ABOUT ME

Drawing a Venn diagram with marketing, digital communication and culture, I am in the position where the circles overlap. Immersed in the study of digital culture, I am learning digital technologies skills such as interface design and film editing, as well as their cultural context – how networked media or digital devices affect our daily lives, society, and even the world. My Master’s thesis therefore focuses on how spreadable digital technologies create value and meaning in a networked society.

SO, WHAT IS DESIGN?

Customer dissatisfaction and needs with the current state coupled with a determination that some ideations and actions should be employed to ameliorate or solve the issue is the start of a design process (Razzouk & Shute 2012). In this sense, interface design I conducted to optimise Woolworths’ search engine is a repeatedly iterating process with multiple times of ideas constructing, discarding and reconstructing.

DESIGN BACKGROUND

Digital technology is redefining the meaning of "going" shopping (Nielsen 2015). Throughout the design process, I am trying to create a physically alike online store to blur the lines between the physical and digital world in order to allow users to be more engaged with shopping online. With regard to digital engagement, I would like to briefly discuss the concept of digital connections and disconnections, why users are more immersed when it comes to interact and connect with physical presence, and how these connections affect user experience and feelings. James Ash points out the word "sensation" to explore how digital technology affects a human body when the body contacts with a digital object (Ash 2012). By exemplifying the case of GIF, he argues that the rationale of the success of GIF is its "particularities as a file type frame and organize the types of sensation transmitted within it" (Ash 2012). Sensation invokes users’ emotional attachment to an object. Within this context, replicating the experience of shopping in a physical store may resonate with customers' sensation to the products, enabling them to be more engaged in online experience.
WOOLWORTHS

Known as the dominate player of the Australian supermarket industry, Woolworths is proficient to provide its online grocery shopping service ranging from the context of mobile, tablet and web applications to its customer, and replicates the experience of shopping in physical stores online. However, issues regarding the vast differences between customers in-store and online experience have been pointed out. This includes:

1) the difficulty of finding groceries: with regard to instore shopping, customers can walk down aisles in their familiar pattern and pick products they want. In online store, on the other side, customers are not provided physical aisles and adequate visual cues to find items;
2) Customers’ different recognition to products’ name: each person perceives items differently, which is the main factor making online search difficult;
3) Inconsistent product categorisation and allocation;
4) delayed delivery and unsatisfied customer services.

DESIGN BRIEF

“Maximizing your site’s search engine visibility can be a powerful and cost-effective part of an online marketing plan. A properly performed search engine marketing campaign can provide a tremendous, long-term return on investment (ROI)” (Thurrow 2007, 2).

To enhance its online shopping experience, the design solution focuses on the optimization of Woolworths’ search engine.

During the design process, the solution includes:

1) map search:
   a. The map search function allows users or customers to choose and shop at a particular Woolworths store. The purpose of map search is to offer users an equivalent, innovative and authentic online shopping experience.
   To replicate instore experience, I went to the Woolworths Central Park store for site visit, and our group made a 3D and 2D map. With perceptual affordances, customers may resonate with a sensory experience of the physical store. In addition, this real-store mockup will recall customers’ habits of walking down physical aisles to find items in order to avoid the difficulty of searching products caused by customers’ different recognition to products’ name.
   b. After several times of iteration, I made a shelf displaying products to enhance the authenticity of the digital realm.

2) General search:
   This search engine includes three functionalities: type-in search, scan barcode, and image search. Scan barcode and image search was then discarded for web context after conducting user tests as few people use scan and camera functions on computer. Instead, if they have a picture of the product, they are more likely to directly type the name of the product. Nevertheless, these two functions are suitable for mobile and tablet platforms as it can quickly locate the product to make the shopping process be more efficient and time-saving.

3) Chatbot:
   We innovated a chatbot named “Wollie” for Woolworths to provide always-online, interactive and comprehensive services to customers in order to resolve the issue across the search engine and customer services. It interacts with customers through textual, verbal and visual context immediately. Its primary feature is to help customers search and find a particular item. However, it was also discarded as it is in fact repetitive.

DESIGN BRIEF

“If we had to choose a single word to describe today’s consumers, “connected” would surely rise to the top of the list” (Nielsen 2007). Everyone and everything is increasingly moving online, resulting in habits change and forming a new market trend (Nielsen 2007). Digital retailing is no exception: “it is growing seven times faster than the total market, and consumer spending will inject up to $2 billion of incremental sales into the Australian grocery industry over the next five years” (Atipaldi 2016).

Design Brief

"If we had to choose a single word to describe today’s consumers, “connected” would surely rise to the top of the list” (Nielsen 2007). Everyone and everything is increasingly moving online, resulting in habits change and forming a new market trend (Nielsen 2007). Digital retailing is no exception: “it is growing seven times faster than the total market, and consumer spending will inject up to $2 billion of incremental sales into the Australian grocery industry over the next five years” (Atipaldi 2016).

