearby stores:

Austell #1749 Austell, GA (6.57 mi)	✓
Buckhead #6986 Atlanta, GA (6.89 mi)	✓
Sandy Springs #154 Sandy Springs, GA (8.36 mi)	✓
Merchants Walk #111 Marietta, GA (8.52 mi)	✓

Apply

City, State, Zip or Store # 📍 1

 **Ryobi 1,700 PSI 1.2 GPM Electric Pressure Washer**


PICK UP IN STORE **FREE**

Austell #1749 3 In Stock 6.57 Miles Away	Add to Cart
Buckhead #6986 2 In Stock 6.89 Miles Away	Add to Cart
Sandy Springs #154 2 In Stock 8.36 Miles Away	Add to Cart

View More Inventory

Key **0** Preference **1** Low **2** Medium **3** High

City, State, Zip or Store # 📍 1

 **EGLO Romao 2 63 in. Satin Nickel Floor Lamp**

SHIP TO STORE **FREE**

Austell #1749 Pick Up: 10/03 - 10/08 6.57 Miles Away	Add to Cart
Buckhead #6986 Pick Up: 10/03 - 10/08 6.89 Miles Away	Add to Cart
Sandy Springs #154 Pick Up: 10/03 - 10/08 8.36 Miles Away	Add to Cart
Merchants Walk #111 Pick Up: 10/03 - 10/08 8.52 Miles Away	Add to Cart
Midtown #159 Pick Up: 10/03 - 10/08 8.62 Miles Away	Add to Cart

Not frequently viewed by customers (but also didn't cause confusion understanding stock levels)

Not really understood if its ship to store or they can go get it.



- Issue: A few customers were unsure how to provide special instructions for instore pickups using the Home Depot application checkout.
- 2 customers wanted the ability to give special instructions for in store pickups, like they could do from in store but without the waiting.
- Being able to schedule this ahead of time should also help store employees complete the task at a time that isn't busy.

Contact

First Name

Last Name

Email

Phone

Also text me when my order is ready.

Home Depot will send you a sms when your order is ready for pickup. Message and data rates may apply.

Shopping Cart

[Checkout Now](#)

FREE Shipping on eligible items. [See Details](#)

[Share Your Cart](#)



EGLO Romao 2 63 in. Satin Nickel Floor Lamp
Model #95344A
[Save for Later](#) | [Remove](#)

Qty	Unit Price	Item Total
1	\$196.00	\$196.00

Ship To Store FREE | [v](#)



Financial Incentive

- The retail apps customers kept on their phone and used most often had special deals, special savings or loyalty incentives. *
- Amazon was used for both ordering and comparing prices to items seen in stores.*
- Target Cartwheel and Walmart price matching * their less expensive online prices in store were two common ways customers used apps in-store to save money.
- Kohl's has a way to save special app coupons * to use in store as well as a wallet function.
- Sam's self checkout was also semi-commonly remarked upon
- *Supported by Mobile Landscape Exploration Q1 2017

