



# Usability Test for Wal-Mart Stores, Inc.

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## Overview

For this project, my team of one, did a usability test of the website and the mobile application for Wal-Mart Stores, Inc. with a single test subject. This was to determine the pros and cons of each and also to determine how each of them could be improved in order to make both the mobile application and the website more user friendly.

## Background on Company

Wal-Mart Stores, Inc. was founded in Rogers, Arkansas on July 2<sup>nd</sup>, 1962 by Sam Walton. It was first founded as a discount store and then quickly became a global retail corporation. By 1988, it had become the most profitable retail corporation inside of the United States. In 1982, Wal-Mart created a subsidiary company called Sam's Club, after Sam Walton, which focused on membership-only sales as well as bulk retail. The company has three major categories for stores: Wal-Mart Supercenters, Wal-Mart Discount Stores, and Wal-Mart Neighborhood Markets (Wal-Mart). Wal-Mart Stores, Inc. have operations all over the globe and it is the world's largest company by revenue (Fortune Global 500). Also, the majority share of Wal-Mart is still owned by the Walton family. On October 27, 2015 at 11:13 am, the current value of Wal-Mart Stores, Inc. was \$57.60 per share on the New York Stock Exchange. According to SimilarWeb, an online web traffic analyzer, around 3.3 million users visit Wal-Mart's website and have around 50 million app downloads on the Google Play Store.

## Case Study

### Method

The method used for these usability tests followed the Steve Krug method of usability testing. The first thing that will be done is selecting the single subject for the usability test. Next, the subject will come to the testing facility to participate in the actual testing. The usability test will then follow a number of steps being outlined by Krug: the first step is welcoming the subject and explaining what the test is about. This step gives incite to the subject that they are not the one being tested but rather the website/application is. The next step is gathering all the demographic information from the subject. This allows for an analysis based on certain groups the subject falls under. Next is for the subject to do the "5 second test" on the homepage of the website/application to determine if the main features are easily recognized. The fourth step is to conduct the actual test for usability for the website. This was done by asking the subject to perform three tasks that any given user would do at some point. The fifth step is the reflection phase. During this step, the user is asked to recognize what they found ineffective with the site.

The last step to the Steve Krug method of usability testing is to conclude the test and do a report of the findings. To clarify the process for the simplified Steve Krug usability tests are:

1. Welcome (4 minutes)
2. The questions (2 minutes)
3. The home page tour (3 minutes)
4. The tasks (35 minutes)
5. Probing (5 minutes)
6. Wrapping up (5 minutes)

Another tool that will be used for this usability test will be Jing, this is a PC screen recorder. Also the app called Shou will be used to capture video for the application usability test. The last things that will be used for the test will be the usability test script document and the recording consent form from *Rocket Surgery Made Easy*.

## Process

The team chose Wal-Mart Stores, Inc. because the team routinely shops at this global retailer and the team inquired what flaws the application and website this “top dog” company has. The subject was John Hupp. He was a 22 year old male who attends Indiana University and is semi-technologically savvy. He spends roughly 40 hours a week on the internet and has visited Walmart.com before. To conduct this study, the method of Steve Krug’s usability test was used: it is the method that was laid out in the previous section. To start, the subject was welcomed to the study and was explained what was going to take place. Next the subject was asked for his demographic information in order to make correlations later on. Then the subject got to go through the homepage for five seconds and then was asked to recall what elements he saw. Next the subject was asked to do the three tasks: to sign up for an account at Walmart, order a newly-available used PlayStation 4 game, and find a television that is on sale. Then the subject was asked to reflect how the test went and what they found good about the site/mobile application and what flaws they found. Finally, the test was concluded and the subject was thanked for his time.

## Background on User Interface

To provide some background on the user interface, two tests were conducted. The first was conducted by the research team, the “Trunk Test” by Steve Krug, and the second was the “Five Second Test” conducted by the subject. The Trunk Test is an analysis test to determine what key elements the website and mobile application retain and which elements they do not. The Five Second Test is a shorter test in which the subject looks at the webpage for five seconds and then the page is closed. The subject is then asked to recall what they remember from the webpage. For the Trunk Test, refer to Figures 1 and 2 (the annotated webpage and mobile application respectively). As Figure 1 shows, Walmart.com has the site ID, sections, local navigation, utilities, a search bar, and a footer navigation. The site is missing a few key elements, such as a “you are here indicator” and a page name. These elements could cause problems for a user because they won’t be able to recognize where they are in the grand scheme of the website. Figure 2 shows the annotated mobile application. The elements that the mobile application has

are a site ID, utilities, a search bar, sections, local navigation, a page name, and a “you are here indicator”. The mobile application possesses all the attributes that the Trunk Test looks for. The 5 second test is to determine what main features of the website/app are and how memorable they are. For the website, the subject pointed out the colors, the search bar, the site ID (Walmart) and that it was simple. For the application, the subject pointed out the larger site ID, an ad that took up a large portion of the page, and sections at the bottom.

