## 2016 Proceedings

## Vancouver, British Columbia



## Factors Affecting the Intention to Participate in Apparel Crowdsourcing

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Keywords: Chinese consumers, co-creation, crowdsourcing, preference

Introduction. Crowdsourcing, outsourcing of an organizational task to an undefined 'virtual' crowd, has been broadly used by companies to harness the information, expertise, and collective intelligence of potential customers at different stages of the product lifecycle (e.g., product development, product launch) to refine offerings, and predict market preferences (Saxton, Oh, & Kishore, 2013). Websites such as Threadless.com and BetaBrand.com are good examples of apparel companies utilizing crowdsourcing in their product development processes. This co-creation process often results in reduced cost; increased efficiency and effectiveness for the company; products that better fit consumers' needs; and consumers' engagement with the brand (Hoyer et al., 2010). It helps designers to gather feedback and reduce the risk of failure. However, many retailers who adopted crowdsourcing have failed because participation did not reach the critical mass. To attract and engage the crowd and co-create value for participants and the brand, careful planning is needed. Therefore, the purpose of this study is to examine factors driving individuals to use a crowdsourcing platform from a perspective of their clothing interests.

Supported by co-design literature (e.g., Fiore, Lee, & Kunz, 2004), the present researchers proposed that the individuals' ability to express their preferences (i.e., their ability to articulate and clarify what they want in terms of clothing) and their tendency to experiment with appearance (i.e., one's enjoyment and experimental attitude with trying on new clothes for the sake of an experience) will affect the perceived ease of use of a crowdsourcing web-platform, enjoyment from performing crowdsourcing tasks on the platform, and the fit between their own clothing preferences and the crowdsourcing tasks (preference fit). When an individual can well express her/his interests and preferences in clothing, she/he might find more enjoyment from the crowdsourcing tasks and perceive them better fit with her/his clothing interests. The present researchers also proposed that ease of use, enjoyment, and preference fit will affect an individual's intention to participate in crowdsourcing through the platform, leading to willingness to pay a premium.

**Methods.** With the assistance from a reliable market research company, 444 usable responses were collected with an online survey from female consumers across China whose age ranged from 18 to 66 years old. The sample was drawn from the Chinese consumer market because it has been rapidly expanding, and many brands are trying to develop new product lines that meet the market's preferences. Participants provided demographic information and were directed to a crowdsourcing platform, which contained about 30 2D flats of female garments that participants could view, comment on, rate, and use with other garment flats to create a new look on a croquis figure. Participants were then asked to (a) create and share a new look by combining multiple garment flats, (b) browse the looks created by other users and provide comments, and

(c) rate the looks created by other users. Participants then completed the rest of the survey which addressed their clothing interests and perceptions of the platform and resulting product designs.

**Results.** Results from a confirmatory factor analysis showed a good fit of measurement models ( $\chi^2$  (515) = 1212.40, p < .001; CFI = .95; NFI = .92; RMSEA = .06). The composite reliability of the constructs were all above .89, and the Cronbach's alpha coefficients ranged between .88 and .96, confirmed the reliability of the measurement. Structural equation model testing of our path model revealed a good fit ( $\chi^2$  (515) = 1350.91, p < .001; CFI = .94; NFI = .91; RMSEA = .06, SRMR = .06). Experimenting with appearance had a significant influence on ability to express preference ( $\beta$  = .67, p < .001), a weaker but significant effect on preference fit ( $\beta$  = .11, p = .01), but had a non-significant influence on perceived enjoyment ( $\beta$  = -.02, p = .61). The results supported the relationships between ability to express preference with perceived ease of use of the platform ( $\beta$  = .81, p < .001), enjoyment ( $\beta$  = .89, p < .001), and preference fit ( $\beta$  = .85, p < .001). As predicted, perceived enjoyment and preference fit had positive and significant effects on intention to use the platform ( $\beta$  = .25, p < .001;  $\beta$  = .60, p < .001, respectively). Interestingly, ease of use did not have significant influence on intention to use the platform. Significant relationships were found between intention to use a platform and willingness to pay a premium price for products available through the platform ( $\beta$  = .73, p < .001).

**Conclusions.** The findings of this study show that an individual's ability to express preferences is a crucial factor leading to perceived ease of use of a crowdsourcing platform, enjoyment, and preference fit, and that enjoyment and preference fit directly affect intention to use the platform. This suggests that to attract participation, there should be a consistency between crowdsourcing tasks and the individual's personal interests. Apparel companies using crowdsourcing for their product development processes should ensure that their platform is fun to use and has enough options for users to express their preferences, as well as target those who are genuinely interested in the product categories being crowdsourced. It is noteworthy that although many apparel-related crowdsourcing tasks may be similar to those for mass customization, mass customization often emphasizes the empowerment of customers to enhance individuality (Fiore et al., 2004), whereas crowdsourcing creates value for the collective group (e.g., improvement in product design). Also, individuals will be more willing to pay a premium for the products that they contributed time and knowledge to improve. Designers who choose to launch their businesses through crowdsourcing websites should consider whether the website audience had the tendency to experiment with their appearance and the ability to express preferences. This would ensure that designers receive adequate feedback and attract customers who are willing to pay more for the apparel products better fitting their needs.

## References

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