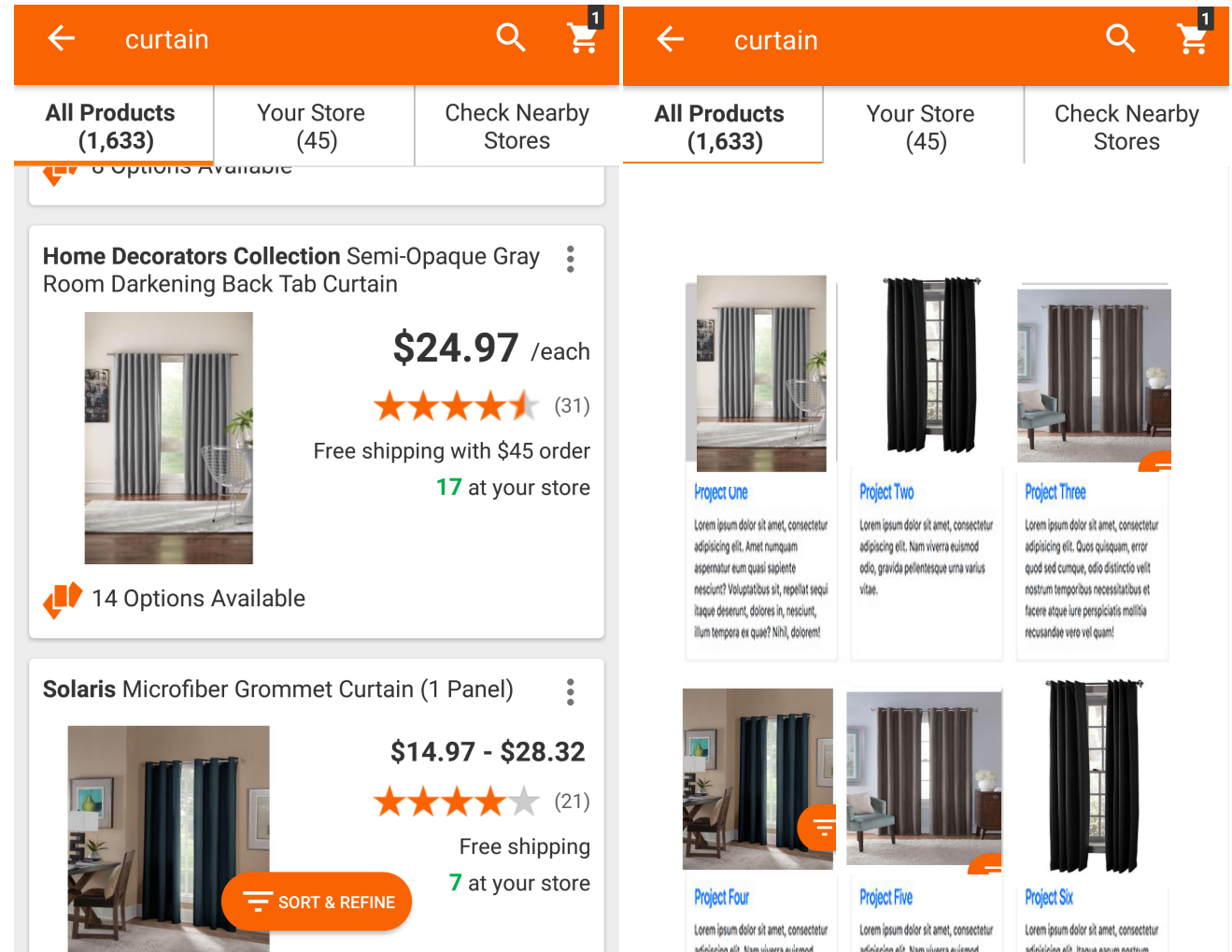


Retailer Apps most commonly used by customers we interviewed



Better Browse

- Some customers expressed a desire to toggle between the current list view and a 3x3 view or the like to speed up the browsing process
- Customers mostly scrolled down with not too much filtering on the PLP
- Customers paid much more attention to the photos than the description on the PLP, reading happened mostly on the PIP. It is important to have accurate and descriptive pictures on the PLP, this was inconsistent even within listings for the same product in a different color!
 - As mentioned in the PLP information page.



Current Browse

Additional Requested View



Chat

- How customers used the chat function:
 - Things they couldn't find on the site
 - Expert knowledge on product selection
- How customers said they would use the chat function:
 - Modify or cancel an order
 - If they can't figure out where something is
 - Information on warranties

“I am not really sure what happened. This is kind of where I'd be interested in talking to someone. Like I want to rent a power washer do you have that available? I am looking for pop up chat or something like that.”

