

# Investigation of usability factors in direct-to-consumer D2C e-commerce in context of UX and Purchase intention

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## ABSTRACT

This study aims to answer 'what are the usability factors that affect user experience and purchase intention & what are the user preferences in D2C e-commerce'. The focus is to determine how these metrics affect the user's experience on each step for a deeper understanding rather than just fetching usability issues. The project will provide usability recommendation for D2C e-commerce that involves the UX and purchase intention.

## INTRODUCTION

With consistent speed, e-commerce has been growing since its application in the market, which now can be seen in two different types, i.e., B2C (Amazon, eBay, etc.) and D2C (Nike, Apple, etc.). A survey result shows that most users buy or browse products from B2C sites, yet they believe that D2C provides a personalized experience with solid branding. So, it is essential to improve user experience and sales on D2C sites by understanding what kind of information users want and usability issues.

Considerable evidence was found to support that usability directly impacts a user's experience; considering this, more than 20 usability metrics were recorded from 15 academic papers. These metrics are the usability recommendation provided for general e-commerce. In contrast, this study will focus on metrics affecting UX and purchase intention in D2C sites and what kind of information these sites should have as per user preference.

## RESEARCH METHODS



**Online survey** to collect user behavior and preferences towards D2C site



**In lab usability testing** (1:1) on three D2C sites, qualitative and quantitative data were collected to identify usability issues



**Interview** for the feedback on tasks performed and to gather more knowledge on user expectation from D2C sites.



**Feedback questionnaire, an instrument** through a , where questions were listed on the basis of finalized metrics with a 1-5 likert scale.

## EVALUATION

**Survey form** also worked as pre test form has questions about demographics, user (sample n=38) behaviour towards e-commerce and their expectation from D2C sites.

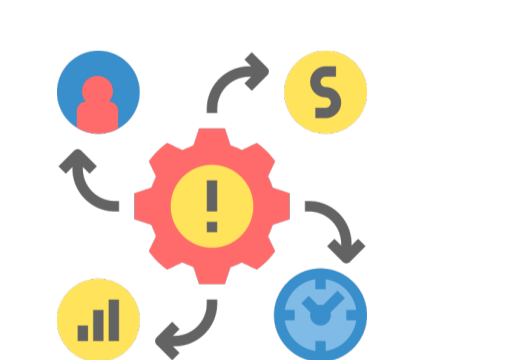
- When asked to choose from the listed factors that can make them stay or leave any e-commerce out of 38, product details got 31, easy navigation 30, aesthetics 23 and value of content 22 are some majority voted factors.
- In the open question for expectation, most mentioned factors emphasised personalisation, Product details and navigation.

**Usability testing** followed with think out loud method and user interviews (sample n=7) which were recorded and analysed later. The data showed many challenges in D2C sites like:

- 43% user on site 1 and site 2 disagree over operability and good navigation of the website.
- 59% user on site 1 disagree that there is precise product details.
- In qualitative finding four users reported issue in understanding website easily on site 1 and site 2

All the identified issues were given a term and then the severity of those issue were analysed on the basis impact, persistence and frequency. Considering the most sever issues and user expectation the study has concluded a list of UX recommendations that can help future designers and developers in creating a usable D2C site.

## GOAL, QUESTION, METRIC (GQM MODEL)



Effectiveness

If user can complete task with minimum problems and without any command?

Navigation  
Understandability  
Operability



Efficiency

How fast a user can complete the task with minimum number of actions?

Learnability  
Aesthetics



Satisfaction

How does user feel about the website design, does it fulfil the requirements?

Product details  
Value of content



Purchase intention

What are user's concerns that affects purchase decision?

Credibility  
Telepresence  
Interactivity

## CONCLUSION

After rigorous research on D2C sites and observing user behaviour towards these sites through multiple ways:

- Users are noted to pay much attention to the personalised experience on D2C compared to B2C.
- Users also showed some trust issues; they trusted D2C sites more with the product than the reviews, as many abandoned websites to check reviews on other platforms.
- Brand image and aesthetic were seen affecting most on purchase intention as users emphasised presentation of the brand and product is different on D2C sites from large e-commerce.

Credibility and telepresence can not be judged as no real purchase was made and website is used only single time which makes it hard to comment about empathy