



UNIVERSITI PUTRA MALAYSIA

**A STUDY OF MALAYSIAN COMPANIES EXPERIENCE IN
GETTING THE ISO 9000 SERIES CERTIFICATION**

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TESIS

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GETTING THE ISO 9000 SERIES CERTIFICATION**

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ABSTRACT

As the world faces the challenge of globalisation, more and more corporations are searching for tools to excel in the face of competition. One such tool is through ISO 9000 certification. Corporations with the ISO 9000 series certification are seen to have the competitive advantage. For example, in the European Community countries, it has been imperative for companies to have the certification before their products/services are allowed to be in the EC marketplace.

Like their worldwide counterpart, Malaysian corporations are applying to be ISO 9000 certified through our ISO regulatory authority SIRIM. In this research study, I shall study the Malaysian experiences with regards to obtaining the ISO certificate. The objective is to cover what the companies experience in the process of fulfilling all the 20 elements in the ISO 9000 series certification. It also attempts to evaluate if there is a strong correlation between the certification and the company's earnings. This study is important as it will serve as a guide to new companies seeking to be certified.



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Chapter 1

Introduction

1.1 Quality

Customers have different perceptions of what quality is. In general, one can define quality as meeting or exceeding one's expectations. The challenge in business today is to produce quality products and services to be competitive. This is essential as consumers everywhere become more and more demanding, they will decide whether the quality of a product or service is worthy of his/her hard-earned resources.

From the perspectives of customers, quality has different dimensions. Most notably, these dimensions are as follows:

1.1.1 Conformance to Specification

When a consumer buys a product or service, he already has an expectation of what to get from the product or service. These expectations are normally conceived through advertisements and other marketing activities that the suppliers have done in order to make a sale. For example, most machinery products would have an advertised mean time between failure (MTBF), the average time the product is expected to perform its job before failing. When the customer purchase this piece of machinery, he expects the machinery to perform without failing before the mean time between failure. If the product fails before the published MTBF, the customer would have a perception that this piece of machinery is of inferior quality.



In service terms, customers normally expect certain level of 'quality' service. For example in the case of private hospitals, a patient would have the expectation that waiting time for consultation would be shorter than that for government hospitals. At the same time, the patient would expect good and courteous service from the nurses to the consulting specialists. If any of the expectations were not met, the patient would have a feeling of being cheated and perceive the service as being inferior.

1.1.2 Fitness for Use

'Quality is fitness for use' - J.M. Juran

When the customer buys a product or service, he expects the product or service to perform what it was intended for use. For example, when food products are bought, the consumer would expect that the products to be consumed without any health problems. If he buys dairy product and after consuming it becomes ill, the product is obviously not fit for consumption. In this scenario, the product will definitely be regarded as poor quality.

1.1.3 Value

Another dimension of quality is through value or how well the product or service serves its intended purpose at a price customer are willing to pay. How much the customer is willing to pay for a product depends on how much he thinks the value of the product is. For example, if the customer buy a lawnmower for RM 300 and it lasts for 10 years then the product is perceived as good quality. On the other hand, if the same lawnmower is only good for 2 years and after that needs to be repaired, then the



consumer will think that the lawnmower is not worth the RM 300 he paid for earlier. He will think that the lawnmower is of unacceptable quality.

1.1.4 Support

The support given to the customer also forms a dimension of quality. Product after-sales support often cause the customer to think if the product is of high or low quality. If a customer needs to run around and go through a lot of hassle for after-sales support, the immediate reaction for the customer is to think that the manufacturer is of poor quality and tends to associate that with the product itself. In the case of service, the customer will associate long waiting-time for service as poor quality service.

1.1.5 Psychological Impressions

Often, people associate quality of products or services through their psychological impressions: atmosphere, product or service image, aesthetics or advertisement. These factors can often impact the customer perception of the product or service. A friendly and smiling nurse will impress on the patient of good quality although the actual service quality may not be as good.

1.2 Quality as a Competitive Tool

The intensification of global competition and increasing trend towards the establishment of regional groupings means that companies need to focus on quality as a competitive tool to gain consumer preference.



**‘Quality is dependable, customer satisfying product or service at a low cost’ –
W.E. Demings.**

Consumer world-wide is demanding better quality at a competitive price. Many organisations believe that quality is the deciding factor in world markets. Many have embarked on their own internal quality approaches to produce or deliver services.

In the 50s and 60s, products from Japan were viewed as having poor quality due mainly to the destruction of the Japanese industries during the world war. Now, Japanese products are regarded as having the best in quality and many countries are regarding Japanese products as the quality benchmark to their own. It was through the teachings of people like Demings and Juran that the Japanese realised then that quality would be the key in their success in the world market.

