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Exploring consumption intentions of customized apparel

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The online shopping experience promises to become more interactive, creative, and social. Emerging digital technologies in the fashion industry could change the dynamics of online garment purchase and garment consumption by enabling consumers to acquire visual information, interact, co-design, and make more educated purchase decisions (Ashdown & Loker, 2010). Assuming a situation in which people are fully technologically enabled to be involved with the creation of their garments, we had several research questions: Would consumers be willing to wear customized garments longer compared with the way they wear other garments that they purchase? How would integrated technologies affect consumers' choices about the number of the garments they buy and the way they consume them? Would using integrated technologies change the meaning of clothing? How would consumers perceive the process of using these integrated technologies to design customized clothing for themselves?

Our study was designed to examine consumers' intentions to consume customized garments acquired through emerging technologies for the apparel industry. 3D body scanning, a virtual try-on software with tools that make it possible to actually design or modify garments, and online social media to share information with and receive information from peers before acquiring these garments were identified as integrated enabling technologies for mass customization in the apparel industry. It should be noted that the customized garments made using these technologies would be different from general custom-made garments, as more than one enabling technology would be working together to involve users in designing a product and making a purchase decision. These differences in involvement and communication could contribute to a different relationship between the customized garments and consumers.

We conducted a qualitative study to explore behavioural intentions of potential users, and gain a deeper understanding of an emerging area. Considering the terminology, current level of the technology interface, and the concept of using enabling technologies to design garments, we recruited 160 participants with apparel design knowledge. We divided participants into two groups (intervention and control), in a stratified manner, to explore the impact of social messages containing information both on sustainability and on possible uses of the technologies for customized garment creation and for sharing virtual designs with others. The intervention group viewed a 10-minute video, and the control group was given only brief written definitions and Page 1 of 2

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screenshots from the video. Intervention and control groups responded to four open-ended questions about the customized garments and the integrated technologies in an online survey. These open-ended questions were then analysed to gain insight into participants' beliefs. To find the emergent themes related to the participants' thoughts about their willingness to use integrated technologies and their end products, we analysed the qualitative data, by applying the constant comparative method. First, we obtained codes for each question and each group. Each time a text was coded, it was compared with all the texts that had already been coded in the same way. Similar codes were combined into one code. While applying the method, we put aside previous knowledge, expectations, and prejudices to let the codes emerge from the data (Glaser & Strauss, 1967). After coding responses, we calculated frequencies for the research questions. Next, we reduced these codes to generic categories as described by Ryan and Bernard (2003).

We examined the responses to the open-ended questions in light of four categories: technology, garment design and use, perceptions of customized garments, and environmental concerns. The integrated technology itself was perceived quite positively and as helpful to developing a more functional and meaningful wardrobe. Respondents viewed integrated technologies as efficient, as easing decision making, as enabling, as accurate and flexible, as potentially saving resources, and also as inspiring users to update one another about designs and to obtain their peers' feedback. Responses showed that the intervention-group participants perceived technology as an enabler (increasing knowledge and awareness of the products, involving users, and strengthening their design skills), and they stated that they would plan to use these garments frequently and for many seasons. This study presented an important initial attempt to conceptualize possible changes in consumption patterns through the use of technologically enabled fashion systems. In addition, the results implied a relationship between garment design and use, and perceived garment characteristics in a custom-garment context.

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