



**UNIVERSITI PUTRA MALAYSIA**

**INFLUENCE OF CRITICAL SOFT FACTORS ON QUALITY IMPROVEMENT AND  
ORGANIZATIONAL PERFORMANCE**

**MUHAMMAD MADI BIN ABDULLAH**

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**INFLUENCE OF CRITICAL SOFT FACTORS ON QUALITY IMPROVEMENT  
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**MUHAMMAD MADI BIN ABDULLAH**

**DOCTOR OF PHILOSOPHY  
UNIVERSITI PUTRA MALAYSIA**

**2007**



**INFLUENCE OF CRITICAL SOFT FACTORS ON QUALITY IMPROVEMENT  
AND ORGANIZATIONAL PERFORMANCE**

**By**

**MUHAMMAD MADI BIN ABDULLAH**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,  
In Fulfillment of the Requirement for the degree of  
Doctor of Philosophy**

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia  
in fulfillment of the requirement for the degree of Doctor of Philosophy

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**MUHAMMAD MADI BIN ABDULLAH**

**March 2007**

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This study was to determine the relationships of selected variables, namely management commitment, customer focus, employee involvement, training and education, reward and recognition and supplier relationship in predicting quality improvement (QI) and their relationships to organizational performance (OP).

The survey research provided a method of empirical verification utilizing stratified and simple random sampling to determine the relationships between variables at the time of study. The sample consisted of 255 firms from the electrical and electronics sector. The selection of respondents involves a complete list of electrical and electronics firms within West Malaysia which was obtained from directory list Federation of Malaysian Manufacturers- Malaysian External Trade Development Corporation (FMM-



MATRADE). The quantitative data were subjected to various descriptive-correlation statistical analyses, multiple regression, mediation analyses, and structural equation modeling.

In this study, the findings support the relationship between the independent variables and QI. Five variables, namely management commitment, customer focus, employee involvement, training and education, and reward and recognition explained 93.8% ( $F = 748.342$ ,  $p = 0.0001$ ) of QI. Only four variables, namely management commitment, customer focus, employee involvement, and reward and recognition significant predictors of organizational performance, and collectively these variables explained 25.6% ( $F = 15.636$ ,  $p = 0.0001$ ) of the variation in OP. QI is a significant predictor in determining OP. The effect of the QI as a mediator between all the exogenous variables and OP is found. Reward and recognition exerts the strongest total effect (0.688) on OP whereas customer focus emerged as having the second strongest total effect (0.588) on OP.

The implications as well as the limitations of the study were discussed in detail. Future research suggestions were advocated, in particular, the replication of this study to other industry. Further work is also needed to develop a new model and identify the relationship between the critical soft and hard factors and their joint contribution to QI and OP. The implications as well as the limitations of the study were discussed.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**PENGARUH FAKTOR-FAKTOR INSANIAH KE ATAS PENAMBAHBAIKAN  
KUALITI DAN PENCAPAIAN ORGANISASI**

Oleh

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**Mac 2007**

**Pengerusi: Profesor Madya Jegak Uli, PhD**

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Kajian ini dijalankan untuk mengkaji hubungan antara komitmen pengurusan, fokus pelanggan, penglibatan pekerja, latihan dan pendidikan, ganjaran dan pengiktirafan, dan hubungan pembekal dengan penambahbaikan kualiti dan hubungan kedua-duanya ke atas pencapaian organisasi.

Kajian soal selidik merupakan satu kaedah empirikal untuk menentukan hubungan antara pembolehubah-pembolehubah kajian dengan menggunakan teknik persampelan rawak stratifikasi dan rawak mudah. Sampel kajian merangkumi 255 firma dari sektor elektrik dan elektronik. Pemilihan responden adalah berdasarkan senarai penuh firma yang terdapat di Semenajung Malaysia yang diperolehi dari senarai direktori FMM-



MATRADE. Data yang diperoleh dianalisis dengan menggunakan pelbagai kaedah statistik deskriptif kuantitatif, analisis perantaraan, dan model persamaan berstruktur.

Keputusan kajian menyokong hubungan antara pembolehubah-pembolehubah bebas dan penambahbaikan kualiti. Lima pembolehubah, komitmen organisasi, fokus pengguna, penglibatan pekerja, latihan dan pendidikan, ganjaran dan pengiktirafan menerangkan 93.8% daripada variasi penambahbaikan kualiti. Hanya empat pembolehubah, komitmen pengurusan, fokus pelanggan, penglibatan pekerja, dan ganjaran dan pengiktirafan merupakan pembolehubah yang signifikan dalam menentukan pencapaian organisasi dan ianya menerangkan secara kolektif sebanyak 25.6% daripada variasi pencapaian organisasi. Penambahbaikan kualiti merupakan pembolehubah yang signifikan dalam menentukan pencapaian organisasi. Kesan perantaraan penambahbaikan kualiti di antara kesemua pembolehubah bebas dengan pencapaian organisasi telah ditemui. Ganjaran dan pengiktirafan menunjukkan kesan keseluruhan tertinggi (0.688) ke atas pencapaian organisasi manakala fokus pengguna muncul sebagai faktor kedua yang menunjukkan kesan keseluruhan tertinggi (0.588) ke atas pencapaian organisasi.