Figure 1

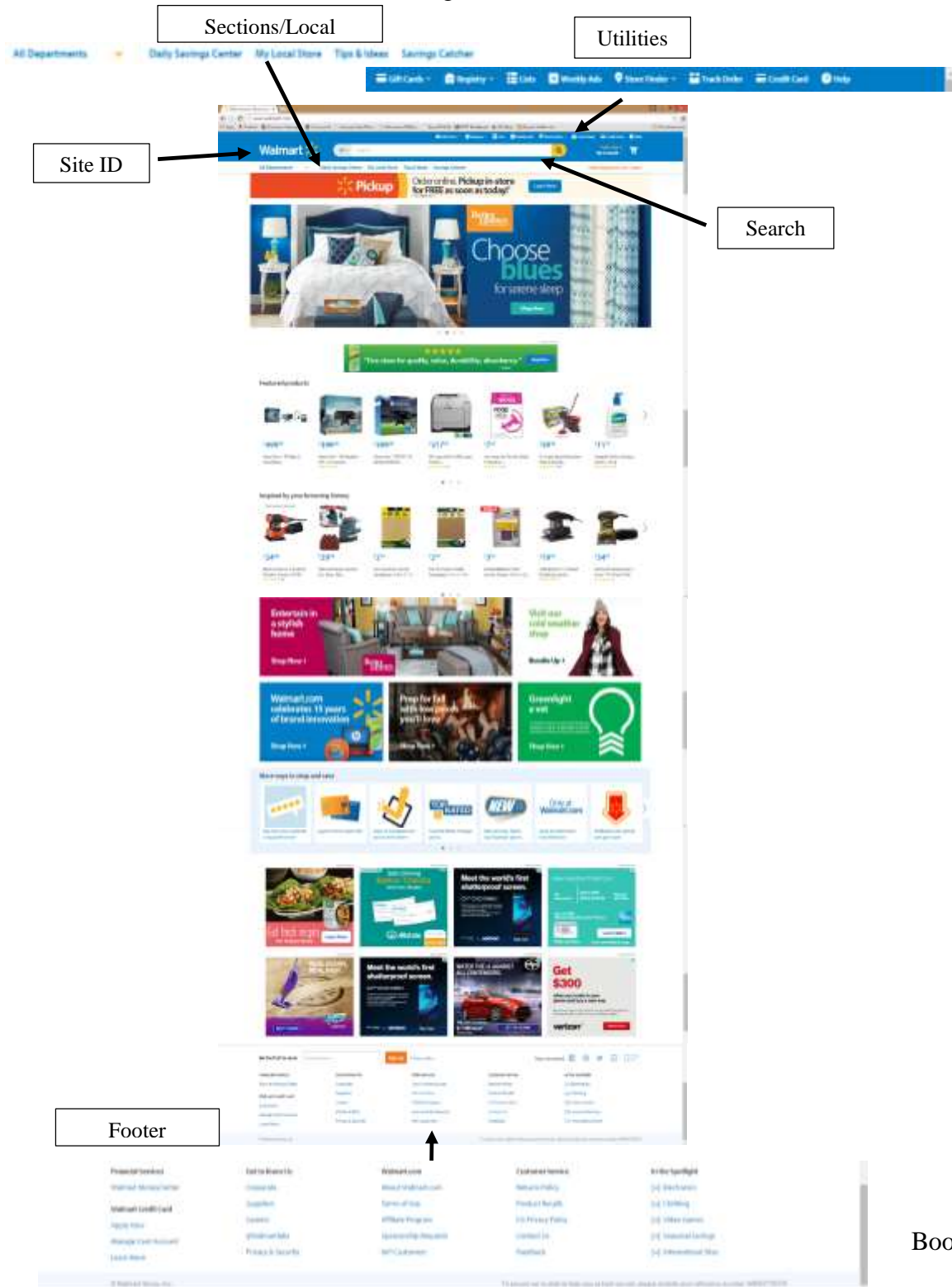
