

# A design exploration to improve the online clothes swapping platform user experience based on the study of swapping mechanism

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## Abstract

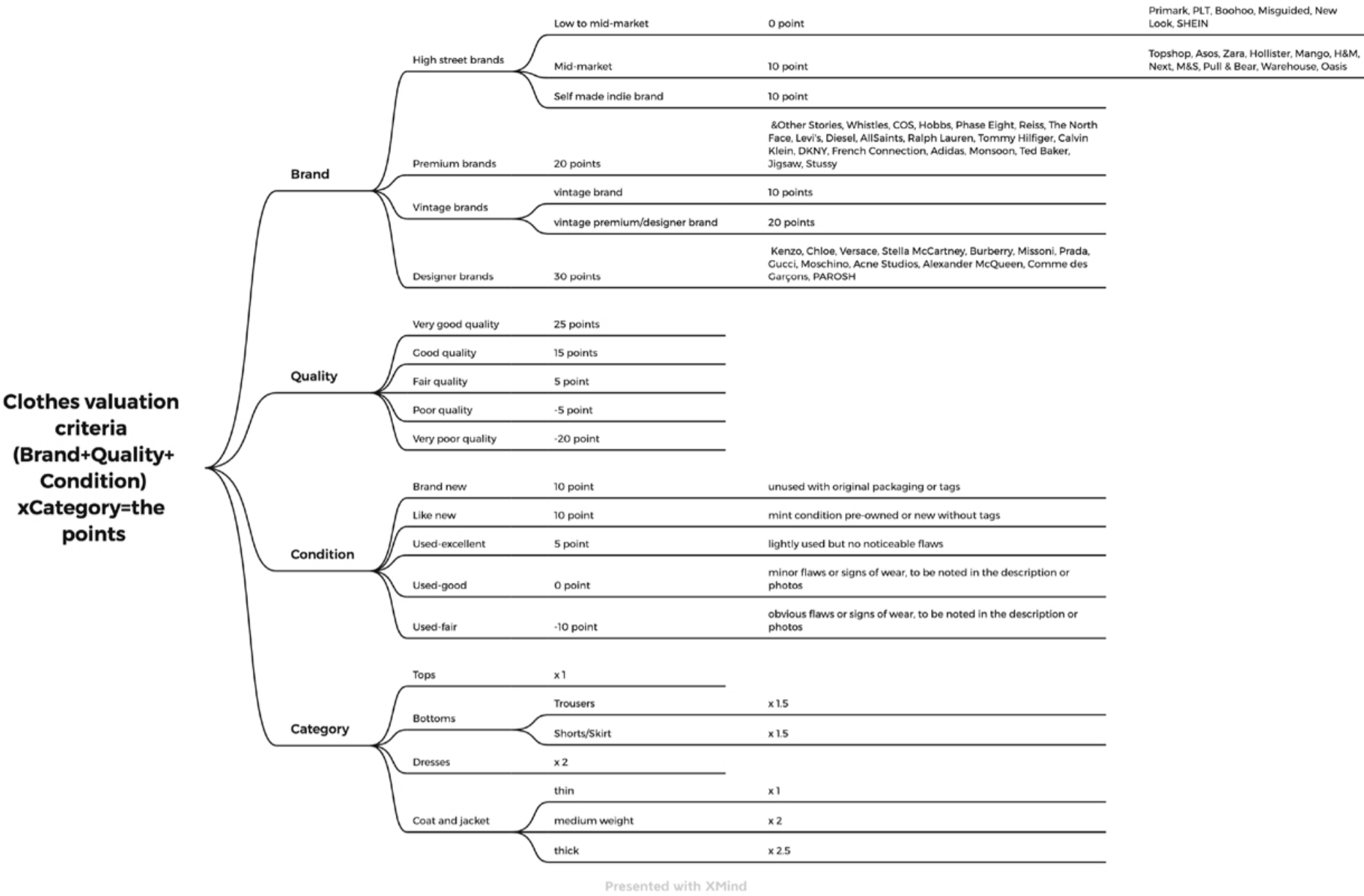
Clothing swapping is a sustainable environmental activity, and I hope to improve the user experience of online clothing swapping platforms, especially for their swapping mechanism, so to make online clothes swapping as popular as online shopping. After analyzing several online clothing swapping platforms, I found that few platforms provide detailed and open criteria for determining the value of used clothing for swapping, which does not ensure that each user receives a return on the corresponding value investment, thus reducing user stickiness. My study looks at improving the user experience of online clothes swapping platform, from the clothes swapping mechanism to its corresponding interface interaction, and gives possible design solutions.

