

**THE MOTIVES FOR ISO 9000 CERTIFICATION IN THE MALAYSIAN
MANUFACTURING COMPANIES**

By

ABDALSALAM MOHAMED A.GADER

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia
in Fulfillment of the Requirements for the Degree of Master of Science**

February 2004

DEDICATION

To my parents, wife, who shared me the long months of effort that went into this
thesis

With gratitude and love

Abstract of thesis presented to the Senate of the Univerisiti Putra Malaysia in fulfillment of the requirement for the degree of Master of Science.

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Chairman: Professor. Madya. Ir. Md. Yusof Ismail, Ph.D.

Faculty: Engineering

This study was come to identify the real motives behind ISO 9000 Certification. Towards this goal, a survey of 300 ISO 9000 certified companies was carried out for the Malaysian Manufacturing Companies and to study the motives for ISO 9000 Certification.

The survey also to determine the relationship between the motives and the improvement of seven basic Quality Management Practices such as leadership, information and analysis, strategic planning, human resource management of process quality, quality results and customer satisfaction. The survey was also design to determine the overall benefits gained from certification and the barriers faced during ISO 9000 Certification.

The study revealed that other factors also can influence the performance of ISO 9000 Certification such as the period of time after the company has been certified and size

of company. Factor analysis was applied to identify the main factors in certification motives, benefits, barriers, and QM Practices, and their in-between relationship.

The results indicate that companies which seek certification due to external pressure seem to gain fewer benefits from ISO 9000 Certification. While companies that seek certification for internal needs gain higher benefits through improvement of their human element and internal efficiency.

The results also indicate that early certified companies have experienced greater benefits from ISO 9000 Certification than recently certified companies. There is no evidence that larger companies gain more benefits from ISO 9000 Certification than smaller ones.

Abstract tesis yang dikemukakan Kepada Senat Universiti Putra Malaysia
sebagai memenuhi Keperluan untuk ijazah Master Sains

**MOTIF PENSIJILAN ISO 9000 DALAM SYARIKAT PEMBUATAN
DI MALAYSIA**

Oleh

ABDALSALAM MOHAMED A.GADER

February 2004

Pengerusi: Professor. Madya. Ir. Md. Yusof Ismail, Ph.D.

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Tesis ini mengemukakan hasil kajian bagi mengenalpasti tujuan sebenar di sebalik pensijilan ISO 9000. Untuk mendapatkan hasil kajian, satu tinjauan ke atas 300 syarikat pengeluaran Malaysia yang mendapat pensijilan ISO 9000 telah dijalankan. Tinjauan ini melihat hubungan pemulihan tujuh amalan QM asas seperti kepimpinan, penerangan dan analisis, pelan strategik, pengurusan sumber manusia mengenai kualiti proses, hasil kualiti dan kepuasan pelanggan serta menguji kebaikan yang didapati daripada pensijilan dan halangan yang didapati dengan mendapat pensijilan ini.

Tesis ini juga memperlihatkan factor-faktor lain yang boleh mempengaruhi pencapaian pensijilan ISO 9000, contohnya jangkamasa selepas syarikat mendapat pensijilan serta saiz syarikat. Analisis faktor digunakan untuk memperlihatkan factor-faktor utama dalam motif, kebaikan, halangan dan amaln-amalan QM pensijilan serta hubungan di antara factor-faktor tersebut. Hasil kajian menunjukkan bahawa syarikat-syarikat yang ingin mendapatkan pensijilan kerana tekalan luaran mendapat lebih sedikit faedah daripada pensijilan ISO 9000 berbanding dengan

syarikat-syarikat yang ingin mendapatkan pensijilan kerana keperluan dalaman. Syarikat-syarikat ini telah dapat memperbaiki elemen kemanusiaan serta kecekapan dalaman syarikat mereka.

Hasil kajian juga menunjukkan syarikat-syarikat yang memperolehi pensijilan ISO 9000 lebih awal mendapat faedah yang lebih daripada pensijilan ISO 9000 berbanding dengan syarikat yang baru mendapat pensijilan tersebut. Saiz syarikat juga didapati tidak memberi kesan terhadap faedah yang diperolehi daripada pensijilan ISO 9000 iaitu syarikat yang besar tidak semestinya mendapat faedah yang lebih daripada pensijilan ISO 9000 berbanding syarikat yang kecil.