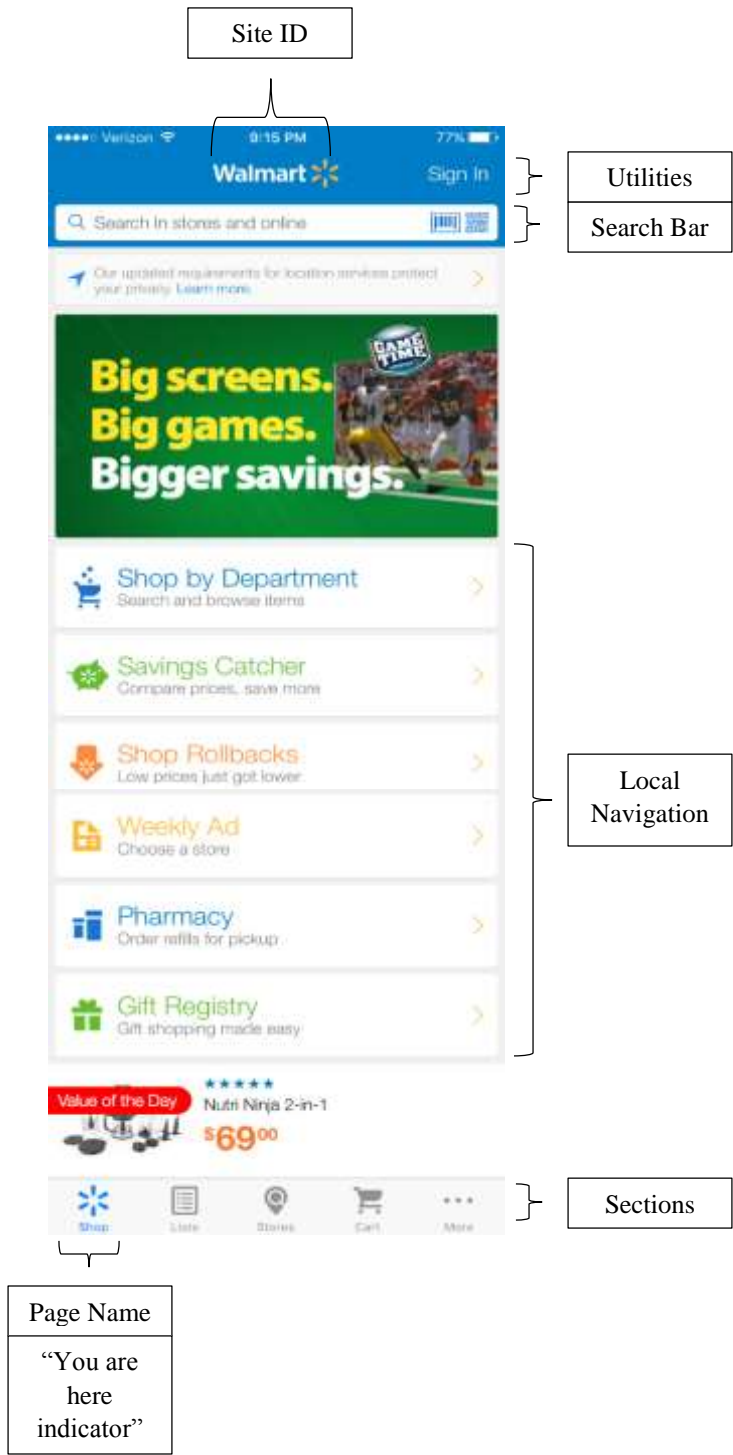


