

FABRICATING CHANGE: INVESTIGATING SUSTAINABLE FIBER ADOPTION IN FASHION COLLECTIONS

Özgür Ceylan¹, Nesligül Kılıç¹, Emel Aydın¹, Irmak Taş¹, Neslihan Ak², Elçin Küçükerdem²

¹ Eskişehir Technical University, ² Mavi Giyim Sanayi ve Ticaret A.Ş.
ozgurceylan@eskisehir.edu.tr

Abstract: Sustainability has become a crucial aspect of various industries, including the fashion and textile industry. To address the significant environmental and resource depletion problems in the textile lifecycle, apparel manufacturers and retailers are exploring sustainable manufacturing strategies. One of the key areas of focus is integrating sustainable fibers into their production processes.

In this context, this study delves into the sustainability endeavors of a prominent fashion brand inspired by material innovations, focusing on its utilization of sustainable fibers including PrimaLoft, EcoVero, and Refibra within dedicated collections. PrimaLoft, EcoVero, and Refibra are three examples of sustainable fibers that have gained popularity in recent years [1]. PrimaLoft is a sustainable fiber that is known for its insulation properties. It is made from 100% recycled plastic bottles and offers excellent thermal efficiency while reducing waste in the environment [2]. EcoVero, on the other hand, is a sustainable viscose fiber that is derived from certified renewable wood sources. It is produced using an eco-responsible production process that minimizes emissions and water pollution [3]. Refibra is another sustainable fiber that combines recycled cotton scraps with wood pulp sourced from sustainably managed forests. The resulting fiber has a significantly lower environmental impact compared to conventional cotton and reduces waste in the fashion industry. These sustainable fibers offer numerous benefits in terms of reducing environmental impact and promoting circularity in the fashion industry [4].

Employing qualitative methodology, specifically a case study design, the study scrutinize the brand's sustainability approach. Data acquisition entails participant observation and document analysis, with a particular emphasis on examining written and visual materials relevant to the

phenomenon under investigation. Three of the authors, integral members of the brand's design team, partake in participant observation, facilitating an organic immersion into the collection development process. This insider perspective enriches the understanding of sustainability practices within the brand's operational framework.

The results demonstrate that, by using fibers such as PrimaLoft, EcoVero, and Refibra, the brand contributes to the reduction of waste and carbon footprint. This study provides valuable insights into the brand's resolute dedication to sustainability practices, positioning it as a pioneering force within the fashion industry's sustainability landscape.

Keywords: *Primaloft, ecovero, refibra, sustainability, textile waste.*

REFERENCES

- [1] Shen, B., Li, Q., Dong, C., & Perry, P. (2017). *Sustainability issues in textile and apparel supply chains*. *Sustainability*, 9 (9), 1592.
- [2] <https://primaloft.com/technology/>
- [3] Venger, J., et al. *Natural Fibers and Fiber-based Materials in Biorefineries*. Status Report, 2018.
- [4] Piribauer, B., Bartl, A. *Textile recycling processes, state of the art and current developments: A mini review*. *Waste Management & Research*. 37 (2) 112–119, 2019.