

## **Competitive Edge Through Automation: A Study on the Sri Lankan Apparel Industry**

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The Sri Lankan Apparel Industry is one of the significant contributors to the country's economy as it generates considerable amount of export income. Tasks in the apparel industry which involve a higher amount of labour involvement have been replaced by automated technologies such as Robotics, Computer Aided Designing and Computer Aided Manufacturing technologies in order to achieve a competitive position in the industry. The objective of the study is to examine the impact of automation on achieving a competitive edge in the Sri Lankan apparel industry. Process automation, intelligent manufacturing and the global customized production were used in this study to achieve the objective by using cost advantage as the mediator. This study employed the deductive approach, and quantitative data were utilized to achieve the objectives. A questionnaire was distributed among 65 respondents selected to gather quantitative data. An exploratory research was conducted by the researchers conducting three interviews with industry experts, which helped to design the overall study. The researchers analysed the effect of the mediator through the Sobel test. As per the data analysis conducted in this study, it was found that there is a correlation between process automation, intelligent manufacturing, and customised production with competitive advantage, and there is a strong relationship between cost advantage and competitive advantage. The qualitative findings of this research conclude that apparel companies should invest in automation to gain a popularity in the global market. Thus this study proves that automation should exist in a developing country like Sri Lanka to achieve a competitive advantage.

**Keywords:** *automation, competitive advantage, apparel industry, cost advantage*