M1 Assignment

Lu Han  
lhan72@gatech.edu

***Abstract—***The interface of Zara can be redesigned to improve its user experience of online shopping. The user type will be the general consumers of broad demographic profiles. Three methods of needfinding will be discussed to explore the problems for current interface and study the possible solutions to solve these problems.

1. **problem space**
   1. **Define the problem space**

It is the end of the year and you are invited to the company annual party, you want to buy a nice dress for the party. You google your favorite fast fashion brand Zara’s online shopping website. You log into the website and start looking at it. The website design is so clean and minimalism, and you only see two pictures on the first page and you scroll down only one more picture showing “sale”. You don’t know where you can start and you get confused as you expect to see some categories of the clothing such as men, women, kids just as what you see in the real Zara store. You notice on the right there is an icon with three bars without any explanation what the function is. Out of curiosity you click the bar and realize it’s the categories of woman, man, kids and beauty. The list of categories are designed into a horizontal list of 25 categories and all of them are squeezed together to fit into the length of the page. After a closer look at the list for a long time, you find the right category of dress out of the over-crowed list. Then you are presented with a extremely long view of all kinds of dresses. You have no idea how much you need to scroll down to find your favorite dress as there is no number of dresses or page number shown and the list seem endless. The “view” and “filter” bars on the right up corner is barely noticeable as again there is no message indicating to its user that the bar with a dot is the “view” bar to adjust the page view.

After a very frustrating search process and time-consuming browsing of your preferred dress options, you add two items into cart and want to check out. You go to your cart and just notice that one of the item is greyed out saying that it’s sold out and no longer available. Now you feel frustrated and think that you should have checked out earlier to secure the item before it’s taken by another buyer. You spend so much time to select your perfect dress and it turns out to be a waste of time. You want to continue place the order for the remaining dress so you press continue button, then everything seems quite normal and within control. You choose to whether log in as member or as guest, then you choose your payment method and fill in visa card details. In the final step, again you have difficulty to double check the payment amount just to confirm that you are paying what you expect to pay, because the total amount number is so small to notice Graphical user interface, application, Teams

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1. Interface of Zara

The scenario mentioned above is an example of online shopping using Zara website to search for a dress and place the order. During the process of searching her dress and place the order, she has many frustrating moments such as searching for a right dress, secure her selected item, checking her payment details. Why does Zara interface supposed to simplify people’s online shopping experience cause so many confusions? Why the shopping process makes the user feel that they cannot find what they want and they lose control to accomplish the shopping task? These are some questions that I want to address in the following discussions. For the location where these problems take place, mostly they take place in a desktop computer when people are at home or whenever they have the time and internet to go online shopping.

In the discussion below, I will use different needfinding methods to help the designer to improve the Zara interface and solve the pain points that the users may encounter in the shopping process.

# user type

For my user type, it will be quite broad as almost everyone male or female can have the chance to use online shopping tool such as amazon to buy the stuffs they like. The target users of Zara website will have a broad demographic profile, including children, woman and man, with the age between 18 to 40, as fast fashion brand always targeting millennials and young adults who are very sensitive to fashion trends, and conscious for cost and environment. The users might have different levels of expertise in online shopping as some people may shop online everyday while others may be novice for online shopping. The motivations for them may be different as well, for example, some people are motivated to shop on Zara simply for everyday fashion as he wants to keep trendy in his daily life. Some people may want to purchase the clothes for some special occasions such as party, interview or some important events. Also, there are cases that people such as parents want to shop for their children for the children clothes. The diversity of the audience makes Zara a good brand for people with various motivations.

# needfinding plan 1:naturalistic Observation

My first plan is to apply the method of naturalistic observation to dig out the needs from the users. This is a low-intervention method as you can easily observe people how they interact with Zara website when they try to shop online. Also you can directly go to the shopping center where people perform their daily shopping tasks and you just observe people in their daily environment and try to map their shopping pattern into the online shopping website. You may notice something you never notice. However, naturalistic observation means that you can only observe people, you cannot enter their head and know what they are thinking about. You take down the notes for the facts you observe without understanding why this kinds of things happen or why the participants will behave like this. And you cannot participate into the task and understand the task through your own experience. There is a chance for confirmation bias from the naturalistic observation as you can only see the things you want to see and ignore the things you don’t want to see.

I want to first start observing people shopping in the offline Zara stores and see if there is any shopping pattern that will be useful to be applied into the online shopping website. The mapping between offline and online shopping is very necessary as people will know what to expect on the website if they already have the offline shopping experience. From a predictor model perspective, the users will be able to predict the outcome of their actions if the interface applies the mapping well enough.

Firstly I choose the downtown Zara store to start my observation as it has a good sample size, a diversified consumers from all over the world like Asia, North America, Africa, Europe. In addition, the age group and gender are well diversified. The observation will take place in the busy hour at around 1 pm on weekend, as research shows as soon as it hits 1 pm, Zara will get super busy(Hargrove n.d.). I plan to observe the gender, the age, the shopping process and pattern. I may see both women, men and children shopping in the store. They first shop around in different areas such as men/women section, formal/casual section, assessor/clothing section, then they put the items to a Zara shopping bag and head to the fitting room to try the clothes on. They leave the unwanted clothes in the fitting room basket and takes the remaining to check out table. Lastly, they use their preferred payment method to pay for the items.