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May Allah repay all of you with happy lives and successful endeavors.

Abdalsalam Mohamed A.gader

I certify that an Examination Committee met on 16th February 2004 to conduct the final examination of Abdalsalam Mohamed A.Gader on his Master of Science thesis entitled “The Motives for ISO 9000 Certification in the Malaysian Manufacturing Companies” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and University 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 questions 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.

ABDALSALAM MOHAMED A.GADER

Date: 25th April 2004

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CHAPTER 1

INTRODUCTION

1.1 General

Malaysia was one of the early adopters of the ISO 9000 series standards and ISO 9000 registration has grown rapidly over the past decade. In Malaysian context, SIRIM QAS, the largest local certification body has seen the number of certifications rise from around 50 in 1990 to over 2500 in 2002 (SIRIM List of ISO 9000 certified companies). In addition, the government in Malaysia is encouraging local industry to upgrade its operations.

Internal efficiency is often cited as the reason for companies to seek ISO 9000 registration. However, the reason most frequently reported by organization seeking registration to ISO 9000 is to become internally efficient, effective and in turn profitable.

Throughout the world, manufacturing companies in particular have been forced to gain certification to ISO 9000 because of various reasons. Firstly, manufacturing companies, both public and private often require certification to improve internal efficiency. Secondly, to increase their ability to compete their manufactured products in the global market. Thirdly, competitive pressures occur where one enterprise in an industry gains certification and uses it for marketing purposes forces others to follow in order not to be at a perceived competitive disadvantage.

ISO 9000 registration is believed to bring about numerous benefits to organization including providing a foundation for TQM. Commonly cited benefits include: improved communication among employees, cost saving, reduced paperwork, more organized design and output, greater competitive advantage, access to global markets, fewer customer audits, improved productivity, a better trained workforce and increased customer confidence.

An ISO certificate does not guarantee that the processes or the products are of the highest quality, it only states that there is a system in place which provides confidence that the organization will be consistent in their management processes.

1.2 Purpose of the research

The purpose of this research is to ascertain registered organization perceptions of ISO 9000 registration in Malaysia. Although research studies on ISO 9000 implementation have been reported overseas few studies have been conducted in Malaysia. Malaysia's economic environment and business infrastructure differs from that of many other countries. Hence the impact of ISO 9000 on Malaysian organizations may differ from other countries.

In this research an attempt will be made to understand the motives for ISO 9000 certification through examination of Malaysian Organizations which have implemented and maintained a quality system and pursued and gained certifications to ISO 9000. The differences in experiences within different divisions influenced staff attitudes towards the quality system and certification explored. The findings from this study will be compared with other similar studies.

1.3 Problem Statement

The problem under investigation is whether there is relationship between the Motives for ISO 9000 Certification and the Benefits, Barriers and Quality Management Practices of Malaysian listed company. In order to investigate the main problem, the following sub-problems need to be investigated:

1. Have early certified companies experienced greater benefits from quality certification than recently certified companies?
2. Have larger certified companies experienced greater benefits from quality certification than smaller ones?

1.4 Objectives

ISO 9000 is a family of standards that provides a series of guidelines on how to establish a quality system to manage the processes that affect its product or services, the family of standards was first published by International Organization for Standardization (ISO) in 1987 and was subsequently updated in 1994 and 2000. The quality system is required to be documented and employees are expected to follow consistently the documented procedures. After the quality system is implemented, the firms can obtain registration through an audit performed by an independent registrar. The main objectives of this study are:

- 1- to identify the motives behind ISO 9000 Certification.

- 2- to identify the overall certification benefits of ISO 9000 Certification.
- 3- to identify the barriers of ISO 9000 certification.
- 4- to evaluate the relationship between the motives and benefits, barriers and QM Practices.
- 5- to identify the differences based on the companies' size and year of certification and their relationship with benefits and QM Practices.

1.5 Importance/usefulness and potential contribution of thesis

Many companies obtained ISO 9000 Certification because they wanted to use it as a management tool to enhance efficiency. Others were forced to do it, but whether they got it voluntarily or under pressure from customer, they have the value of ISO 9000 Certification. A number of empirical studies have examined the motives for ISO 9000 Certification (Buttle, 1996; Brown et.al, 1997; Gotzamani and Tsiotras, 2002) these studies found the motives plays an important role in explaining their level of performance.

