Bestbuy Evaluation

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INTRODUCTION/MOTIVATION

Best Buy in an electronic retailer, and it owns a web-based system that allows customers to purchase products online. The website- www.bestbuy.ca offers various services like shopping, and finding nearby stores to its users. This study's primary goal is to test if this online-purchasing system is good enough for real users to use. This usability study for the Best Buy website tests several features the system offers and tries to find the inconvenient parts to improve future improvements. This study is aimed to test how easy this website is for real users. We prepared five tasks base on this web-based system. Two participants are involved in this study. They will be tested by two different usability methods: the silent observer method and the think-aloud method, respectively. Their decisions and actions will be recorded for future analysis during the task.

HEUISTIC EVALUATION

Violation	Rank	Explain	Solution
Consistency and standards	2	There exists an inconsistency of the way going back to the previous page. There is a "back" button on some of the web pages, but others do not. Users might be confused about how to go to the previous page.	Add the "back to the previous page" button to all web pages.
Match between system and the real world	3	Before users sign in, there is an "Account" button on the top right corner. This button usually appears after users have logged in in real life. After the registration, the button turns to "Hi, xxx." Users might not know if they have signed in or not.	Change the "Account" button to "Sign in" if users have not logged in yet.
Error prevention; Aesthetic and minimalist design	8	There is a duplicate feature for "order status," and unexpected actions would occur without error prevention. There is an "order status" button on the top right corner and an "order history" feature inside the user account. When users go to the order status page and click "order status" by mistake, the web page will return to the home page without any error messages demonstrated.	Merge these two order status buttons.
Error prevention	10	When users were editing their personal information and pressed the "back" button by mistake, the website has no warnings and quit without saving user information.	Add error messages if users have not saved their information. Making sure users save their changes before leaving.
Error prevention; User control and	10	The website does not have any alerts nor undoes options if a user removes	Add confirmation for removing items from the

freedom		an item from their shopping cart. Users would not receive any confirmation, and they cannot go back to the previous state if they misoperated.	shopping cart or allow undoes.
Visibility of system status	6	There are no checkmarks nor save button for users who want to change their billing address at checkout. There is no information showing that the system has selected the new address as the billing address successfully, which might cause confusion and misunderstanding.	Add an update/save button or a checkmark.
Help and documentation; Visibility of system status	5	The web system will display an empty page if no results are found. The only documentation they have is "End of results." Users might be confused if they cannot see anything. They might not know if the images are loading slowly, or no relative items are found.	Change the documentation "End of results" to how many results are found ("0 results are found.")
Visibility of system status	7	When users click "Available at Nearby Stores" on the searching result page, "Best Buy Only" will turn on automatically. Although the "Best Buy Only" button is lighter, it might confuse users with which button they have selected.	Do not turn on "Best Buy Only" with "Available at Nearby Stores" automatically.
User Control and Freedom	6	While users are shopping and select one category from the sidebar, they cannot uncheck that option. If they choose the wrong category, they have to refresh the web page or go to the previous page and start over.	Add a reset/clear/uncheck button for categories.
Consistency and standards; Match between system and the real world	5	There is a login bar at the end of the web page. The bar looks like a search bar, and it lays beside the list of services. Users might be misleading and think that the bar is a searching engine.	Change the design for the login bar, or simply delete it.

USABILITY STUDY METHODOLOGY

Two participants were involved in this study. I used two usability methods: the silent observer method, and the think-aloud method, to observe the participants.

I asked the participant who involves in the silent observer method to go through the tasks in person. Since she would not speak out her thoughts, I can keep tracking her actions during the study. I would know when she got confusion, got stuck, and making more attempts. I took notes when she could not easily access that feature and quickly and wrote down the general routine to complete the

task.

For the second participant who joined the think-aloud method, I tested her though the Zoom because of the epidemic. She went through five tasks with her screen shared with me, and I recorded her impressions during the study. Since she was speaking everything aloud, it was easy for me to keep tracking on her logic. I could better realize things that I had not considered before. Similar to the first participant, I wrote down her general routine and things that annoyed her. I also took notes base on her feedback.

