



**School of Textile and Design**  
**University of Management and Technology**

Bachelor Thesis

IMPLEMENTATION OF SIX SIGMA TO REDUCE THE REJECTION  
RATE OF GARMENT IN STITCHING DEPARTMENT OF THE  
APPERAL INDUSTRY

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## Abstract

Without reducing the rejection rate of the manufactured products it has become impossible for an organization to earn profits in this global competition. Customer satisfaction and financial conditions of any company have great impact upon the rejection rate of any product. Rejection rate effects on profit margin of a product and meanwhile it also decreases the quality of a product. Companies are struggling to reduce their rejection rate during the process of manufacturing through different quality tools, checking and inspection during different operations and implementing changes and strict quality checks. The major problem faced by Crecent bahuman Apparel textile mills is the high rejection rate of garments due to different number of defects during sewing. Now as we know the high rejection rate has become the big problem for the industries as it is creating customer dissatisfaction and financial loss to organization so industrial point of view this project is very important. The six sigma methodology the reduction in the rejection rate is successfully attempted to prompt-out root causes along with a number of factors. Where high rejection rate stitched garment was recorded it was decided to implement the DMAIC methodology in sewing department. Our research focuses on the implementation of the six sigma. To introduce DMAIC process of Six Sigma is the main aim of our study. In garment manufacturing industry the problem was identified practically. To eliminate or reduce the problems it was measured to identify the extent of the problem. Potential causes of problem was identified in the analyze phase. Eventually, it was made sure that the improvements being made actually work and in control phase the work being done previous phases properly implemented and sustained for providing the desired results. After that we did statistical work for our project using Microsoft Excel 2010 and Smart Draw and after that to reduce the rejection rate and to provide the significant financial benefit an optimum solution was suggested along with area of improvement.



## Declaration

This piece of work is dedicated to:

- ❖ The inhabitants of this planet who are living below the poverty line.
- ❖ Those people who are the victims of natural calamities and human disasters.
- ❖ Those people who were forced to leave their homelands and are living as migrants on foreign lands.
- ❖ Those who bore the brunt of wars and got wounds which never healed.
- ❖ Those people who are deprived of basic necessities such as clean drinking water and medicines.
- ❖ Those who are born with deformities or developed medical anomalies.



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