The next thing I plan to observe is how people do Zara online shopping. I will sit beside the participants and observe how they interact with the Zara website. The participants should also be well diversified in terms of age, gender, expertise level of online shopping. During the process of observation, I need to take down the number of events of interest observed. For example, when the participant search on the search bar, how long it takes to type the search criteria, how many words he types, how many errors he makes, how many times he moves his hands from keyboard to mouse or vice versa, how long it takes for him to get to the search criteria page he wants. The measurements we take above might give a rough idea of how a task is performed, what kinds of errors can occur and how many, how long each task will take and what kind of apparatus is more helpful to accomplish the task. Meanwhile, we can encourage the user to “think out loud” and tell us what they are doing and why they think they want to perform this action. The “think out loud” process can help us better understand the reasons and motivations behind the user’s action.

However, these manual observations may have the confirmation bias we mentioned before: we only see the things we want to see. To avoid the confirmation bias, we can increase the sample size and pay more attention to the quantitative data such as the time each user takes to type in the search criteria, the errors user made in typing the search phrases. If I think that user likes the search function in Zara but the actual data shows the user makes multiple errors and spend super long time to use the search function, it’s a sign that the search function has some problems there. By tracking the actual numerical data, we can have a better understanding how the users actually interact with Zara website.

# needfinding plan 2: participant observation

## Action & Step

The second needfinding plan I choose is the participant observation. As naturalistic observation gives me a preliminary idea of how people perform the online shopping task, the participant observation can go deeper into people’s brain and figure out what they are thinking as a user. Being a participant myself, I hope to take down the notes of each step I take, what button I press, how many clicks I need to press to finish the task, how many errors I make, how my emotion changes in each step and so on. I will sit in front of my computer at home and log into the Zara website. First thing I need to set up my main goal to buy a casual dress. The subtasks will be search for dress, add to the shopping cart and place the order.

I will take the following steps to accomplish the task:

1. Select the three line bar, click the dress category.
2. Adjust the view so that the view grid can show four picture along the length of the screen.
3. Select the “Filters” function, click on “color” button and select “black”. Select “M” for size.
4. Select the dress called ”mini dress” and add to cart.
5. Press the button “go to cart”.
6. Press the button “continue” in the cart page.
7. Press the button “continue as a guest”.
8. Choose “visa” as payment method.
9. Press the button “continue”
10. Type in the card information.
11. Check all the information of item, delivery, payment, contact details.
12. Press the button of “authorize payment”.

## Data collection

For each step I take, I realize that there are various parameters I can collect to help me better understand the issues. In the first step, time to select the right category will be collected. In the second step, I choose middle of view grid as it’s easy to see the dresses in this view and the time to click into the first item will be collected. In addition, the time I take to scroll down the page, whether I have scrolled to the bottom of the page or not, will also be the useful data to suggest some insights of the view clothing function. In the third step, how long I spent in choosing the filter will be recorded. The step of 4 to 12 is for the task of placing the order, the number of clicks to accomplish to task, the time I take to fill in all the information needed, the errors I make when typing in the information, the time I spent in the checking process of final stage will all be useful data that I am interested in during the check-out event.

## Related bias

However, there are also bias in the participation method. I need to recall some of the events after I finish the task of place the order. Some of the emotions or the clicks I pressed I may not be able to recall accurately after the event. To avoid this kind of bias, I can try the think out loud method and use an video recorder to record my thinking process and the actions I took during the process. Also, I can take a look at the data log which has all the action history of the steps I took.

# Graphical user interface, text, application, email, website Description automatically generatedneedfinding plan 3: evaluation of existing UI

1. Interface of H&M

My third plan for needfinding is to evaluate the existing UI and compare with Zara UI to find out solutions to redesign and improve the Zara UI experience. The interface I chose is H&M as it’s one of the biggest competitor for Zara in fast fashion market. Looking at the H&M interface, the layout design is more clear than the Zara interface. In the right up corner is the search products bar and you can type in the texts easily. The category is organized in a horizontal navigation bar at the top. By clicking the category, user will see a drop down menu with more subcategories. This design makes the primary navigation more visible and useful. In addition, the breadcrumbs on the left side column showing the new arrivals, trending items, offers make it much easier for the user to search for the items from new arrivals or trendy in the industry. Also the view grid is fixed and you can also easily find the view icon on the up right corner. The color style, the font size style of the interface are consistent. Looking back to Zara interface, it’s usually hard to find the right category, to perform filter task, to adjust the view grid, and sometimes the texts are all capitalized, making it very difficult for people to read. The H&M interface involves much less cognitive effort to identify the actions and make it easy to predict the outcome of each action. In order to better compare with Zara interface, we can collect the same type of data as in Zara: the time to identity right category, the time to type in search criteria, the errors made during searching, how many times of clicks to place the order and so on. By collecting these quantitative data, we can easily tell which interface is more efficient to help the user find the right item and check out, which interface has higher usability, learnability to its user. To get some qualitative findings when evaluation the H&M interface, we can use survey to ask users questions like: what do you like about the interface ,what features you don’t like, what works for you and what doesn’t. These questions help the designer have a better understanding of how users feel about the interface and what works for them.

However, when the evaluator has the belief that one interface is better than the other, there might be a chance of observer bias. The observer may evaluate the preferred interface towards his preference and design survey questions more likely to receive a positive feedback according to his preference. To avoid the observer bias, the evaluator can ask multiple experts to help proofread his surveys and evaluation plan. Through proofreading by third-party experts, the designer can avoid the observer bias in the leading questions.

# conclusions

By using three methods of naturalistic observation, participant observation and evaluation of existing UI, we aim to figure out what features work well in the interface and what doesn’t work well. In addition, by using the qualitative and quantitative measurements we gained from the needfinding process, it will be easy for us to identify the problems that prevent the user from accomplishing the task using the interface. Furthermore, hopefully the insights in the needfinding process can provide some solutions to solve the problems and improv the user experience for Zara interface.