

“AWEAR”: A tool to support sustainable clothing consumption by young adults

Lelie van Everdingen, Industrial Design Engineering, University of Twente, The Netherlands
Design Thinking, Co-design, Impulse Consumption

Background Information

This thesis is executed in collaboration with Snijboon, a social design studio specialized in Design Thinking (DT). Snijboon wants their design to contribute to an inclusive, sustainable and social society and uses DT methods to ensure their design is functional and meets the needs of the users (Richter & Wiebes, 2022). The past years Snijboon mostly did projects for ministries, but in the future they would like to do more projects about socially relevant issues regarding inclusive design and/or sustainability they value themselves. Snijboon gave me the freedom to use their expertise in DT and apply it to a social issue of choice, to see how the methods would be used in a process that balances between theoretical and practical insights.

Practical relevance

While slowing down fashion consumption is one of the answers to the environmental and social issues of the fashion industry and more consumers intent to ‘consume more sustainably’, retailers are updating their branding and selling strategies to keep consumers buying their things impulsively (Ellen MacArthur Foundation [EMF], 2019; Vasquez, 2022; Gustafson, 2014; Warren, 2018). Compared to the massive amounts of knowledge and strategies used to encourage impulse buys to maximize the profits of big companies, there is very little research and design focused on the consumer and the environment. This thesis wants to make a start to fill this gap, by designing an intervention that helps young adults to consume more sustainably, by doing less impulse purchases.

Research question

How can technology be designed in a way that helps young adults consume less clothes on impulse?

Approach

DT is used in co-design sessions to generate ideas and concepts that suit the end-users, while the knowledge from a literature review is used to review the concepts. The design process is divided into 4 phases: Discover; Define; Develop and Deliver. These phases are used in four iterations: Design Sprint; Co-design Session #1 and #2 and Prototyping.

The design process is kicked off with a 5-day design sprint. Via street interviews, it was decided to look into ways to make YA aware of the sustainable consumption options in Utrecht. A prototype was developed for an app that shows where to find sustainable brands, vintage stores and repair shops. After doing user testing, it was realized that, while the prototype did solve the HCW-question, it did not match the aim of the thesis; to reduce clothing consumptions among YA.

Using the insights from the sprint it was decided to focus on “interrupting the regular buying process” in the first co-design session. Four participants went through the phases of developing and selecting and the results were two concepts: the digital wardrobe and an environmental score system. Based on the feedback in the session and the requirements, the digital wardrobe seemed to have the most potential.

The second co-design session, with 3 participants, was used to further develop the concept of the digital wardrobe; The product “AWEAR” would be a combination of a digital wardrobe and a browser extension that helps the user to wear their own clothes more often and reflect before making a purchase. To test the concept a prototype was made in Figma. Potential users on the streets of Utrecht evaluated the prototype by walking through the app and extension and voicing their thoughts and expectations.



Overall, the interviewees were positive the app would help them to wear their clothes more often and make more conscious purchases, but the actual effectiveness has to be tested still. Based on the DT process these features of the technology are expected to be the most supportive to YA to consume less clothes on impulse: The concept AWEAR consists of an app that gives an overview of the closet, a mannequin to try outfits on and that recommends outfits based on the owned clothes of the user and a browser extension for shopping platforms that disrupts the purchase process to automatically compare a new product to the owned clothes.

For further development, more iterations are needed to solidify the concept AWEAR. The core functions of the concept were tested with a very basic prototype and a relatively small group. While most participants responded positively that they could see themselves using AWEAR, it is not clear if the participants would actually use the app and if they would do it, how effective it would be at reducing impulse purchases. To find out if AWEAR solves the starting challenge; to encourage sustainable fashion consumption in YA, it could be interesting to develop the intervention in further detail and do more detailed user testing with it.

References

Ellen MacArthur Foundation. (2017). A New Textiles Economy: Redesigning Fashion's Future. Retrieved from <https://ellenmacarthurfoundation.org/a-new-textiles-economy>

Ellen MacArthur Foundation [EMF], 2019; Vasquez, 2022; Gustafson, 2014; Warren, 2018)

Gustafson, K. (2014). Impulse buys: The holy grail of online. CNBC News (March 2014). <https://www.cnbc.com/2014/03/06/impulse-buys-the-holy-grail-of-online.html>

Richter, F., and Wiebes, B. (2022). Het grote design thinking boekje van Snijboon. Retrieved from <https://www.snijboon.nl/design-thinking>

Vasquez, R. (2022). Overconsumption in the fashion industry. Retrieved from, <https://www.fashionrevolution.org/overconsumption-in-the-fashion-industry/>

Warren, K. (2018). A new study says you'll spend over \$5,000 on useless things each year—here's how to restrain yourself. INSIDER (Feb. 2018). <https://www.thisisinsider.com/can-you-reduce-impulse-buying-how-to-2018-2>