Contact Reason	Chats	% of Total
Product Information	8,812	43%
Order Questions / Status	2,741	13%
Policy Questions	2,649	13%
Cancellations	1,184	6%
Order Changes	1,060	5%
Ghost Contact	879	4%
Returns	865	4%
Place Order	751	4%
Customer System Issues	691	3%
Mis-directed	397	2%
Other	377	2%

Table Shows Chat Dispositions from FW19

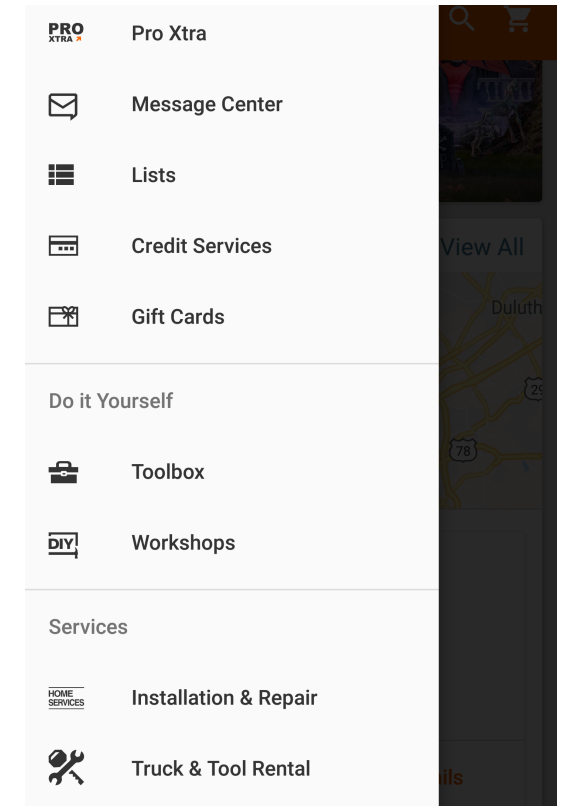
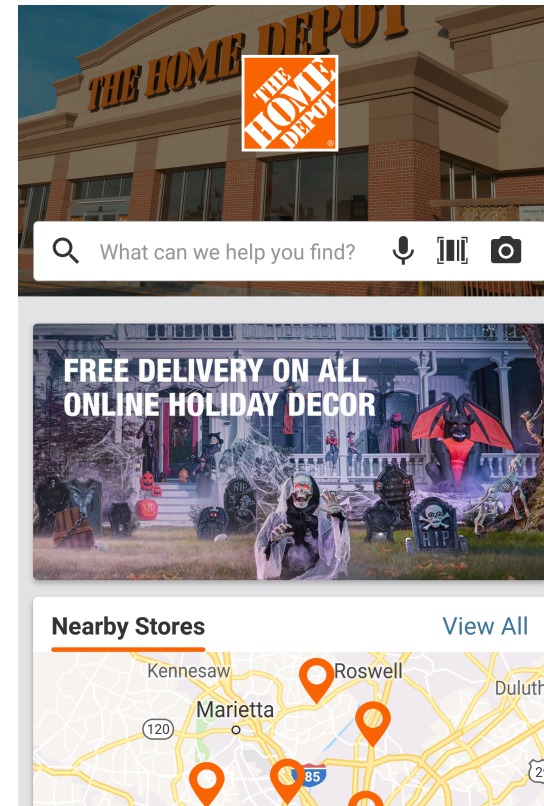


Lack of Feature Awareness

- Not a single customer used the camera search or AR function unprompted, but most were amazed by them once they tried them.