Years ago, it used to be that if you offered high quality products and services, you could thrive. In today’s globalisation environment, if you do not offer high quality products and services, your success is in jeopardy. Today, quality is no longer a luxury. It is a necessity.

1.3 Approaches to Quality

Many organisations have initiated some type of quality management improvement efforts. Some efforts have been highly successful and some have yielded mediocre results. Two common approaches companies world-wide resort to are through total quality management (TQM) and through ISO certification.



1.3.1 Total Quality Management (TQM)

Total quality management (TQM) is a corporate strategy that focuses total company effort on manufacturing superior products with continuous improvement and zero defects that satisfy customer needs. The supplier must continually monitor the consumer's changing requirements as well as the competitive offerings and adjust product offerings as needed. TQM often focuses on benchmarking, product and service design, process design and purchasing.

Benchmarking is a continuous and systematic process that measures products and services against those of industry leaders. Companies use benchmarking to review what the leaders in the industry are doing and use that to improve on their own operations.

Product and service design seeks to help reduce internal quality problems. If a company needs to make design changes to remain competitive, it must carefully test new designs and redesign the product or service and the process with a focus on simplicity. This process needs to be carefully balanced as improving product and service design means added time and cost.

The design of the process that is used to produce the product or service greatly affects its quality. Based on the feedback from benchmarking, it is important to do process redesigning and reengineering on a continuous basis to improve quality to gain the competitive advantage.

Purchasing considerations must also be looked in the TQM process. Many organisations purchase their raw materials and equipments used in the production

from outside suppliers. The whole process is rendered useless if the raw materials and equipments are not up to the expected standards. It is for this reason that purchase considerations play a vital role in the overall TQM process.

1.3.2 ISO Certification

In short, ISO 9000 certification seeks to ensure that companies “say what they’re going to do” (define and document process) and then “do what they say” (process implemented as documented).

ISO 9000 is a set of standards governing the requirements for documentation of a quality program. It is a universal quality system standard endorsed by first by the European nations and then followed by many other nations. The standards were developed by the International Organisation for Standardisation (ISO), the international agency for standardisation, headquartered in Geneva, Switzerland. The ISO is composed of national standards bodies from 91 countries. This program is seen by many organisations as the passport required to do business in the global market place.

1.3.2.1 What is a quality policy?

A company’s quality policy is ‘the overall quality intentions and direction of an organisation as regards quality, as formally expressed by top management. (MS ISO 9001:1994, Clause 4.1.1). The vision and mission statement position the company in the future and identify how that position is to be realised, where as quality policy will set the stage for a complete collection of activity specific company policies to be used



in administrative procedures. Customers should have high level of confidence when reading the company policy. Some company's quality policy is:

- A. The only acceptable level of defects is zero defects.
- B. At no time will defective products knowingly be shipped.

1.3.2.2 What is quality management?

Quality management is 'that aspect of the overall management function that determines and implements the quality policy.' Quality management is a prevention-base management approach for identifying and meeting the business's requirements at every level of operation through continuous improvement in the processes through which products are produced and services delivered. In a nutshell, quality management is to do the job right the first time.

1.4 Quality in Malaysia

Prior to the 1990s, quality is a luxury thing in Malaysian corporate scene. In 1988, only 5 organisations had been granted registration to ISO 9002. Since these early days, Malaysian organisations have been more aware of the need for better quality management system due to market globalisation. The formation of regional market groups, notably the European Union, necessitate companies to be more quality conscious as imports to these groups need to undergo quality certification program such as ISO certification program.

Today, there are already about 1050 companies registered with SIRIM with ISO 9000 series certification. Every week or so we can read from the Malaysian newspaper



advertisement for new company having attained the ISO certification. The number of applications for the certification is still growing at a rapid rate. I see that this trend will continue for some time as part of the organisations' quest to improve their quality management.

Another factor that drove Malaysian companies to be more quality conscious is the more maturing consumers. The Malaysian economy has been growing at an impressive 8% since the late '80s and this has made consumers to have more money to spend and to be more particular about the products or services they buy. Imported goods were perceived to be of better quality. The Malaysian consumers were demanding better quality products at a more competitive price. This forces Malaysian companies to rework on their quality management strategies. Many resort to ISO certification as a mean to achieve better quality. ISO framework provided companies a framework to embark on developing a sound quality system.

1.5 Research Objective

There is a lot of misconception that an organisation that has been certified to comply with ISO standards makes or deliver superior products/services. In this research, I shall attempt to dispel the misconception and at the same time attempt to address the 'payback' of having the ISO certifications. In other words, what are the benefits or advantages of firms to have the certification and is it worthwhile the numerous man-hours spent, the costs, and efforts. In particular, the research shall focus on the following objectives:



- To study the competitive advantage of having the ISO certification.
- To study if ISO certification affects the firm's financial performance.
- To study if ISO certification strategy is in line with the firm's globalisation strategy.