## Introduction & Background

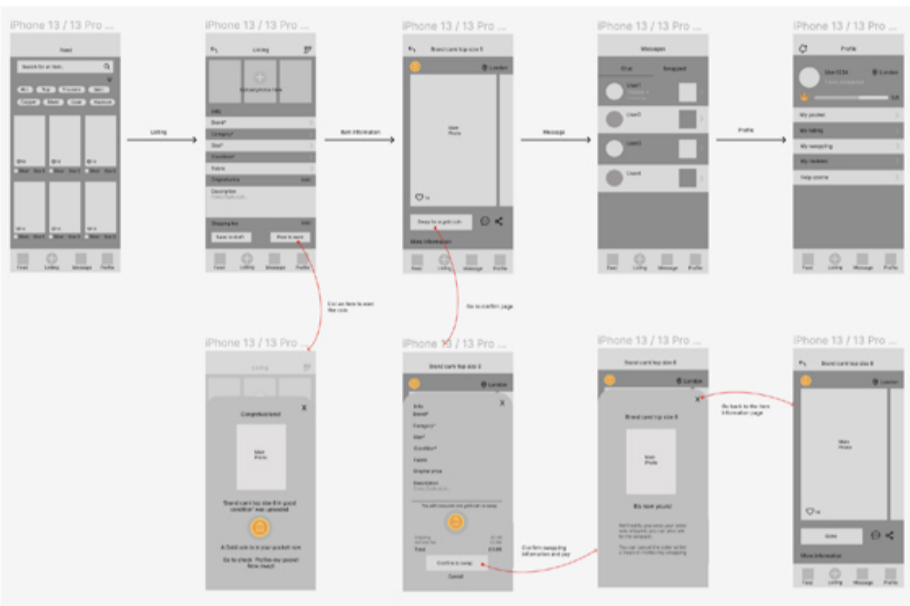
Clothing industry has become the second largest source of pollution to the earth's environment. With the increase in people's awareness of environmental protection and the prevalence of the vintage trend in the fashion industry, the market for second-hand clothing trading is expanding. While the cycle of freshness is getting shorter and shorter, people dislike for having plenty of underutilised clothes at home (Grimshorn & Jordan, 2015), clothes swapping gives people an opportunity to get rid of old clothes and get new clothes at low cost. People may start to participate in clothing swapping because of the novelty, as there is no money involved in this cycle, people are likely to give up immediately if the results didn't meet their expectations (Henninger et al., 2019). An ideal exchange mechanism provides for people's continuous participation in clothes swapping activities. My research is based on the improvement of the online swapping mechanism by developing a value criteria for each item involved in the swapping activity and classifying them into levels to make it fair and transfer more clothing consumers to clothing swappers in a long term.

Grimshorn, C., & Jordan, M. (2015). Ownership—a challenged consumer ideal. A study of two collaborative consumption practices: Clothes swapping and clothing libraries. Henninger, C. E., Bürklin, N., & Niinimäki, K. (2019). The clothes swapping phenomenon – when consumers become suppliers. Journal of Fashion Marketing and Management: An International Journal, 23(3), 327–344. <https://doi.org/10.1108/JFMM-04-2018-0057>

## Diagram / Design



After comparing and studying the swapping mechanisms of several clothes swapping platforms, I chose two of them for optimization and tested. From the feedback of users, I have optimized the combination of these two mechanisms. I list the factors that affect the value of second-hand clothes and then stack the points, and then divide the clothes into four different levels according to the final score of every item, items between the same level can be swapped with each other.