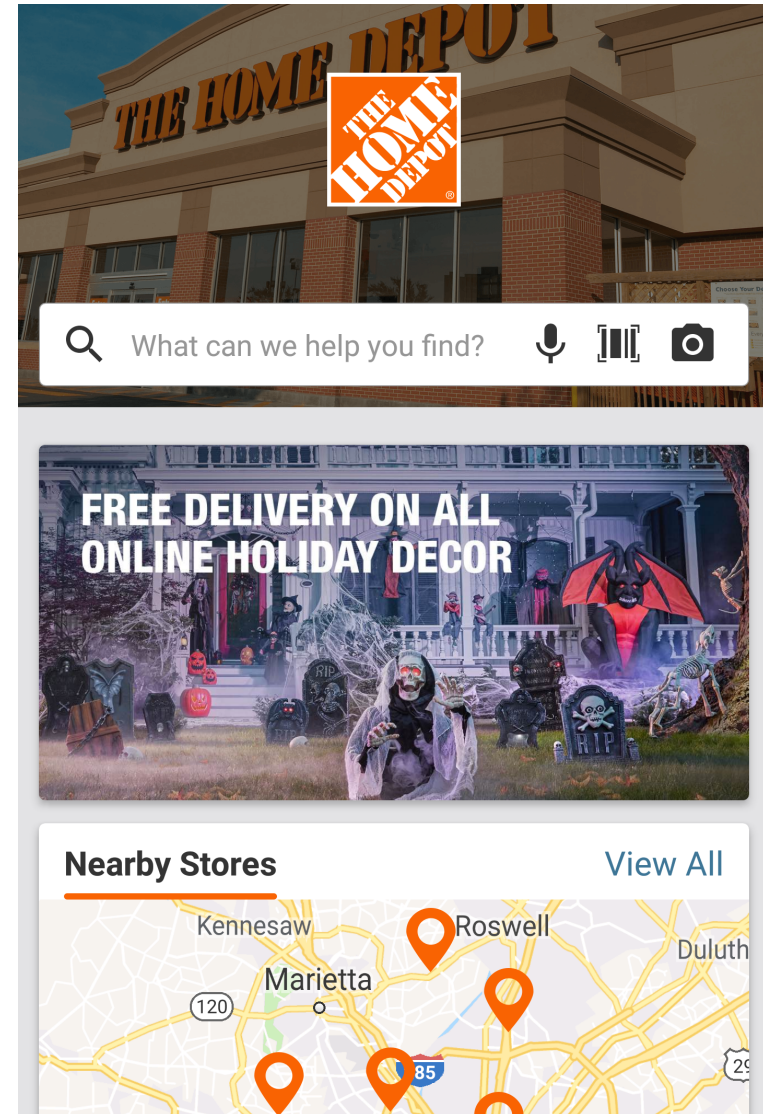
“My first wish would be to have a main menu that helped me discern things more easily.”

“I go to what I’m used to... most comfortable with. So I know how to type in, I know what the magnifying glass is for. I know what the microphone is for, and I know what the bar codes are for. But the camera is a new one for me. But I really like it.”



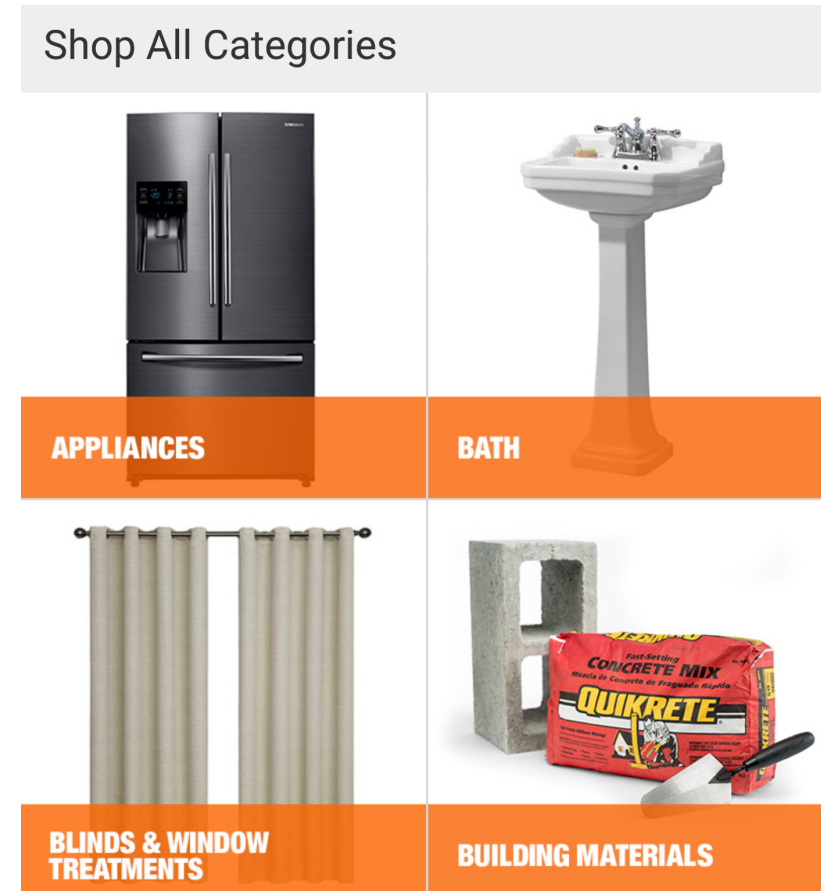
What Worked Well... Feels Like an App/Social Media