The five tasks had tested on product searching, purchasing, and after-sale services. I asked the users to purchase a phone they like, find a laptop at a given price that can be picked up in a nearby store, a specific type of ram and a freezer, and asked for a return service. I made these tasks because those are things a real user might experience. These are the most common process in the online shopping. I gave participants enough freedom to make explorations and finding items they are interested in like a real online shopping.

USABILITY STUDY OBSERVATIONS

I found several features for the Best Buy web-based system that still need to be improved in this usability study. These shortages were apparent by observing participants going through the tasks. I found out that users prefer using the searching engine to find products they need instead of using the product categories. They rarely clicked the "Shop" and the "Brand" button at the top header bar. The searching result confused them a lot since the result displayed some irrelative product most of the time. The filter feature for the result page is not unified. There are filters on the top and the side. Customers might ignore some of the filters and only see one side.

One of the participants stated that the header is quite confusing and clustered. She said she had not seen these buttons at the beginning. After she had seen them, she did not understand what do these buttons stand for. She argued that the choice of words is not that accurate. She first thought the "shop" buttons mean the nearby shops. Then she thought it might stand for settings because setting often lays on the top right corner.

Participants also spent a lot of time scroll the web page. They need to scroll across all the advertisements and product categories first to see the actual product. They were annoyed about this feature. If they did not find the product they needed, they had to scroll back to the top and research. This is time-consuming and would decrease user experience.

When I asked the participants to find the contact email, one of the participants treat the registration bar as the search bar mistakenly because they look almost the same. She complained that the bar is beside all the service options, so it must be a search bar that allows her to search for her questions. She said registration bars usually lie on the top of the page instead of the end of the page. The position of the registration bar did not match her life experience.

INTERPRETATION: SYSTEM STRENGTHS AND WEAKNESS

Strength

- The overall interface for this web-based system is acceptable. The website provides a lot of categories that are well classified with brands and product types.
- The website provides a detailed and robust service page, allowing users to quickly and easily identify their problems. They offer a clear header for each specific situation and give users an intense instruction to know which link they should be clicking to receive more information.
- The icons are simple and accurate. Users can recognize their representations in a short time.

Weakness

- The layout for this website can be planned better. The most attractive element at the home page is the advertisement bar, which cannot scroll by itself. Other main features are not prominent enough, so they cannot provide users as much important information. Users need to click on the drop-down box to receive more information. The website also has a too-long page, and it does not have any sidebars nor a button to scroll back to the top. Users have to spend extra time scrolling back.
- The searching engine sometimes cannot provide users with the most relevant products. For instance, if a user wants to buy a new iPhone and uses the searching engine, the results will be iPhone accessories. Even the result page shows all types of iPhones; it only provides deals for users. Customers cannot purchase a phone directly. They need to access this page through the brand header and find Apple to buy an iPhone. Although the website did a great job classifying their product, the result page

classification is not exhaustive. When users search RAM in the task, the result page only provides products' prices and brands. Other categories that are more needed, like the RAM size, are not included in the list. The lack of classification would cause a lot of time to find a specific product.

- There are too many built-in buttons on this website. Built-in buttons cannot provide sufficient information to users intuitively. For example, if users want to edit their personal information, they have to click their user name at the top right corner, click "Your Account" inside the drop-down box, go to a new page and then choose what they want to change. These steps are tedious, unnecessary, and do not contain any valid information. It might be difficult for users who use this website to find the corresponding buttons for the first time.

- The header buttons are not conspicuous, and the choice of the words is not precise. For instance, the "shop" button is next to the "services" service. Users might be confused about what does "shop" means. Does it mean users can start shopping by clicking this button, or it will display the location for the storefronts? They also have multiple buttons having a similar name and have different features. Users can find buttons with other words but will lead them to the same page.

- The speed of this website should be optimized. For instance, the web page will refresh every time users change the color of the product. The overall speed will become slow. The deteriorating user experience would affect users' mood of shopping.

SUGGESTED IMPROVEMENTS

- Streamlining the layout for the web page. Reduce the size of the top advertisement and change the choice of the words for the headers. Display some of the major product categories at the home page beside the ads instead of having them in the drop-down box.

