# Assignment M2

# Lu Han lhan72@gatech.edu

Abstract—In this report, three exercises of needfinding methods were discussed about Zara online interface. The results show a detailed picture of how user interact with the interface and the difficulty during the interaction. The results also narrow down the environment in a safe and controlled context such as in home and at work. Tasks and subtasks were also identified in the study to analyze the interactions.

#### 1 NEEDFINDING 1: THINK ALOUD METHOD

The first needfinding method I use in the study is the think aloud method. The think aloud method is to ask the participant to verbalize what they think during the process of interacting with interface. I recruited five participants in the study and asked them to think aloud their thoughts when they are using the Zara interface to do different tasks. Four of the participants were recruited online and remote think aloud surveys were conducted. One of the participant was recruited offline and therefore a face-to-face think aloud survey was performed. One of the participant agreed to take audio recording and the other one agreed to screen record the whole process.

As the observer, I took notes of what happened and gave some prompts when the user stopped talking, such as asking them: "what are you thinking now?", "keep going", "why did you do it?", "please keep saying out aloud what you are thinking and what you find is difficult or easy" etc.

#### 1.1 Results

The full notes from five participants can be found in Appendix. The first participant is novice in using the interface of Zara though she used other online shopping platforms such as Amazon. Her task is to buy a skirt and she tried to search in the searching bar and she typed in "skirt". She scrolled down the result page and found out that the page is endless. She also mentioned that to view her results better, she wanted a sorting button. As she is sensitive in pricing, she expected to see a filter to view the results by price. But she cannot find a filter

function in her first attempt. In her second attempt, she pressed the "enter" in the searching bar, then she successfully discovered the filter button on the right corner. But still she failed to find a pricing filter. As a result, she went to navigation bar to find her skirt.

The other participants verbalized how they look for a jacket, sweater, shoes and e-gift card respectively. The third participant had a difficult time to use the view scrolling bar and she tried serval times but the page view did not change after she adjusted the bar, so she concluded that the scrolling bar was broken. And she found the product page confusing as she prefer a single item listed. The fourth participant had difficulty to check in-store availability. She tried several times and she could not understand the error message. She also find it hard to view the color in the view result page. The user 5 found it easy to buy a pair of shoes with the interface. But he failed to add the shoes to wish list when he couldn't find the bookmark icon. He mistakenly think the bag on the right corner is the wish list and he thought he already added to the list when he press the "add to cart" button.

### 1.2 Takeaways

The observations from five users showed that they all experienced some confusions and difficulties when they performed certain tasks. The takeaways were summarized in table 1 as below and classified into search, view results, filter, check out, design and other.

In the search function, participants find it hard to search for their target item and sometimes they will switch to the navigation bar directly looking for the category instead of searching with text input. And it's noticed that some novice participants had difficulty in discovering the filtering button.

For viewing results, participants find it hard to use viewing bar and the display of item is confusing. For checking out part, the user find it hard to check inventory and too many steps to complete. Some of them gave up typing in the information halfway. Inconsistency was also noticed in font size, letter capitalization and layout.

*Table 1* − Takeaways from think aloud survey

Search	View results	Filter	Check out	Design & other
Not related	Fond size too small	Fail to find filter	Fail to check in store availability	l-Too much waste of blank space
Cannot sort by price	Confused at items	Filter disappear when scrolling down	Delivery method confus- ing after typing in addres	
Fail to find filter function	Fail to change the view	Filter category confusing	Too many steps	Strange aesthetics
Fail to cor- rect typo	Color icon confusing	Price filter bar had to use	Hard to delete item	

# 1.3 Bias control

One of the bias of think aloud method is confirmation bias that the observer only notes that he wants to know. To avoid or minimize this bias, I took the participants' audio or video record to go back to review again and make sure that I did not interpret their thinking process wrong or only took down the notes that I am interested. Another bias from the method is that people's action might be altered when they are actively thinking and speaking out. They might put more cognitive effort into the interaction and consciously change their behavior with cognitive effort. To avoid this bias, I incorporated post-event method into think aloud method. Sometimes after the event, I would ask the participants questions like "why do you do this", "what do you think of this function", "what do you expect to see when you press the button". Instead of interrupting them during the event, I waited till they finished the task and ask these questions. They still have a working memory of the tasks they performed and their interactions will not be biased after the tasks are done.

