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Analysis of Apparel Structural Characteristics to Determine Effects on Fit, Performance, and Cost of Womens' Athletic Shirts

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Customer serviceability relies on grasping the overall apparel construction and structural characteristics and how it affects the garment's performance and fit. Customers unconsciously ignore the importance of the garment construction and how various elements such as laundering, structural traits, country of origin, and the cost to manufacture affect it. The purpose of this project was to determine how apparel construction affects fit, performance, and cost of a garment.

Women's athletic shirts from three different stores were analyzed for construction, sizing and fit, and cost. The garment labels were analyzed for country of origin, description of the labels, fiber content, permanent care requirements, the RN number, and any extra information. Sizing specifications were analyzed by taking measurements in the bust, waist, hip, and sleeve length of the shirts to ensure a good fit. We measured the original unwashed sample and the washed sample and compared the measurements to their company's standards.

The costing sheet accumulated all the costs associated with the products including the material (fabric), trimmings, labor, packaging, duties/taxes, and indirect costs. Construction characteristics were analyzed to determine the techniques used for the stitch and seam types. Fit and design characteristics were and analyzed for their shaping methods. Extra specifications were noted as well.

The construction of the shirts revealed that BCG had the cheapest wholesale selling price compared to Under Armor and Danskin Now. The garment sizing data revealed that BCG had the least amount of shrinkage. Waist measurements for the original and washed shirt did not meet the standards. Each garment had a printed-on label in the inner back of the shirt that displayed the brand, size, and country of origin as well as a woven care label attached to the side.

In conclusion, after analyzing all the data charts BCG was the best option for meeting customer serviceability.