- The aesthetics and overall experience of the site are friendly and appealing.
- “I do kind of like this home page. It feels more like a social media app than a retail site - good aesthetics”
- “I like that it feels very much like an app. Some retailer apps try and inundate you in superfluous materials – advertisements or suggestions- lots of words really. That’s one of the biggest things I hold against these type of apps is when they try and overwhelm you with material that isn’t directly related to your objectives.”



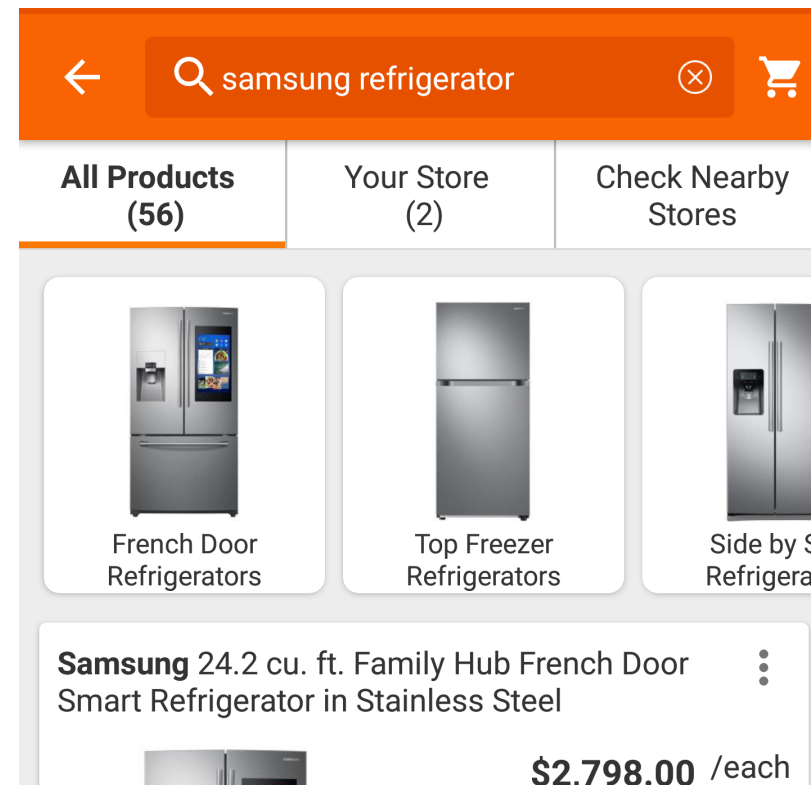
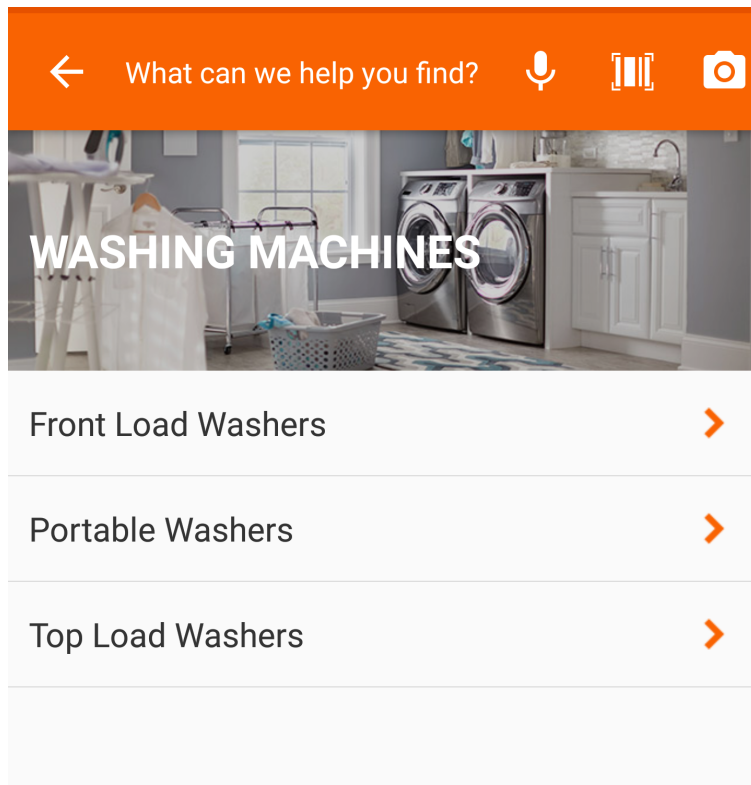
What Worked Well... Picture Browsing