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OVERVIEW OF THE PROJECT

Choose a store

3D Map

2D Map

Hover over a product

Product information
OVERVIEW OF THE PROJECT

Search filter — results showing on map

Search filter — results showing as a list of products

Product Page

Cart Page
OVERVIEW OF THE PROJECT

Homepage
Vegetables and fruits
Display of products
Search product
Result filter
Select an area

Brainstorm

Fruits area

Display of products
1. Evolution of in-store layout:
   a. Throughout the process, the main difference is that I presented my ideation through a more realistic way: Using virtual shelf, products can be picked from the shelf along with the information in sidebars.
   b. The third screen shows two rows of products, if the users want to view more, they need to click left or right button. The new interface design enable users to view products on the whole shelf, or even the whole map, which simplifies the search process.
   c. At the beginning, I used a small map to make the interface be more interactive, as it allows users to know where they are, change view mode (3D/2D), and zoom in/out. It was then replaced by a bunch of small icons which are more space-saving and easier to be noticed.
   c. Considering the first three screens are too spacious, I also adjusted the size of screens.

2. Refinement of small icons:
   a. For the first screen, I used these two icons implying that users can click them to choose category, and then the map will navigate them to the category they want. However, they are too confusing: confusing
      • users do not know what the functionality of the column bar.
      • The design of two columns is also inconsistent.
   b. Then I designed an icon for the second screen, which seems to be more clear. However, after several user tests, most users think the functionality of the icon is not appealing.
   c. So I removed this "select an area" function to just directly display products on the shelf as what users experience in physical stores.

It seems to be repetitive to provide a front picture on information bar, as items pictures have been displayed on the shelf.

So I replaced the picture to the product’s information, and the "view more" button on here will allow users to see more description of the product without being navigated to a new interface.
4. The refinement of presenting filter functionality:
   a. After searching ‘apple fresh’, the results will be filtered and highlight four areas containing “apple fresh”. However, one of my users complained that “since I clearly type in what item I want, I would like my search result to be like a list of products instead of showing categories on the map.” So the search engine avoids its principle of efficiency.
   b. Since the new map we created is clearer and more realistic, so I removed the filter function and changed it to a list of products.
   c. However, some users still appreciate this filter showing on map function. Therefore, I made it as an alternative way to go to the product page, and combine this filter function with map navigation. I created two buttons to allow people choose view mode based on their preferences.
   d. During the process of iteration, I have tried a lot of different ways to present this idea. Finally, I chose these two buttons to imply these two options.

5. Product Page:
   a. This was designed for functioning as ‘My Cart’, however, with inadequate information, this interface was then replaced by a detailed product page.
   b. It was adopted as it provides enough information:
      • promotion with recommended products;
      • customer reviews;
      • Link to social network sites, which are crucial for Woolworths to be exposed to potential customers.

6. Functionality of volume change:
   In this case, users can change a can of Pepsi (350ML) to a bottle of Pepsi (1Liter) by just selecting the volume in the right bar with no need to put the Pepsi can back to look for Pepsi bottle.
As mentioned before, digital technologies impact on customers’ habits and market trend. Marketers increasingly use digital tools to engage with shoppers such as offering touchpoints that are specific and relevant to customers’ needs (Nielsen 2017).

As for the impacts of this project, users’ reviews and feedback should be taken into account.

With regard to

1) Map search:
   a. For map search, all of the users like the function of “click on an icon” on the map as it is effective and is extremely useful if they have no idea about buying something so they can just explore. As one of my users said, “The map search feature clearly sparks my attention and I think is a great way to help me to understand the layout of the supermarket and know where the products are.” With regard to this comment, I keep the basic function that icons on the map can be clickable. However, the cartoon icons we used in map to represent different categories would confuse customers and hinder them from regarding the site as an professional and official online grocery store.

   b. As regard the function of “select an area”, Most users considered that while this map feature could be a good secondary support functionality for the search engine, does not play a big role in the search item functionality, since it leads to the same page as if you click an icon.

   d. For the first user tests, some users suggested that we should ask for permission to get user location to select the recommended map. Also, we received a relevant feedback from the teaching teams, “while it may aid users who are very familiar with a particular store layout to find what they are looking for, grocery store physical layouts are notorious for being hard to navigate and find what you are looking for, instead being optimised for the sale of specific items and maximising impulse purchases.”

2) Normal view of the screen:
   a. In terms of the rest part of the web, I did not provide more interfaces allowing users to navigate. Some users intend to explore more pages such as specials and fresh magazine pages on normal view section to gain a deeper understanding about the site aesthetic.

3) General Search:
   a. One user suggested that, “It will be nice to know the food calories of each product.” Therefore, I have put a lot of information on product page, such as product information, customer reviews, comments, recommended products, connection with social networking sites (“share with friends”).

   b. Regarding the functionality of filter, users hold different viewpoint. To resolve this issue, I innovated two version of search results: “category” or “product”. Search engine automatically filter the results, showing category icons containing relevant products and hiding irrelevant ones, while “product” shows a list of result items.

   f. In addition, it still appear to be repetitive and unnecessary as “there was enough detail and functionality in the main search and display section that this component felt tacked on”. Therefore, our group decided to discard this functionality.

FURTHER IMPROVEMENT

The current design is still inadequate in utilizing technologies to meet users need more efficiently and flexibly. For example, when the user opens the Woolworths website, they may receive personal recommendations based on their shopping history and frequently viewed products.

In terms of the normal view of the homepage, the colour and content is too complicated. For the future improvement, I will reference the ideology of “simplicity is the power”.

EVALUATION OF THE PROJECT