

EVALUATE THE ELEMENTS THAT CONTRIBUTE TO
THE SUCCESS OF *KAIZEN* IMPLEMENTATION IN
MANUFACTURING SECTOR

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MASTER OF SCIENCE (MANAGEMENT)
UNIVERSITI UTARA MALAYSIA
SEPTEMBER 2012

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MANUFACTURING SECTOR

By

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Thesis Submitted to

Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia

In Fulfillment of the Requirement for the Degree of Master of
Science (Management)

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ABSTRACT

This study aims to investigate the relationship between worker attitude, skill, knowledge, and management support and success of *kaizen* implementation among SRM employees in the manufacturing sector. The relationship between those variables are predicted based on relevant literature, and are tested using survey results from 206 of the SRM employees in Arau, Perlis. Descriptive statistics analysis and inferential statistical analysis are used to analyze the corresponding characteristics of the sample. Reliability of measures is established by testing for both consistency and stability. Pearson's Correlation are used to test the relationships between attitude and success of *kaizen* implementation, skill and success of *kaizen* implementation, knowledge and success of *kaizen* implementation, and management support and success of *kaizen* implementation. Overall results indicated that all the independent variables i.e. attitude, skills, knowledge and management support were significant influence to the success of *kaizen* implementation. Hypothesis one is accepted: There were positive relationships between attitude and success of *kaizen* implementation. Hypothesis two is accepted: There were positive relationships between skills and success of *kaizen* implementation. Hypothesis three is accepted: There were positive relationships between knowledge and success of *kaizen* implementation. Hypothesis four is accepted: There were positive relationships between management support and success of *kaizen* implementation. Attitude has strong influence contribute to the success of *kaizen* implementation. Skills and knowledge has moderate influence. However management support has less influence contribute to the success of *kaizen* implementation.

ABSTRAK

Tujuan kajian ini adalah untuk mengkaji sejauh mana hubungan di antara sikap, kemahiran, pengetahuan, dan sokongan pengurusan dan kejayaan pelaksanaan *kaizen* di kalangan pekerja SRM dari segi perspektif sektor pembuatan. Hubungan di antara pemboleh ubah-pemboleh ubah berikut adalah berdasarkan ramalan literasi-literasi lepas dan hubungan ini diuji dengan melakukan kaji selidik terhadap 206 pekerja SRM di Arau, Perlis. Ujian ‘Descriptive statistics’ dan ‘Inferential statistics’ digunakan untuk menganalisa faktor ‘demography’. Ujian ‘Reliability’ digunakan sebagai langkah untuk menguji konsisten dan kestabilan data. Ujian ‘Pearson’s Correlation’ digunakan untuk menguji hubungan di antara pemboleh ubah bebas seperti sikap, kemahiran, pengetahuan dan sokongan pengurusan dengan kejayaan pelaksanaan *kaizen*. Keputusan keseluruhan menunjukkan bahawa semua pembolehubah bebas iaitu sikap, kemahiran, pengetahuan dan sokongan pengurusan memberi pengaruh penting kepada kejayaan pelaksanaan *kaizen*. Hipotesis satu diterima: Terdapat hubungan yang positif antara sikap dan kejayaan pelaksanaan *kaizen*. Hipotesis dua diterima: Terdapat hubungan yang positif antara kemahiran dan kejayaan pelaksanaan *kaizen*. Hipotesis tiga diterima: Terdapat hubungan yang positif antara pengetahuan dan kejayaan pelaksanaan *kaizen*. Hipotesis empat diterima: Terdapat hubungan yang positif antara sokongan pengurusan dan kejayaan pelaksanaan *kaizen*. Sikap mempunyai pengaruh yang kuat menyumbang kepada kejayaan pelaksanaan *kaizen*. Kemahiran dan pengetahuan yang mempunyai pengaruh yang sederhana. Walau bagaimanapun sokongan pengurusan telah pengaruh kurang menyumbang kepada kejayaan pelaksanaan *kaizen*.

ACKNOWLEDGEMENT

Alhamdulillah. My highest gratitude to the Almighty Allah s.w.t. for the blessings in giving me strength, good health and opportunity to complete this task.

First of all, I would like to express my gratitude and greatest appreciation to my supervisor; Dr Amlus bin Ibrahim for his encouragement, guidance, ideas, critiques and comment throughout the period in completing this research.

I wish also to express my gratitude to my wife, Hariati bte Khalid, and my children, Arifah Husna, Fatin Nublah, Nur Insyirah, Nurul Nadhirah and Muhammad Zuhaily Hazazi for their support, encouragement and patience along the way of the journey in completing my master course.

Lastly to the SRM staffs who have been supporting me in gathering data, sharing information, knowledge and idea in order to make this research worthy and useful.

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LIST OF ABBREVIATION

SRM	Shorubber (M) Sdn Bhd
CPI	Continuous Process Improvement
QCD	Quality, Cost and Delivery
KSA	Knowledge, Skills, Attitude
KKSA	<i>Kaizen</i> , Knowledge, Skills, Attitude
PDCA	Plan – Do – Check – Act
SDCA	Standardize – Do – Check – Act
IV	Independent variable
DV	Dependent variable

CHAPTER 1

INTRODUCTION

1.1 Introduction.

Kaizen is a Japanese word that has become common in many western companies. The concept of *Kaizen* (or continuous improvement) has received much attention as a key to Japan's competitive success (Imai, 1986). The way of thinking named *Kaizen* as "Japanese style of quality management" became an object of interest of Europe and American industrialist, when Japanese economy had success in 80-ies of the XXth century. (Wawak, 2004)

Kaizen is a compound word involving two concepts: Kai (change) and Zen (for better) (Palmer, 2001). The term comes from Gemba *Kaizen* meaning continuous improvement (CI). Continuous improvement is one of the core strategies for excellence in production, and is considered vital in today's competitive environment (Dean & Robinson, 1991). It calls for endless effort for improvement involving everyone in the organization (Malik & Ye Zhuang, 2006). *Kaizen* strategy is the single most important concept in Japanese management – The key to Japanese competitive success; *Kaizen* means 'on-going' improvement involving everyone – top management, managers and workers. (Imai, 1986)

Kaizen events are often associated with lean production (Womack et al, 1990), and published practitioner account suggest that they can result in substantial improvement in technical system outcomes, (such as lead time, work process, inventory and productivity) (Kosanda & Faris, 2004) as well as in sosial system outcomes, such as employee knowledge, skill and attitude, aligned with continuous improvement. The strength of *kaizen* events improved the technical system and social system in an

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