A Call for Inclusion of Human Centered Design Framework into Apparel Design Curriculum

Andrew Zimbroff*
University of Nebraska Lincoln, USA

Human Centered Design (HCD) is a design framework used to develop solutions to problems experienced by humans. It focuses on an end-user (i.e., who you are designing a solution for) and incorporates their input at multiple stages throughout the design process. These tools fit loosely into an overall, iterative timeline, which comprises a comprehensive design process. HCD has been applied successfully in diverse settings within academia, industry, and government [1]. Because consumers often have strong personal preferences for the clothing they wear, this methodology can also be used to effectively design apparel for these consumers. Therefore, students preparing for careers in apparel design should be trained in the use of this framework, which will augment their ability to design apparel for their customers.

Customers for apparel are diverse, as are the reasons they choose to purchase one garment over another. One of the only ways to learn what these customers want from the garments they buy is to get their input directly (otherwise, a designer is just making educated guesses). The HCD framework includes many different tools a designer can use to "empathize," or learn from a viewpoint other than themselves. These tools take the guesswork out of apparel design, and help designers work intentionally to learn about their customers and create garments these customers will want and ultimately buy [2].

Further, these needs can be quite complex, and most customers have multiple "wants" for a garment, all with varying levels of importance. It can be overwhelming for a designer to try and understand all of these customer needs and determine which are most important to address when designing apparel. HCD principles help designers navigate this ambiguity -- the framework also includes tools to take raw input from end-users and synthesize this large volume of information into a single, actionable statement for solution ideation.

Poorly designed apparel can be an especially expensive mistake for the businesses that produce them. Unsold inventory can be disruptive to a company's cash flow and supply chain logistics. Further, it can take a long time to design, manufacture, and ship an improved product to customers. HCD practices can reduce the likelihood of designing products that will ultimately go unsold to customers. Rapid prototyping and testing tools included in this framework allow designers to collect user feedback before shipping a product and can identify product modifications that will make a garment more appealing to customers. This presents an additional business case for companies to have their designers employ an HCD framework when designing new products.

Human Centered Design is not completely foreign to the apparel design industry. In my work with clothing companies, I have met designers who employ some HCD techniques during their design process. I have also encountered companies that attempt to gain input from potential customers during the design process. However, these encounters seem to be exceptions rather than the norm for apparel designers. Further, I have observed some companies that will employ a single technique, or only a small part of the HCD process. While this piecemeal approach can provide some benefit, utilizing a comprehensive HCD timeline will lead to significantly more benefit for garment design. In order to train the next generation of apparel designers for career success, there needs to be a more comprehensive, intentional effort to incorporate HCD principles into curriculum for students.

Acknowledgement
None.

Conflict of Interest
No conflict of interest.

References
1. dschool.stanford.edu/our-impact.
2. dschool.stanford.edu/about.