- Add a button that allows users to scroll back to the top. Similarly, add a sidebar with all product categories in it.

- Optimize the searching engine and the searching results. Users prefer to use the search bar if they have specific needs. The results should be more accurate, and more detailed classifications are needed. Change the documentation "End of results" to how many results are found.

- Move features inside the user account page (i.e. order history, payment methods, etc.) into the drop-down box for the user account at the top right corner. Change the button to "sign-in" before users have logged in, and change it to "account" after registration.

- Change the position or change the design for the sign up bar at the end of the web page.

CONCLUSION

In this usability study for the Best Buy web-based system, I found out that the website's overall design is acceptable, but some features still need to be improved. Two participants can accomplish their tasks individually and find the product they asked to purchase successfully. The website provides sufficient brands and product categories to users. The after-sales services are relatively complete. They list all the problems and information that customers might want to know in detail.

The biggest problem with the Best Buy website is that the layout is not intuitive. Instead of having buttons displaying on the interface directly, they have a lot of drop-down boxes. Users might not find relative features in a short time. Moreover, some drop-down boxes do not have too many options and necessary features. They could minimize and simplify the design appropriately so that users can receive clear guidance on what they can do.

APPENDIX

- Signed consent forms:

Task instruction sheet:

Task Sheet

1. You want to buy a new phone. Use www.bestbuy.ca to find a phone that you are interested in.

2. You received your package from Best Buy and you realize the product is broken. Use www.bestbuy.ca and send them an email telling them your situation.

3. Use www.bestbuy.ca to purchase the cheapest laptop that is on sale which can be picked up in person.

4. Use www.bestbuy.ca to purchase a white freezer with a discount of over $50.

5. You want to buy new ram for your desktop. Use www.bestbuy.ca to purchase a 16GB ddr4 2933hz ram.

Observation notes:

Observation Note

Participant: Zijin He

1. Confused at the beginning (classifications?)
Search: phone -> old phones
Search: iphone -> deals, phone categories, accessories. No iPhones?
Click deal, cannot buy a phone directly.
Too slow, refresh the page.
Back, research iphone.
Click deal and fill the form. Submit.
Goes to a new page allows her to buy phones directly…

2. Order status: cannot find after sale service
Goes to the bottom, service (common sense)
Bar on the right, search bar (actually a sign in bar)
Customer support -> returns and exchange -> detailed service
Policies   how to return a product
Have 2 emails. Which one?
Might send 2 emails.

3. Search: Laptop on sale
Top filter Price low to high
Not match -> best matches
Filter on the left: price   nothing wanted
Filter -> price low to high
Click one laptop: online only   go back
Cannot find available at store prompt. Find it in the detail page
Find another laptop. Available at stores. Purchase.

4. Search: white freezer
Left filter: discount
Found it

5. Search: ram: Nothing wanted. All laptops.
Search: ddr4 ram: all laptops
Search: ddr4: laptops and rams. Cannot find 2933mhz
Search: ddr4 2933mhz: find it
purchase

Observation Note

Participant: Yutong Han

1. Brands
Deals
Shop (spend a lot of time find phone)
Cell phones, iphones
Deals and iphone accessories?
Iphone 11 pro. Iphone accessories.
Brand: apple, explore iphone 11
Cannot find anything? Go back
Not previous page? Brand: apple
All results. Cannot find iphone. Cannot find a phone category at the filter
explore iphone 11 -> an extremely small "shop now"
Purchase monthly financing phone

2. Go to order status
"need to return an item" click
Returns and exchanges
How to return a best buy product
2 emails? Which one?
Decide to make a phone call

3. Search: laptop
Left filter: on sale
Price low to high
Available at nearby stores
Click first one and purchase

4. Shop: cannot find freezer
Search: freezer
Left filter: colour family: white
Left filter: current offers: on sales
Found one, purchase.

5. Search: ram ddr4 2933
16gb, but it is 2 x 8
Left filter: status
Left filter: brands
Left filter: categories: computers and tablets: computer accessories
Found a 16GB ram. Purchase.