The results of the proposed study will help to assess the relationship between the motives for ISO 9000 Certification and benefits, barriers of ISO 9000 and quality management practices. This will also help business leaders, quality practitioners and governmental authority to determine the future path of ISO 9000 in Malaysia and its relevance in enhancing the operations of a firm.

1.6 Research Work Layout

This section describes the work layout for this research. There are four main phases of layout captured in the PDCA (Plan-Do-Check-Act) Cycle. Figure 1.1 illustrates the flow of the work layout.

The first phase is engaged with the planning for the preliminary research activities like the identification of the places or sources for background study. This also includes the identification of survey population. The second phase was the development of the literature review in areas related to the topic particularly in ISO 9000 concepts, the benefits derived from ISO certification, the reasons for pursuing ISO certification, and total quality management practices. It also includes the design of research tool. The second phase also involves with distribution and data collection. Strategies were put in place to increase response rate. The third phase was on analyzing the raw data and transformation of the data into information. Qualitative and quantitative approaches were utilized upon needs and suitability. Statistical software like SPSS are faster means of data processing, analysis, and transformation to bring about the meaningful patterns it describes. The third phase also involved discussion of results, formulation of conclusion, and statement of recommendation. The fourth phase was the presentation of findings and thesis contribution.

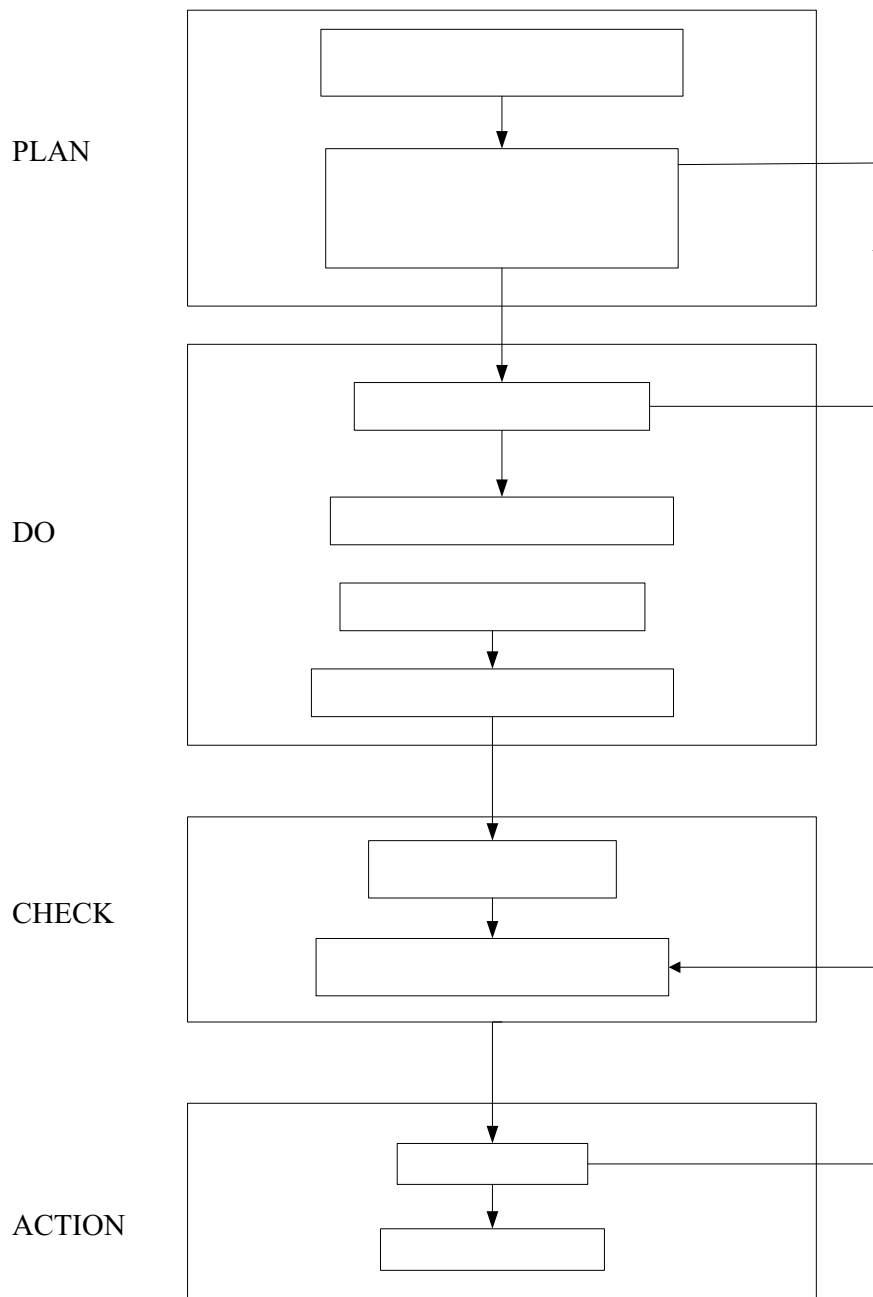


Figure 1.1: Research Work Layout

CHAPTER 2

LITERATURE REVIEW

2.1 Motives for ISO 9000 Certification

A study by Fenghueih (1998) drawing on the results from a questionnaire survey conducted in Taiwan, of the 1,004 mailed questionnaires, 376 were returned by respondents. The motivations are improving corporate systematization, improving product quality, promoting corporate image, enhancing international competitiveness, developing international markets, customer requests, following the heat wave of markets, pressure from competitors, improving employees' fringe benefits, and requests from governmental policy.

Other study by Anderson et al (1999) revealed that compliance with regulatory and customer requirements were secondary reasons for seeking ISO 9000 registration. Managers obtain certification mainly to provide credible signals of quality assurance to external parties. In this regards, ISO 9000 complements rather than replaces more developed total quality management efforts. Other findings from this study include companies that sell in Europe and other international markets are likely to seek ISO 9000 registration, and companies with alternative means for signaling quality (e.g., branded consumer products) or for which the particular form of quality control embedded in ISO 9000 standard may be inappropriate (e.g., process control industries), are unlikely to seek registration. Thus, ISO 9000 is adopted when this is considered likely to confer a competitive advantage through quality management and