#### 2 NEEDFINDING 1: SURVEY

The second method is survey and the full survey results can be found in Appendix. The survey has 14 questions and received 22 responses from peers and people outside of Gatech as I also posted the survey on reddit fashion forum.

### 2.1 Results & takeaways

### 2.1.1 Question 1: Select your age

The first question in survey shows the age group of participants, ranging from 18 to 64. Most of the participants are in the range of 18-29, accounting for 50% of all the respondents. People with age 30-39 shows a percentage of 36%, and 50-64 age group takes 9%, and only one participant is in the range of 40-49.

# 2.1.2 Question 2: What is your gender?

The second question asks for the people's gender. Out of 22 responses, there are 9 responses from female and 9 from males, which is 41% for each gender group.

# 2.1.3 Question 3: How many times do you shop on Zara website in a year?

This question intends to asks for people's expertise with the Zara interface. Out of 22 responses, two survey subjects use the interface for more than 5 times a year, 10 people responded that they use it 1-5 times/year and another 10 people said they use it 0 times.

### 2.1.4 Question 6: What is the biggest challenge you face when shopping on Zara?

Question 6 asks for people's challenges and searching functions accounts for the highest percentage which is 50%, while view searching results takes 14%.

# 2.1.5 Question 8/9/10: how satisfied are you with the Zara Search/Filter/View search functionality?

The overall satisfaction level for search, filter and view functionality are quite low. As the average for each functionality are 2-somewhat unsatisfied.

The takeaway from this survey is that most of the people have difficulty with search function, and people are somewhat dissatisfied with the functionalities mentioned above. Mostly users are young adults from age 18-29. They mostly use the interface at home, at work, or when they are waiting in public area. The

interaction environment is safe and controlled. Some people dislikes the cluttered photos and find it confusing to navigate. The overall satisfaction of the interface is low and there are rooms to improve the whole design.

#### 2.2 Bias control

The survey method might have confirmation bias. To avoid this bias, the survey has an option of "other" to give people to option to express their ideas when their response is not one of the option on survey.

#### 3 NEEDFINDING 1: EVALUATING EXISTING INTERFACE

The survey shows that around 30% of people use Amazon, 50% use H&M and 32% use Uniqlo for shopping. To better understand the advantage and disadvantage of Zara interface, the interfaces of Amazon, H&M and Uniqlo were selected for evaluation in the needfinding method 3.

#### 3.1 Results

H&M 's searching function is accurate, simple and easy to understand comparing to Zara's interface. When typing in search bar, it automatically shows you the related searching keywords and the user can just select from the list instead of typing in the full name. The navigation bar is classified into eight categories including women, divided, mean, baby and etc. A more detailed category list will show up when the cursor hovering over the tab. Searching on Uniqlo's interface for women's jeans with keyword of "jeans" need two clicks, while H&M only one click. The searching speed of Uniqlo is slower. On Amazon, the searching step for women jeans is also one step.

For filtering search results, H&M not only shows the sorting and filtering functions, it also shows some feature filtering functions such as conscious choice, color and size. Amazon's view can filter results by only one click and is the fastest among the all three interfaces. As its filter is displayed directly on the left side. The user do not need to press extra button to open or close a filter window. Uniqlo's filter window blocks the page information when it shows up and it's displayed in the middle of page instead of on the side, which makes it difficult to see the main page.

For viewing grid, only H&M affords the view size change. It has two icons of large view and small view on the right corner. The icons are self-explanatory and by clicking on it, it shows an immediate feedback, which make the user understand the usability of the icons right away. There is also an option to view the results by model or product. By adding this option, it can avoid the confusion happened in Zara interface that the user doesn't know which product they are buying. Amazon and Uniqlo only can show the results in the default size, which might cause issues for some people who prefer to browse items in a larger or small view.

