

IMPLEMENTATION TOTAL QUALITY MANAGEMENT AND INNOVATION
DETERMINE COMPETITIVE ADVANTAGE IN MANUFACTURING SECTOR
OF MALAYSIA.

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DECLARATION OF ORIGINAL WORK

“I hereby declare that the work I am submitting for assessment contains no section copied in whole or in part from any other source unless explicitly identified in quotation marks and with detailed, complete and accurate referencing.”

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DEDICATION

I would like to dedicate the appreciation to beloved parents who supported me from spiritually and financially. A special thanks to my supervisor and panel who guided me throughout this research and even thanks to my friends that helped and assisted me through the journey of research.

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I would like to take this opportunity to express my sincere appreciation to my supervisor Pn. Nor Ratna Binti Masrom for guidance and encouragement throughout the journey to complete this final year project. Throughout her guidance, I managed to finish my final year project successfully within the time frame given. Besides, there are some other important people involved in this final year project, for instance my beloved lecturers, friends and course mates. I am deeply grateful for the guidance and support towards this project as play as an important role for this project.

Next, I am sincerely thanks to the researchers that they have previously conducted the similar study and published online. Although the research topic of the study was different, but the theory and knowledge provided were useful as a reference in this final year project.

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ABSTRACT

The implementation of total quality management (TQM) and innovation always concerned by top management within organization. Generally, TQM consists a list of practices while innovation activities divided into product and process innovation. TQM and innovation are crucial elements in manufacturing sector due to it aimed to improve competitive advantage of organization. The issue of innovation in manufacturing sector having attention of many parties whether in customers and investors due to rate of innovation is lower if compared with other countries. This research is aimed to explore the role of innovation as mediating role in relationship between TQM and competitive advantage within manufacturing sector of Malaysia. Quantitative research is used to conduct this research. Therefore, questionnaires would be distributed to the executive management level or above within electrical and electronic (E&E) organization in Malaysia randomly. Statistical Package for the Social Science (SPSS) and ADANCO are the software used to analyse the data gathering from respondents. The result of analysis shown that total quality management (TQM) and innovation has a significant positive impact to competitive advantage. In addition, the innovation is mediate positively for the relationship between TQM and competitive advantage. Therefore, this research is expected to provide deep understanding regarding TQM, innovation, and competitive advantage for the manufacturing industry within Malaysia and acts as reference to future researchers.

Keywords: Total Quality Management (TQM), Innovation, Competitive Advantage, Executive Management Level or Above, Electrical and Electronic (E&E), Malaysia, SPSS, ADANCO

ABSTRAK

Pelaksanaan total pengurusan kualiti Keseluruhan (TQM) dan inovasi selalu prihatin oleh pengurusan tertinggi dalam organisasi. TQM dan inovasi adalah elemen penting dalam sektor pembuatan kerana ia bertujuan untuk meningkatkan kelebihan daya saing organisasi. Isu inovasi dalam sektor perkilangan yang mendapat perhatian banyak pihak sama ada pelanggan dan pelabur kerana kadar inovasi rendah jika dibandingkan dengan negara lain. Penyelidikan ini bertujuan untuk meneroka peranan inovasi sebagai perantaraan dalam hubungan antara TQM dan daya saing dalam sektor perkilangan Malaysia. Kajian kuantitatif digunakan untuk menjalankan kajian ini. Oleh itu, soal selidik akan diedarkan kepada peringkat pengurusan eksekutif atau ke atas dalam organisasi elektrik dan elektronik (E & E) di Malaysia secara rawak. Pakej Statistik untuk Sains Sosial (SPSS) dan ADANCO digunakan untuk menganalisis perhimpunan data daripada responden. Hasil analisis menunjukkan bahawa pengurusan kualiti Keseluruhan (TQM) dan inovasi mempunyai kesan positif yang penting terhadap daya saing organisasi. Inovasi berpihak positif untuk mamainkan peranan perantaraan dalam hubungan antara TQM dan daya saing. Oleh itu, kajian ini diharapkan dapat memberi pengetahuan tentang TQM, inovasi, dan kelebihan daya saing bagi industri perkilangan di Malaysia dan sebagai rujukan kepada penyelidik masa depan.

Kata kunci: Pengurusan Kualiti Keseluruhan (TQM), Inovasi, Kelebihan Daya Saing, Peringkat Pengurusan Eksekutif atau Di Atas, Elektrik dan Elektronik (E & E), Malaysia, SPSS, ADANCO

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LIST OF ABBREVIATIONS

FMM	=	Federation of Malaysian Manufacturers
OECD	=	Organization for Economic Cooperation and Development
SPSS	=	Statistical Package for the Social Science
TQM	=	Total Quality Management

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

The competition in manufacturing sector getting more intensive from day to day all over the world. Therefore, competitive advantage is a must for manufacturing company to sustain in competitive environment. The company performances whether in financial and non-financial performance are always a concern for management team as an analytical outcome. There are many ways to achieve competitive advantage but most of companies adopt the strategic tools which are total quality management and innovation in domain. The following tools are to ensure superior quality of product or service and great value proposition delivered to customer.

