EFFECT OF THE LEVEL OF STATISTICAL PROCESS CONTROL (SPC) PRACTISES ON QUALITY PERFORMANCE

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DECLARATION

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ABSTRACT

Statistical process control (SPC) is a powerful technique for improving process quality by systematically eliminating special or assignable causes of variation. SPC is not a simple and automatic task. The successful application of SPC requires focused to following ingredients. Such as management commitment, usage of control charts ,identification of critical measurement , operator responsibility ,process definition ,training for SPC ,teamwork ,organizational cultural change ,update the knowledge of process ,audit the SPC practices and performance ,computers and SPC software packages.

The purpose of this study is to investigate the level of SPC practices and the impact on organizational performance in terms of quality. The study mainly focus to lean applied apparel manufactures in Sri Lanka to analysis out the level of SPC practicing as well as the effect of SPC to the performance of key quality factors. The study was conducted utilizing the statistical process control integrated with quality performance questionnaire which was previously tested by researchers.

This study describes the process and outcomes of the 11 ingredients underlying the SPC practices. Data collected form 20 lean implemented apparel industry in Sri Lanka and data analyzed to find the level of statistical process control practicing and the quality performance. Used SPSS software calculated standard deviation, correlations and the mean value. Further used to Excel sheet to analyze collected the data.

The collected data was analyzed according to company vise to measure the SPC practicing level. The key quality performances were analysis with level of the SPC practicing. The result was discussed according to the collected data and also discussed.

According to the result the lean applied apparel manufacturer are practicing SPC 78.40 % and there is positive trend in key quality performance with SPC practicing level.

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