#### 3.2 Takeaways

One of the takeaways from the evaluation of the three interfaces is that they all have a sorting function to enable the user to sort the results by price, new, reviews. This sorting afford users with different searching priorities to view the results accordingly. Some people might be more sensitive to price, while others may be sensitive to fashion trends or reviews. By using the sorting, the interface covers the needs for different users. Another takeaway is the view size and view by product or model function. It benefits the user by giving them control over the view and they can customize the view according to their preference. Another thing to notice is the filter design. H&M has the most clean and simple filter functions and they are not as cluttered as Uniqlo or Amazon.

#### 3.3 Bias control

The evaluation method might have confirmation bias as I am the only evaluator. To minimize the bias, three interfaces were selected and compared in parallel to gain as many insights as possible from different perspectives. Also I tried to be objective when evaluating the easiness to achieve certain tasks, counting the clicks, and easiness to learn and discover the functionalities.

#### **4 DATA INVENTORY**

# 4.1 User

The users are mostly young adults, ranging from 18-29. They can be any gender and their expertise levels vary. Some people might have expertise in general online shopping websites while other might be first time user to novice to online shopping.

#### 4.2 Context

The context for the user mostly takes place at home and they need to have access to a computer and internet so that they can interact with the interface. Some people might also do it at work or when they are waiting in the public area. So a home or work environment will be the primary context for the interaction in this study.

# 4.3 Tasks & subtasks

The user's task is to shop online in Zara and buy the product. To accomplish the task, they need a computer and access to internet. Their subtasks will be: searching for the product, may need to filter the results to narrow down the options, view the product details, add the product to shopping cart, typing in payment and address information, paying for the product.

#### **5 REQUIREMENTS**

From the three executions of needfinding methods, we better understand that the interface redesign should improve its major functionalities such as searching product, filtering searching result, and view the products. We might need to study how quickly a searching action can be conducted and how to make the searching and viewing more efficient to improve overall shopping efficiency for users. Meanwhile, the learnability of the interface also has room for improvement. It's necessary to look into the reason why user find it hard and confusing to using the scrolling bar to adjust price or view size. And how to teach them to use the bar feature and make less mistakes. We might also want to look into the automatic searching prompt to help the user learn how to search for keywords.

#### 6 CONTINUED NEEDFINDING

The exercise of three needfinding methods help me better understand the users and their different behaviors towards certain task. They also showed different priorities when interacting with the interface. Some users focus more on the layout, others on the functions or pricing, or fashion trends. To better understand their needs, a continue survey could be performed to ask about their priorities when shopping online and their shopping habits. The information gathered can help us better design a useful searching and filtering function. Also we might want to study people's eye movements or the click number to get some

quantitative data to better evaluate the efficiency and functionalities of current interfaces. The qualitative analysis will help us better understand people's behavior and find out solutions to improve the interface design.

#### 7 APPENDICES

#### 7.1 Think aloud notes

# Participant 1:

#### Female, has not used Zara before

- 1. Task: buy a skirt
- 2. Doesn't like top menu camouflaged in pictures when scrolling down and up
- 3. Find the right size: too many questions, want to skip some questions.
- 4. Search cannot find a filter
- 5. Endless list when scrolling down. Too many options.
- 6. Wish they can have a sorting function.
- 7. The category is random
- 8. Wish they could have filter by price function
- 9. Wish they could have ratings, reviews
- 10. Tried to buy e-gift card, cannot type in the number, dislike the interval of \$5, hard to scroll the bar, cannot tell min and max number
- 11. Miss the save to wishlist icon
- 12. Tried to look into loyalty plan, cannot find it
- 13. Design styling: black & white, not marketing enough
- 14. Product page pictures don't have zoom in/out function
- 15. Confused what product they are selling, pants or jacket when the model shows too many products.