Implikasi kajian dan limitasi kajian telah dibincang secara terperinci. Kajian mencadangkan supaya kajian sama dijalankan dalam sektor pekerjaan yang berlainan. Begitu juga kajian terhadap pembentukan model baharu, penentuan hubungan antara faktor-faktor kritikal insaniah dengan faktor-faktor mekanikal serta sumbangan keduanya ke atas pencapaian organisasi dicadangkan di masa akan datang.

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Finally, I remain solely responsible for any errors and shortcomings contained in this study.

THANK YOU ALL!

GOD BLESS YOU

Madi



I certify that an Examination Committee has met on 12<sup>th</sup> March 2007 to conduct the final examination of Muhammad Madi Bin Abdullah on his Doctor of Philosophy thesis entitled “Influence of Critical Soft Factors on Quality Improvement and Organizational Performance” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

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## **DECLARATION**

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

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**MUHAMMAD MADI BIN ABDULLAH**

Date: 27 APRIL 2007



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## LIST OF ABBREVIATIONS

AMOS	Analysis of Moment Structures
CEO	Chief Executive Officer
CFs	Critical factors
CSF	Critical Soft Factors
EFQM	European Foundation for Quality Management
HRD	Human Resource Development
HRM	Human Resource Management
ISO	International Standard Organization
MIDA	Malaysian Industrial Development Authority
MBNQA	Malcolm Baldrige National Quality Award
MNC	Multinational Corporation
NPC	National Productivity Corporation
OD	Organizational Development
OP	Organizational Performance
PDCA	Plan-Do-Check-Act
QFD	Quality Function Deployment
QI	Quality Improvement
QM	Quality Management
SEM	Structural Equation Modeling
SPC	Statistical Process Control
SPSS	Statistical Packages for Social Sciences



TQM Total Quality Management

ZD Zero-Defect



# **CHAPTER I**

## **INTRODUCTION**

### **Introduction to the Study**

Business organizations all over the world including Malaysian organizations have to change and restructure themselves in order to maintain and enhance their competitiveness in the face of fierce global competition, changing markets and technological breakthrough. Increasingly, battles for competitive superiority are being won by achieving outstanding quality, whether from manufacturing or service businesses and customers demand high-quality goods and services (Evans and Lindsay, 2002). Firms may use several strategies for competitive and quality improvement is one way for competitiveness. Therefore, Malaysian organizations would lose ground to competitors if they were not responsive to changes. To compete in the global market, Malaysian manufacturers have long realized that they need to produce quality goods and provide services (Agus and Abdullah, 2000). Even, the former prime minister, Mahathir Mohammad (2001) also echoed the importance of quality improvement in order to improve the quality of products and services to the Malaysian organizations.

The pursuit of organizational effectiveness and success through higher quality in products and services is a dominant theme for organizations throughout the world (Beckford, 1998). Juran (1981), one of the most respected leaders of quality in the twentieth century, suggested that historians would define the past century as the century of productivity and





the next century would be the century of quality. To keep abreast with the current changes, organizations then have no other alternative but to continuously improve the quality of products and services. Commitment to continuous quality improvement is than, become the new way of doing business (Juran, 1981). Therefore, quality improvement plays an important role towards the productivity and performance of an organization. Evans and Lindsay (2002) further reminded us that good quality of goods and services can provide an organization with a competitive edge and good quality also reduces costs due to returns, reworks, inspections and scrap. They further pointed out that good quality can also increase the productivity, profits, and other measures of success in the organization and most importantly, it can generate satisfied customers who reward the organization with continued patronage and favorable word-of-mouth advertising. Overall, quality improvement in organizations is aimed to increase the organizational performance through customer satisfaction.

## **Background of the Study**

### **Global Competition and Challenges**

Business organizations worldwide have responded to the demands of an increasingly competitive and challenging global market. Organizations that are going to stay ahead and gain competitive advantage in this unpredictable and challenging environment are those that are more focused (Goss, Pascale and Athos, 1993; Martin, 1993), fast, flexible and friendly (Kanter, 1994). Therefore, the ever-increasing global nature of the business