Figure 2



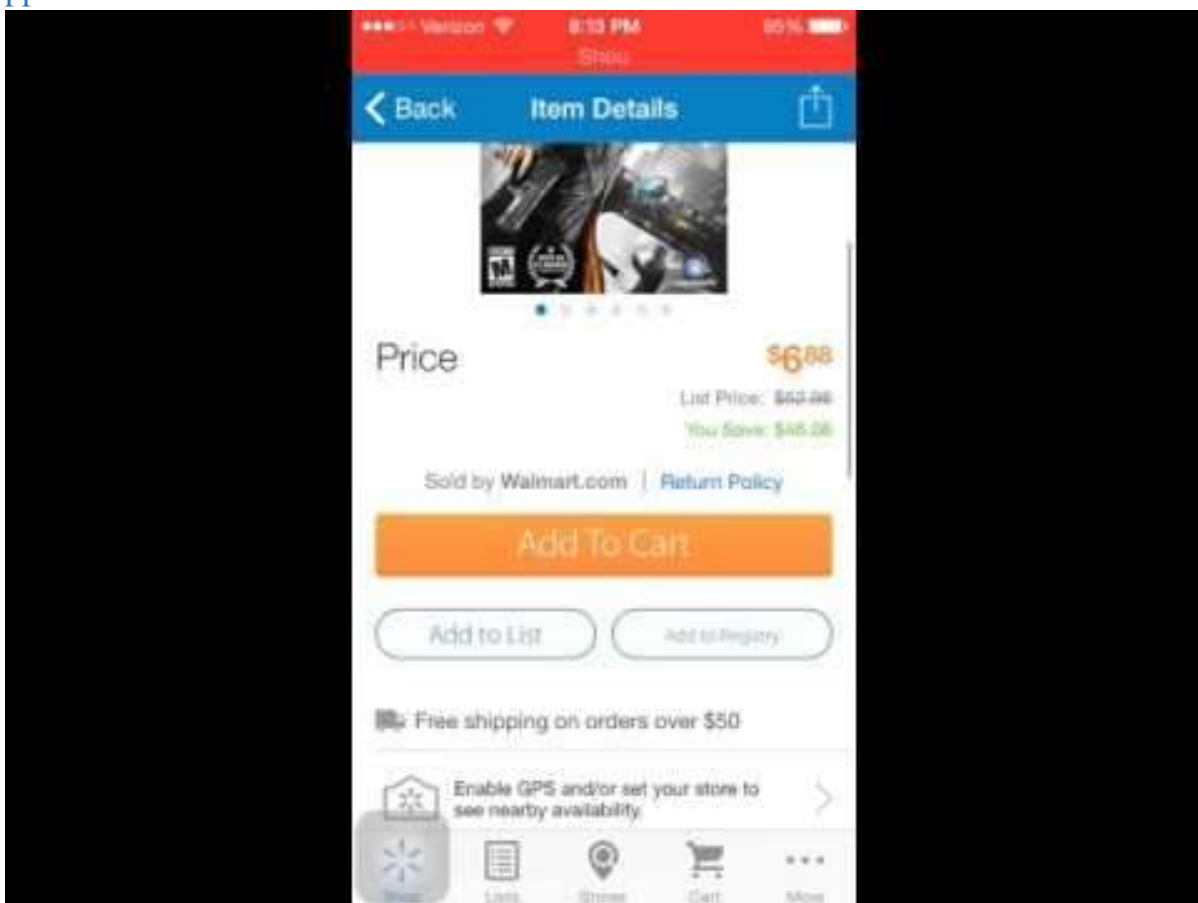
## Website

Video 1	<a href="http://www.screencast.com/users/I300Skyler/folders/Default/media/7bee062f-0e32-450e-be79-a553793b70a8">http://www.screencast.com/users/I300Skyler/folders/Default/media/7bee062f-0e32-450e-be79-a553793b70a8</a>
Video 2	<a href="http://www.screencast.com/users/I300Skyler/folders/Default/media/dfea20a9-08ec-4cf1-b60c-2828e6dc1193">http://www.screencast.com/users/I300Skyler/folders/Default/media/dfea20a9-08ec-4cf1-b60c-2828e6dc1193</a>
Video 3	<a href="http://www.screencast.com/users/I300Skyler/folders/Default/media/8ee44401-c87f-45ca-b370-931a231d245b">http://www.screencast.com/users/I300Skyler/folders/Default/media/8ee44401-c87f-45ca-b370-931a231d245b</a>
Video 4	<a href="http://www.screencast.com/users/I300Skyler/folders/Default/media/9ba2b866-a0b0-43f2-bf23-6beed0ebf383">http://www.screencast.com/users/I300Skyler/folders/Default/media/9ba2b866-a0b0-43f2-bf23-6beed0ebf383</a>

Step	Input	Feedback	Confusion
1.	My Account	Interactive pop up opens	
2.	Create an Account	Opens new page	
3.	Personal Information	Typing on screen	
4.	Create Account	Welcome to your Walmart account	
5.	Home	Opens Home page	
6.	Video Games	Opens video game page	
7.	Playstation 4	Opens new page	
8.	Shop used games	Opens new page	Took a while to find
9.	Watch Dogs Game	Opens Watch Dogs page	Incorrect due to unclear preview
10.	Back	Opens used video game page	Notifies "New" Icon on some of the games
11.	Battlefield: Hardline Game	Opens Battlefield: Hardline Game page	
12.	Home	Opens Home page	
13.	Electronics	Opens Electronics page	
14.	Tv & video	Reloads page	
15.	Shop Tv's by type	Reloads page	
16.	50-59"	Reloads page	Can't find a spot to specify only 55". Also can't find a sale, only special buys and rollback

