# Investigating Accessibility Challenges and Opportunities for Users with Low Vision Disabilities in Customer-to-Customer (C2C) Marketplaces

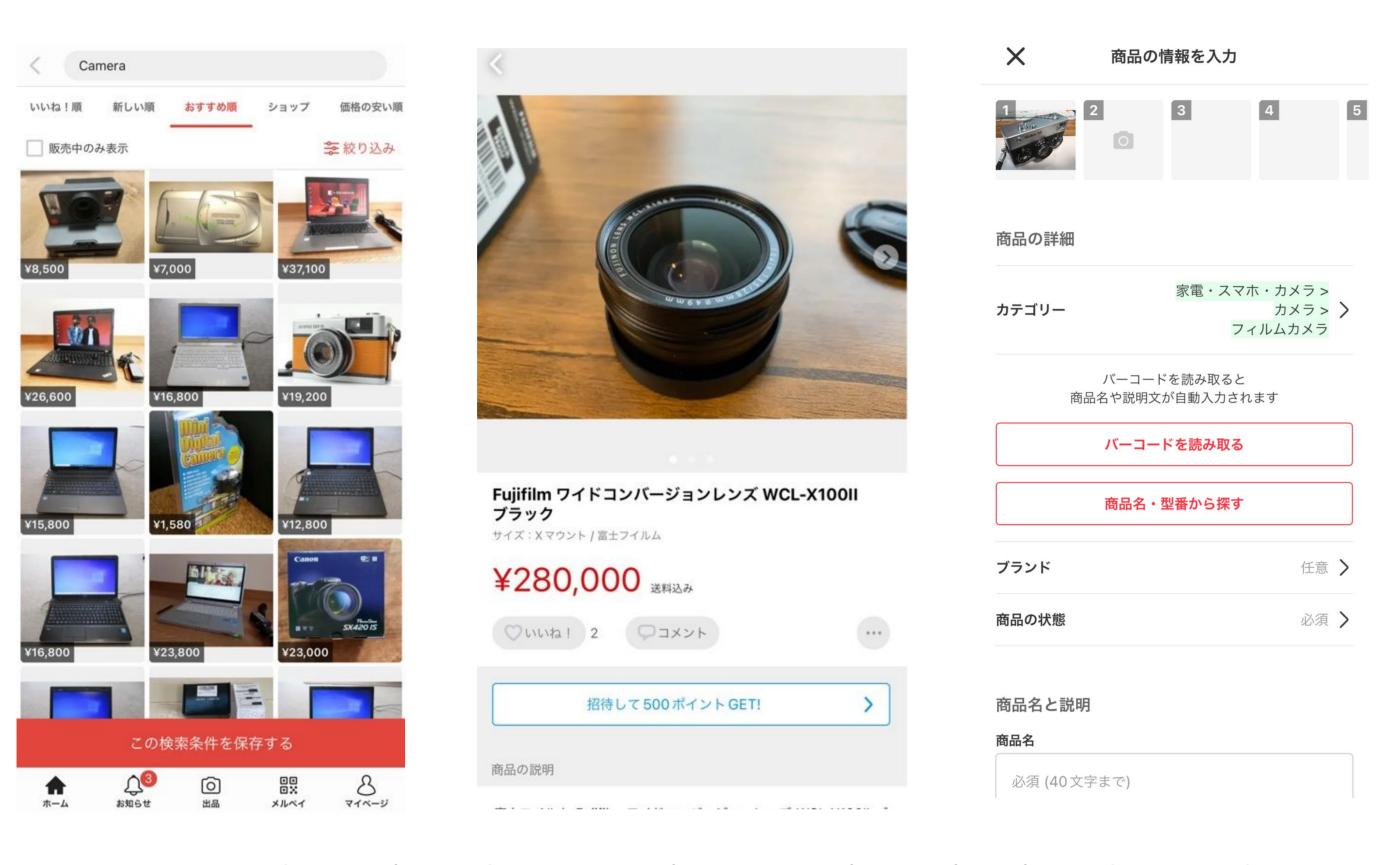
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#### Introduction

Previous studies have shown that online shopping is common among users with vision disabilities, however little is known about their experiences in Customer-to-Customer, or C2C, platforms where users act both as buyers and sellers.

Compared to business-to-customer e-commerce, C2C marketplaces expect users to create item listings (picture, description), handle price negotiations, as well as shipping and packaging, which results in potential accessibility issues.



Examples of user interface seen in Mercari application (from left to right): browsing, item listing (buying), creating a listing (selling)

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Nagatani, Y. et al. (2022). How Visually Impaired People Use Information Media and E-Commerce in Japan.

### **Study Method**

The goal of our study was to understand what accessibility issues are experienced by users with low vision disabilities that are unique to C2C marketplaces.

We designed a study which features a combination of questionnaires, where we asked users about their daily lives, shopping preferences, and prior C2C experiences, and follow-up online interviews, where participants tried using Mercari C2C marketplace app in three common scenarios: browsing, buying, and selling online.

### Results

We recruited 12 participants (4 male, 8 female), aged 27-58 (mean = 43.25, SD = 10.393). The participants had varying degrees of visual impairments. The resulting feedback can be divided into buyer and seller side of user experience.

**Buyers** reported issues with:



Poor image quality (lighting, contrast issues)



Product descriptions unreadable or lacking information not visible in the photo





Challenges with picture taking and filling out product information



Lack of accessible item packaging and packing instructions for shipping





Regular photo

Canon concess





Poor lighting

Poor color contrast

Multiple items in one image



Barely visible scratches and dust





Difficulty choosing the right size of packaging materials

## **Discussion and Conclusion**

Our initial investigation has shown several opportunities for improvement of buying and selling experience in C2C marketplaces for users with low vision disabilities:

- Product Listing Accessibility Guidelines
   can be introduced to inform sellers on how
   to make their item listings (pictures,
   description) more accessible
- Offline Accessibility such actions as inspecting product condition, packing and shipping could be made more accessible by introducing applications with packaging instructions or remote guidance, as well as item size and condition estimation assistance.
- Opportunities for Future C2C Platform
   Design since C2C marketplaces have a
   strong social and community aspect to
   them, it is possible to incentivize users
   further to create accessible content or
   provide assistance through gamification or
   crowdsourcing.

Full article on R4D blog