# Participant 2:

### Female, used Zara before, not very often

- 1. The front page: the animation is too quick to see
- 2. The page layout has too many blanks
- 3. The font size is small and all capitalized, hard to read.
- 4. The product page: left details are hard to see, should put underneath the pictures.
- 5. Filter: category cannot find
- 6. Filter in details, not sure what it is

- 7. Why not color in details
- 8. Filter: prefer box to check, like they can choose multiple criteria at same time
- 9. Tried to find return policy on bottom of page, failed to find
- 10. When scrolling down, dislike the overlapping of zara brand and text
- 11. View bar: do not know what's it for, tried it and do not understand which side is to zoom in/out, wish they can have some labels of "+" "-"
- 12. The view scrolling bar is same as price filter, confusing it to price filter at first.
- 13. Like the 3D model, you can see how it looks on people from 3D view
- 14. No back to top function, the list is endless, don't want to keep going down
- 15. Wish it has the video triggering when the cursor hover on it
- 16. When the cart is empty, the page looks like unfinished page and font size is too small.
- 17. Using the website less often than on mobile app
- 18. When the model is wearing pants, jacket, sunglasses, wish the related accessories can be added to the product page. The link can show extra products that people may be interested in.

# Participant 3:

### Female, used Zara before, not very often

- 1. Task: look for a jacket
- 2. The searching results are unrelated
- 3. Dislike the style
- 4. Dislike scrolling so much, prefer an overview
- 5. The function of view scrolling bar broke
- 6. Confused what they are selling
- 7. Prefer single item rather than the model wearing multiple items

# Participant 4:

#### Female, used Zara often

- 8. Task: Search for a yellow sweater
- 9. Models poses look weird
- 10. Information about the model height, weight....
- 11. Find my size: type in instead of dragging the bar due to easiness

- 12. Chat box: Ask questions for return policy? Find FAQ first, then use chat box. Chat about how many inventory in specific store
- 13. Strange order of functions: address information, then select delivery method
- 14. Store finder: failed, don't understand the result
- 15. Buy E-gift: not very convenient to use the dragging bar
- 16. View grid confusing for minimize and maximize
- 17. Color: +3, might list all the colors
- 18. Pants: could show measurements of length and other parameters
- 19. Bookmark: useful

### Participant 5:

#### Male, used Zara before, not often

- 1. A lot unnecessary information
- 2. Shoes details font size too small
- 3. Add to wish list, cannot find the bookmark
- 4. E gift bar: scroll bar: good to know the min and max
- 5. Styling: would like a bit more colorful, happy style. Current version is boring.

# 7.2 Survey results

response,Q1,Q2,Q3,Q4,Q5,Q6,Q7,Q8,Q9,Q10,Q11,Q12,Q13,Q14

- 1,18 29,Male,1-5 times,At home;At work,,Search for products,,2-Somewhat dissatisfied,2-Somewhat dissatisfied,H&M;Uniqlo,,It tries way too hard to be cool,N/A
- 2,18 29,Female,1-5 times,At home,,Search for products,,o-Extremely dissatisfied,o-Extremely dissatisfied,O-Extremely dissatisfied,H&M;Uniqlo;Aritzia;ASOS;Mango,Na,"So heavy on the photos, very hard to actually shop. Pretty sure though",An easy to use shopping page
- 3,18 29,Male,o time,Other,Never have,Other,n/a,3-Somewhat satisfied,3-Somewhat satisfied,H&M,n/a,,n/a
- 4,18 29,Female,1-5 times,At home;Other,In public while in a waiting room,View search results,,1-Very dissatisfied,2-Somewhat dissatisfied,2-Somewhat

dissatisfied,H&M;Aritzia;ASOS;Topshop,N/A,,More organization and not a infinity scroll

5,18 - 29, Female, o time, At home, Search for products, o-Extremely dissatisfied, o-Extremely dissatisfied, o-Extremely dissatisfied, Uniqlo; Aritzia; Other, Doen, "an uncomplicated UI, easy to navigate, better modeling photos"

6,30 - 39,Male,o time,At home,,Search for products,,2-Somewhat dissatisfied,2-Somewhat dissatisfied,2-Somewhat dissatisfied,H&M,did not select other,i THINK they can improve their search functionality to be more relevant,I wish the search was more predictive and assistive

7,30 - 39,Prefer not to say,o time,Other,"I don't lmao. Don't make ""zero"" an option above then require this question. This is a UX class for Christ's sake. ??",Other,??,2-Somewhat dissatisfied,2-Somewhat dissatisfied,4-Somewhat dissatisfied,H&M,No way you made this question required ??I hope you fail this class omfg,,yes