1.6 Importance of the Study

This study is important as the outcome of it will directly affect the number of applications that SIRIM would receive. If the research can conclude that firms that comply with the ISO certification has competitive advantages that other firms do not have, then there will be more firms that will go through the certification program. For example, as most European businesses view the ISO certification as a prerequisite for a business relationship, then firms that intend to export their products/services to the European countries may just need to go through the process, regardless of what they feel about it.



More specifically, this study is important for the following reasons:

- To establish if there is a direct relationship between the firm certification and its products/services quality.
- To establish if there is any relationship between the firm's financial performance with the certification program.
- To establish if the certification is more applicable to certain type of firms, such as manufacturing firms.

1.7 Research Outline

This research paper is organized as follows:

Chapter 1 – Introduction

This chapter discusses the different dimensions of quality and takes a look at quality management in Malaysia. In particular, two main approaches to quality management are discussed.

Chapter 2 – ISO 9000 series certification

This chapter looks at the costs and benefits and ISO 9000 series certification. It also looks at the 20 elements that are found in this scheme.

Chapter 3 – Literature review

This chapter reviews some literature written by others. In particular, it looks at the Malaysian experience in the certification process.



Chapter 4 – Research Methodology

This chapter discusses on research methodology and defines how the research was conducted.

Chapter 5 – Findings and Analysis

This chapter discusses on the research findings and some analyses are discussed. Some conclusions are presented.

Chapter 6 – Summary, Findings and conclusions

This chapter summarizes the whole research projects, its findings and any conclusions that may be useful for other researchers. Suggestions for further improvement are also highlighted here.



CHAPTER 2

ISO 9000 series certification

2.1 ISO 9000

The International Standards in the ISO 9000 family describe what elements quality systems should encompass, but not how a specific organization should implement these elements. It is not the purpose of these International Standards to enforce uniformity of quality systems.

The ISO 9000 family of standards (ie. ISO 9001, 9002, 9003, 9004) are aimed at the establishment of total quality management systems. They call out what pieces a quality system should have and the standards these pieces must meet. However, they do not specify how these pieces are to be implemented.

In short, ISO 9000 seeks to establish quality systems where:

- Processes are defined and documented.
- Processes are implemented as documented.
- Processes are effective at yielding desired results.



2.2 Costs of ISO Certification

What are the costs in getting ISO Certification? The most common reason for companies not to go for certification is the direct and indirect financial costs involved in the certification process. It is not uncommon to hear that “it’s going to cost you at least \$ 50,000 to become registered and another \$ 25,000 a year to keep it”. For large corporations who can afford it, the other costs would be opportunity cost as the time and effort spent in complying with the certification process may be used to generate revenue.

2.3 Benefits of ISO certification

Going through the certification process can take as long as 2 years and involve a lot of management time as well as employee time. So, one may ask ‘What are the benefits of ISO certification?’ The potential benefits are many-folds. The most obvious benefit is the potential sales advantage that companies in compliance with the standards have. For example, companies that are looking for suppliers with ISO certification are obviously more keen to do business with a supplier that is in compliance than with a company that is not. The other benefits that companies have relate directly with their internal quality system, such as total quality management (TQM) system.

In the United States, McGraw-Hill/Dun & Bradstreet study found that of the companies registered since 1987, about 50 percent were able to recover their ISO 9000 implementation costs in three years or less. This reason alone suffice to stimulate growth in the number of applicaton for ISO certification.



2.4 Malaysian ISO Body

The Malaysian Standards and Industrial Research Institute of Malaysia (SIRIM) adopted the ISO 9000 series of standards as the Malaysian Standards MS ISO 9000 in 1991. MS ISO 9000 basically comprises of the following;

Table 2.1 MS ISO 9000 family

MS ISO 9000:1991	Quality Management and Quality Assurance Standards ■ Guidelines for Selection and Use.
MS ISO 9001:1991	Quality Systems ■ Model for Quality Assurance in Design/Development, Production, Installation and Servicing.
MS ISO 9002:1991	Quality Systems ■ Model for Quality Assurance in Production and Installation.
MS ISO 9003:1991	Quality Systems ■ Model for Quality Assurance in Final Inspection and Test.
MS ISO 9004:1991	Quality Management and Quality Systems Elements – Guidelines.

The ISO standards provide a framework for quality management system requirements for all industries. Quality management is a prevention-based management approach for identifying and complying with the business's requirements at every level of operation through continuous improvement in the processes through which products are produced and services delivered. In short, quality management is to do the job right the first time.