The clothes swapping app prototype design

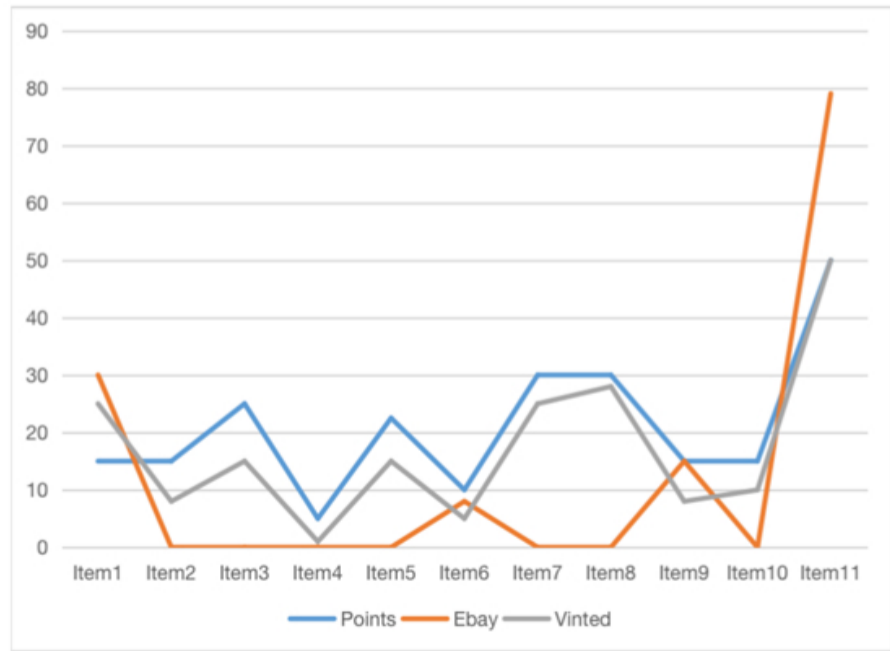
## Study Methodology

- \*Quantitative research
  - Survey** The survey questionnaire is about the user experience of the second-hand clothing resale platform, which is more widely used than the clothes swapping platform. I will respond to user feedback in the interface optimization design.
  - Literature review** Most of the papers have researched and analyzed offline clothes swapping activities, and I got a lot of information about user demographics, user engagement psychology and other research findings from different disciplines.
  - Competitive review** After comparing several clothes swapping platforms that are still in operation, I did an in-depth analysis of their exchange mechanism, app interface, etc.
- \*Qualitative research
  - Interview** During the testing phase of the two clothes swapping mechanisms, I interviewed users and got my final design solution based on their feedback.
  - Usability test** In my design scenario testing, I performed a low-fidelity test and then a high-fidelity test, giving the user a specific route to complete the task.

## Testing & Evaluation

The test was divided into two parts. Part 1 is a test of whether the system of criteria for evaluating an item works correctly, based on whether the point value of a piece of clothing is proportional to its average price on the second-hand resale platform. Part 2 is an app prototype test on the clothes swapping mechanism, which is evaluated on the basis that the user can complete the given test task smoothly and fluently.

## Research Results



Comparison of the average price and calculation of points for the same clothes on different platforms "Points" and "Vinted" are basically matched; \*Some items are not referenced on ebay and have a value of 0

## Conclusion & Future work

The optimised clothes swapping mechanism and application helps people to exchange clothes more fairly with each other, thus increasing the likelihood that online clothes swapping will become popular among the population. In the future I hope to be able to combine big data tools, or artificial intelligence, to give a more accurate estimate of the market price of a second-hand item.