17.	Page 2	Opens the 2 <sup>nd</sup> page	Searching for a sale icon but can't find one
18.	Page 3	Opens the 3 <sup>rd</sup> page	Frustration sets in from not finding a sale icon
19.	Home	Opens Home page	
20.	Daily Savings Center	Opens Daily Savings Center	There are rollbacks but no sales
21.	Electronics	Filters page	
22.	Vizio TV	Opens Page	Says was this price and now it's this price but no markings for sale

## Application



Step	Input	Feedback	Confusion
1.	Sign In	New page opened	
2.	Create Account	New page opened	
3.	Information	Type on screen	
4.	Continue	Creating account wheel and signed in	
5.	Shop by department	New page opened	
6.	Electronics	New page opened	No video games section
7.	Tv & video	New page opened	No video games section
8.	Back (2x)	Departments page opened	
9.	Video Games	New page opened	
10.	Used Video Games	New page opened	No information in product preview
11.	Refine	Filter options opened	Can't find the right options
12.	Back	Used video games tab opened	
13.	Watch Dogs game	Watch Dogs page opened	Looking to find more information
14.	Back	Used video games tab opened	
15.	Call of Duty Ghosts game	Call of Duty Ghosts opened	Looking to find more information
16.	Back	Used video games tab opened	
17.	Refine	Filter options opened	
18.	Video game platform	Video game platform options	
19.	PlayStation 4	Check mark appears	
20.	Back	Filter options	
21.	Apply	Reloads used video games	No details for games
22.	Battlefield Hardline game	Loads game page	Found details finally
23.	Back to Home	Home page is opened	



24.	Savings Catcher	New page opened	Different site opens for no reason
25.	Back to Home	Home page is opened	
26.	Shop Rollbacks	New page opened	
27.	Electronics	New page opened	
28.	Refine	Filter options	
29.	Special Offers	Special offers options	There isn't an option for sale
30.	Reduced Price	Check mark appears	
31.	Back	Filter options	
32.	Departments	Department options load	
33.	TV & Video	Check mark appears	
34.	Apply	Reloads electronics	
35.	Refine	Filter options	
36.	Departments	Department options load	No other refine options help
37.	Brand	Brand options open	Not helpful
38.	Apply	Reloads electronics	
39.	Vizio Tv	Opens Vizio TV page	Says list price with a streak through it showing its marked down but no Sale tab

## Findings

As a result of the study, it was determined that both of the designs and issues that needed to be addressed. As an overall comparison, the subject noted that the website was designed better and was easier to use. The team put together a chart to compare the website and application. The subject also noted that the website had a more satisfying experience because there were a lot less paths and a lot less pages that needed to be navigated through due to everything being on a single page. The user would most likely use the full version if they were at home or at the office. This is because they would have the time to go through the full site and have time to analyze and compare products. The user would use the mobile application if they knew exactly what they needed and needed to order it right then and there. They would also use it if they were already on their way to Walmart and were checking where to find a product. Both the website and the app need changes. For the website, the three changes would be: creating a new tag called sale for items that are marked down online, the next would be reducing the amount of ads, and the final

would be changing the information that is presented in the product preview. For the application, the three changes would be: adding details to the product preview, changing the filtering settings, and change the sections of the site.

