EVALUATING THE EFFECTS OF 5S SYSTEM ON MACHINE AND FABRICATION SHOPS IN CAVITE

THESIS

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Undergraduate Thesis
Submitted to the Faculty of the
College of Economics Management and Development Studies
Cavite State University
Indang, Cavite

In partial fulfilment of the requirements for the degree Bachelor of Science in Business Management



ALIAH GAIL E. VIDALLO IRISH D. ESCARCHA June 2019

ABSTRACT

ESCARCHA, IRISH D. and VIDALLO, ALIAH GAIL E., Evaluating the Effects of 5S System on Machine and Fabrication Shops in Cavite. Undergraduate Thesis. Bachelor of Science in Business Management Major in Operations Management. Cavite State University, Indang, Cavite. August 2018. Adviser: Engr. Gilberto S. David.

The study was conducted to evaluate the effects of 5S on machine and fabrication shops in Cavite. The factors considered in identifying the significant relationship of 5S on the machine and fabrication shops were the quality work performance, productivity of the business, and the safety in the workplace. The machine and fabrication shops included were belong to these towns: Bacoor City, Dasmariñas City, General Trias, Imus, Naic, and Trece Martires City Cavite. The participants of the study were the owner of the business who were responsible for implementing the 5S program and had concrete knowledge and experience practicing this 5S program.

Slovin's formula was used to determine the total sample size of the study. A total number of 100 machine and fabrication shops were surveyed using non-probability sampling technique to select the participants.

Through the use of survey questionnaires, data were gathered from the target participants of the study. Spearman rho technique was used for the correlation analysis between 5s and the factors that were considered in the study.

The result of correlation analysis showed how significant 5S system in the machine and fabrication shops in terms of quality of work performance, productivity of the business, and safety in the work place. Through 5s application, business like machine and fabrication shops becomes more competitive and productive; furthermore, it does provide a solid foundation for achieving operational excellence.

A recommendation for future research is to develop a qualitative study to better understand the conditions that influence significant differences in respondents from different states that operate within the same business.

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An undergraduate thesis manuscript submitted to the faculty of the Department of Management, College of Economics, Management and Development Studies, Cavite State University, Indang, Cavite in partial fulfillment of the requirements for the degree of Bachelor of Science in Business Management major in Operations Management with Contribution No.______ Prepared under the supervision of Engr. Gilberto S. David.

INTRODUCTION

Globalization and innovations in technology have immensely increased the level of competition especially in the past two decades. To stay in the business arena every company needs to reach or exceed the customer expectations at lowest possible cost. Improvements and innovation breakthroughs have become a necessity to stay in business rather than just mere tools to improve profitability of a company. Hence, concepts like Six Sigma, Lean Manufacturing, Continuous Improvements, Quality Circles (QCs), and Just-in-Time (JIT) gained popularity. Lean Manufacturing is the hymn of survival and success of any organization through minimizing the waste (Muda). 5S Methodology is one of the basic and the most important tool to implement lean manufacturing. It is a system to regulate the work flow by systemizing the workplace, thus supporting the culture of continuous improvement. In view of globalization and competitive market conditions, todays organizations must embrace new concepts to improve workplace management and to focus on value added activities by eliminating waste in operations. They should adopt new ways of working supported by change of mind set work culture. Good waste management and control can result to improved organizational efficiency, cutting hidden and direct costs,