- Customers generally liked the browse experience whether from the “shop” page or PLP.
- “I do like that these are easy to read and you know you can just tell by the picture what category the y're under. It's very easy that you don't even have to read it. You can tell right away that you can click on it.”



What worked well... Browse Subcategories & Suggested Filters

- **Customers used and liked the suggestions the Home Depot application made to them to further refine their categorical search.** This helped them determine what they wanted even if they didn't know the terminology off hand.



APP Reviews & History



The Home Depot 4+

The Home Depot, Inc.

#50 in Shopping

★★★★☆ 4.7, 138.4K Ratings

Free

Ratings and Reviews

4.7 out of 5

138.4K Ratings



Best kept secret in brick and mo... Jun 21, 2018

★★★★★

Caliboi03

Customer service fail today. Home Depot... tsk tsk tsk..... I go to home depot all the time. Though I prefer Lowe's, Home Depot has better prices. Every time I go there to look for something specific, it's like searching for a needle in a haystack. I don't think there's ev [more](#)

So close to being a 5 star app Aug 20, 2018

★★★★☆

dmanFC18

I installed this app on a whim, not expecting much. Turns out it's quite a great app, though not without flaws. The store inventory is awesome, as is the UPC scanning feature, and the ability to see your receipts when you link your credit cards. The image recognition seems like it could b [more](#)

Home Depot iOS App

4.7 stars (138.4k)

Commonly reported issues:

Crashes/ slow loading and response times

Inaccurately reported stock for pickup

Issues signing in to account

Delivery estimates inaccurate



The Home Depot

The Home Depot, Inc. Shopping

★★★★☆ 44,355

Everyone

This app is compatible with your device.

Installed

Review Policy

Write a Review

REVIEWS

4.3

★★★★☆

44,355 total



Home Depot Android App

4.3 stars (44.4k)

Commonly reported issues:

App Crashes

Search not returning relevant results

Issues modifying local store

Inaccurately reported stock for pickup

Voice search not working



QUESTIONS?



Participant Demographics

	Existing Home Depot App Customer	New Home Depot App Customer	Total
iOS	6	3	9
Android	5	3	8
Total	11	6	17

