Best Practices in Engineering Activities within New Product Development at Apparel Companies

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Abstract

Given the increased global demand for consumer goods and the advent of multidisciplinary product development, companies that make products have been competing for consumers by developing products that are more and more innovative. Arguably, large technical apparel companies are inherently on the forefront of this innovation, as they (1) put out product seasonally, the consistency of which requires formalized product development processes, (2), require focus on multidisciplinary development (materials, pattern-making, apparel design, testing, etc.) in order to create holistically desirable products, and (3) must put out product that is on-trend and uses advanced performance materials. However, very little research has been conducted that explores the product development processes at technical apparel companies, such that their approach to new product innovation can be clarified and potentially applied in the development of other types of products.

This work seeks to examine and understand the role of both product innovation and engineers in large, distributed technical apparel companies. To accomplish this goal, an initial benchmarking study was undertaken, involving interviewing stakeholders at multiple, prominent technical apparel companies in order to understand the organizational structure and communication in new product development, and also to explore the role of engineers (or engineering tasks) within new product development. The results of this study show variation in organizational structures at these companies when compared to a traditional consumer goods manufacturer, particularly in the roles of engineers throughout the process.

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