The word “quality” is widely used in many fields and especially in manufacturing sector. Many practitioners, academicians and experts believe that quality is refer to fitness for purpose or fulfilling the purpose intended, which means matching specific industry conformance and design specifications to function and make sure that output conforms to specifications (Garvin, 1984; Juran, 1988). In addition, quality is a philosophy, an attitude and a way of thinking that is an integral part of successful industries, businesses, health care, education, and personal growth. It means doing the right things right, doing the right things effectively, and taking the

right measurements to ensure excellence of the product or the service (Scarnati & Scarnati, 2002). For my own understanding, quality is referring to satisfaction of customer, stakeholder, and top management for a product or service which continuously improved from time to time according to market demand. It also designed to meets customer's specific need and excess the customer's expectation.

Moreover, total quality management is a quality management which include social and psychological perspective aimed to improve staff and managerial objects in term of awareness and controllability (Boje and Winsor, 1993). Total quality management is a quality management approach which in charge of designing and planning activities that lead to continuous improvement occur within organization and it probably has positive impact over negative impact to the organization (Claver-Cortes et al., 2008). For my own understanding, total quality management is a managerial program which intends to manage most of the important elements to achieve organizational objectives.

Innovation is the process whereby new and improved products, processes, materials, and services are developed and transferred to a plant and market where they are appropriate (Rubenstein Albert, 1989). Innovation is properly defined as an original disruptive and fundamental transformation of an organizational core task. Innovation changes deep structure and change them permanently (Lynn, 1995). For my own understanding, innovation is creation of new method or process that helps companies to enhance efficiency and perform improvement continuously which stand a high potential to replace conventional product and process management.

Finally, the competitive advantage is defined as isolated properties or characteristics in the market of product which lead organization dominate in competitive environment (Ansoff, 1965). For my own understanding, the competitive advantage can be described as the parameter of firm's performance resulted from implementation a variety of practice in manufacturing process and management. The

competitive advantage also can be anything that tangible and intangible which contribute certain significant level to organization.

1.2 Problem Statement

The total quality management and innovation always a concern for management team within an organization because the following tools are crucial to organization for achievement competitive advantage. It is believed enable to bring significant change for internal structural of organization while accordance with conformance. The issue of innovation in manufacturing sector having attention of many parties whether in customers and investors due to rate of innovation is lower if compared with other countries. For such case, the one of Korea original brand which is Samsung have powerful influences in electronic application sector and considered as invincible for any brands in Malaysia.

Several studies had shown there is a positive relationship between total quality management and innovation. One of the studies, Martinez-Costa and Martinez-Lorente (2008), it demonstrated the practice included in total quality management provide synergy for a situation to implement innovation. Besides that, the total quality management enable organization train workers into experts and include these practices in innovation activities. After that, innovation create a continuous improvement within internal organization. Thus, implementation of total quality management and innovation helps organization to reduce cost and time required in development of product as well as eliminate process which do not create values for organization (Kim et al., 2012). Furthermore, innovation is able to create inspiration of workplace among worker and invention of new method or process aimed to enhance efficiency. Innovation has a significant impact on the organization's performance by enabling a

better position in the market, which in turn will give it a competitive advantage and a better performance (Walker, 2008).

Vanichchinchai and Igel (2011) indicated that TQM is a management approach which enhance the effectiveness and efficiency of overall process of organization by meeting customer expectation continuously. The effectiveness and efficiency derived from TQM could result in cost advantage of organization subsequently. Nevertheless, some studies stated that there is an ambiguous or no relationship between TQM and competitive advantage (Kaur M et al., 2012; Lee V, 2010). These different findings of previous studies are caused by weakness of studies regarding innovation as mediating role.

However, several studies declared that there is no relationship between TQM and innovation, and innovation not even qualified to act as a mediator for quality management to achieve any objective (Wind and Mahajan, 1997; Slater and Narver, 1998). Moreover, a few studies indicate there is no or positive relationship in TQM , innovation, and performance (Ravichandran and Rai, 2000; Flynn et al., 1995). In contrast, there is some studies shown that there is a relatively weak relationship between innovation and competitive advantage of organization, such as studies Chandler and Hanks (1994) and Subramanian and Nilakanta (1996).

In response to these contrastive statements, the research managed to analyze the relationship between total quality management and innovation. Next, the research plan to identify the effect of quality management and innovation implementation on competitive advantage in manufacturing sector in Malaysia. A quantitative method will be conducted to accomplish this research.