communication. Research carried out by Ebrahimipour et. al (1997) demonstrates that ISO 9000 registration issues and experiences were very similar in US-and foreign-owned companies headquartered in the US. Some 541 companies in six industries grouping were surveyed with regard to motivations, for barriers and benefits expected from registration.

A study by Adanur and Allen, (1995) revealed some results on company performance and structuring. The responses were varied that the reasons stated for implementation of ISO 9000 were customer requirement, more efficient operations, requirement of parent company, reduced cost, increased business, involvement of people awareness.

Tsiotras and Gotzamani (1996) revealed that there are four basic reasons why a Greek company usually chooses to adopt ISO 9000 standards. The first reason is to improve the company's image and reputation, thus improving its competitive position in the market. The second is to satisfy external demands and pressure from the market, as the popularity of ISO increases, more and more customers require their suppliers to be certified according to the standards. The third reason is to facilitate and simplify quality acceptance procedures and contracts with the customers, and help company's exports. Finally, the fourth and most important reason to develop and certify a quality assurance system is the need to improve the internal organization and productivity and to upgrade the quality management system of the company.

The study by Carlsson and Carlsson (1995) has asked 114 certified companies about their reasons for implementing the ISO 9000 system by means of open-ended questions. The reasons for certification can be classified into two main groups, market-related reasons and those related to internal routines and procedures. Hence, the companies have opted for certification with the aim of reinforcing their market positions, international and domestic market and competition. The other reason for change was to improve the companies' internal routines and efficiency, using ISO system to create better procedures, product quality, and development tool for the operation, reduced cost, increased rapidity, and a step towards total quality.

Brown et.al (1997) sent a questionnaire to all enterprises in the state of Western Australia which gained ISO 9000 series certification (160 respondents of 500 enterprises). The data on the reasons for seeking ISO 9000 series certification suggest that there are several important driving forces for ISO 9000 certification. Market related factors, customer service, efficiency and as a "kick start" for quality improvement. The reasons identified two dominant factors, namely, internal reasons related to quality and efficiency improvement which are base for quality improvement, improve customer service, improve efficiency, be role model to suppliers, change in culture, combine quality systems, new direction after restructuring, and getting external audit.

Further more, Fuentes et. al (2000) mailed a questionnaire to 400 of organizations and consultants, the sample being taken from the list of certified companies. The questionnaire asked companies for the reasons that had driven them to implement a quality assurance system. In 51.9 percent of cases, the implementation had been a top