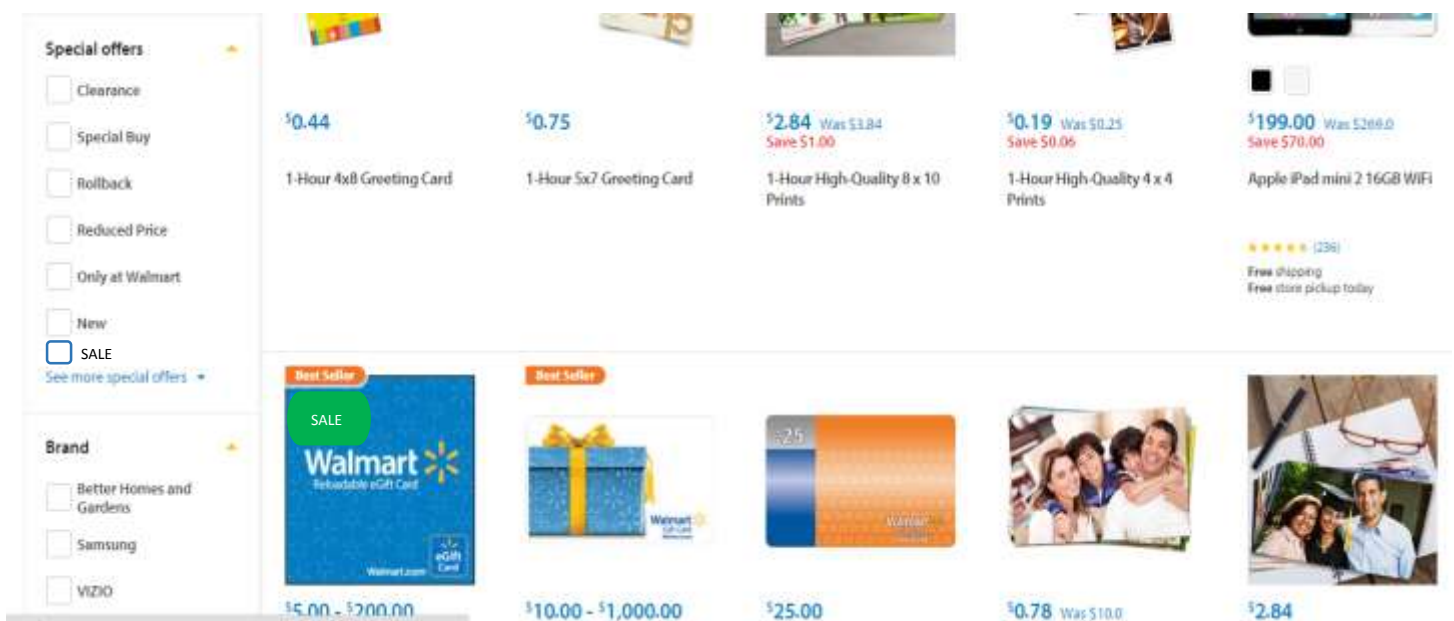
## Design Recommendations

There are a variety of ways the website and application can be improved, but the team has decided on three recommendations for each.

### Website

For the website the three changes would be: creating a new tag called sale for items that are marked down online, the next would be reducing the amount of ads, and the final would be changing the information that is presented in the product preview. The way Walmart uses rollback for an item that has recently changed price is ineffective because many people are confused by the terminology. Every person knows what a sale item is but not everyone knows what a rollback price is. Our recommendation is changing the “Daily Savings Center” to an area that includes items that are on-sale, not just items that have changed price. Also, the filters would be changed to include an option to filter items that are on sale. The last thing for this recommendation is to include a small sale tag icon on the preview picture of the item. The next recommendation for the website is to reduce the amount of advertisements being shown. These ads that are being displayed on the home page detract from the website and cause confusion for the user. The fix for this would be removing the ads from all the pages and putting them in a new section titled “advertisements”. This would simplify the website and make it more user friendly. The last recommendation would be to change the product preview. By changing the product view it will benefit users because they will be given more relevant information.

- Sale



### *Application*

For the application the three changes would be: adding details to the product preview, changing the filtering settings, and change the sections of the site. Similarly to the website, the product preview wasn't the best. But instead of having too much information, the application had slim to none. Our recommendation is to add in the key features of the product and other helpful information. The next issue is the filter settings do not work as well as the websites. The filter page causes so many other pages to be opened, our recommendation is to simplify the filter settings and keep all the options on one page. The last recommendation for the application is to change the name of the section tabs. The sections in the application do not reflect the same choices as the website which can cause frustration and an interruption of flow. This problem needs to be addressed and both the website and the application need to have the same section titles.

### **Conclusion**

The purpose of this project was to conduct a usability test on a website and the application for the same company and then compare the two. The study was conducted by having a single subject go through three tasks on each design. After going through the usability tests, it was concluded that both the website and the application are not perfect. Both of them need to be updated to fix the issues that were found in the tests. If Walmart takes these recommendations and implements them, then their website and application will benefit them in the longer run and give the customers a more satisfying experience. It will also help bring in potential customers because it will be more user friendly and make navigating the website easier for people who may not be very familiar with the site or the store.

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