8,18 - 29,Female,More than 5 times,At home;At work,,Search for products,,3-Somewhat satisfied,4-Very satisfied,2-Somewhat dissatisfied,Other,"Nordstrom, Express, Saks Fifth Avenue",Feels cluttered with unnecessary extras. I'm here to buy clothes not look at an editorial fashion website. Takes forever to load too,Zara has the same product listed as multiple products if it's different colors. I want to be able to see the same style in different colors so I know what's a different product

9,30 - 39,Female,1-5 times,At home,,View search results,,2-Somewhat dissatisfied,2-Somewhat dissatisfied,H&M;Other,Amazon,,Easier to see multiple items on small phone screen

10,50 - 64, Male, o time, Other, dont shop there, Other, dont shop to buy there only other online shops like amazon, 2-Somewhat dissatisfied, 2-Somewhat dissatisfied, 3-Somewhat satisfied, Other, amazon, n/a, n/a

11,18 - 29,Other,o time,At home;At work,,Search for products,,3-Somewhat satisfied,1-Very dissatisfied,4-Very satisfied,Other,Amazon,The website is extremely confusing to navigate and looks more like an art gallery than an online ecommerce protal,i don't have enough experience with zara to answer this question

12,18 - 29,Other,o time,At home,,Other,My challenge is focusing on anything on this website,o-Extremely dissatisfied,o-Extremely dissatisfied,Other,"Ann Taylor, LOFT, Amazon, Books a Million, Miiriya, Target, Bombas, Fabletics, Echt",It looks like some wannabe VSCO influencers went to FIT and made an amateur website for their undergrad thesis. I need an epilepsy warning for the home page and feel like I'm about to descend into a cheap perfume commercial. ,"Pictures that actually focus on the clothing, large and high contrast text, good search features"

13,50 - 64,Male,1-5 times,At home,,Search for products,,2-Somewhat dissatisfied,1-Very dissatisfied,1-Very dissatisfied,H&M,,,augmented reality

14,30 - 39,Female,More than 5 times,At home,,Search for products,,4-Very satisfied,3-Somewhat satisfied,3-Somewhat satisfied,Uniqlo;Aritzia,,,Sale price or discount code

15,30 - 39,Male,o time,Other,,Other,,3-Somewhat satisfied,3-Somewhat satisfied,Other,Amazon,,No

16,30 - 39,Male,o time,Walking,,Other,Never use ZARA website; their styles don't fit me well,3-Somewhat satisfied,3-Somewhat satisfied,Other,Saks 5th ,,"Hope ZARA can make the main entry clean, no need to be so fancy"

17,40 - 49,Female,o time,Other,No experience,Search for products,,2-Somewhat dissatisfied,3-Somewhat satisfied,2-Somewhat dissatisfied,Other,Carters,Important information are not easy to find,More categories

18,18 - 29,Male,1-5 times,At home,,Return,,2-Somewhat dissatisfied,1-Very dissatisfied,2-Somewhat dissatisfied,Uniqlo,,,Uniqlo has a good mobile app ui/ux. I wish Zara integrates that within its use case

19,18 - 29,Female,1-5 times,At home,,Search for products,,3-Somewhat satisfied,3-Somewhat satisfied,H&M;Uniqlo,,,no

20,30 - 39,Female,1-5 times,At home;Other,During commute (not driving),View search results,,2-Somewhat dissatisfied,1-Very dissatisfied,3-Somewhat satisfied,H&M;Topshop,,I like the color scheme/aesthetics of the site,"I would prefer the 'Zara' logo on the left of the website to go away when I scroll down to view

details of an item. Also, the webpage is more user-friendly on a laptop compared to on the phone. "

21,30 - 39,Male,1-5 times,At home,,Return,,3-Somewhat satisfied,3-Somewhat satisfied,Other,Amazon,,Animated characters wearing clothes

22,18 - 29,Prefer not to say,1-5 times,At home,,Search for products,,1-Very dissatisfied,2-Somewhat dissatisfied,2-Somewhat dissatisfied,H&M;Uniqlo,,Dislike the font size and weight. Like the styles in which apparels are showcased.,A simple navigation to women and men section is such a task when you first land on the website. What's with the tiny font and right edge placement of navigation to section.

# 7.3 Survey results analysis











