

Case study DRB-HICOM Industries: Relation between Total Quality Management (TQM) and Staff Satisfaction

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Abstract

Total quality management contributes a significant role on companies and corporation performance and their productivity. In addition, the top management undertaking to total quality management (TQM) provides the condition of the successful practice of quality administration. Present research study investigates the relation between total quality management principles and top management commitment with stress on staff satisfaction, human resources, and loyalty in Malaysian DRB-HICOM industrial sector. This paper is a causal and functional in purpose, a questionnaire research method is of field study as well as research tool. The questionnaire reveals 31 questions, on the base of a five-point Likert rating system. Following the validity determination, 25 questionnaires were distributed and evaluated using Cronbach's alpha, its reliability, and the result indicates the value of 0.863 that is appropriate. The senior and middle positioned administrators, managers, supervisors and workers in Malaysian DRB-HICOM Industry, such as Proton Companies, were employed for the study population and results showed that Total quality management has positive effect on staff satisfaction and loyalty in Malaysian DRB-HICOM group of industry and confirmed the whole research assumptions.

Keywords: TQM, Staff Satisfaction staff, Loyalty, Performance evaluation, Commitment of Management, Employee Training

Introduction

In today's competitive world, quality is a key factor for competitive advantage gain in organizations. Quality of physical goods as well as services is one of the ways to create customer satisfaction. In recent decades, TQM developed to enhance qualities in organizations as a novel approach (Deming, 1980). TQM was used primarily in the manufacturing organization. This was because TQM was focused on quality performance evaluations and this was better done on physical goods. A constant enhancement of quality by implementation of TQM requires a change in organizational culture. It is anticipated in a way that the need to somehow be able to earn the expected results with minimal effort. Management need to be ready change the philosophy, practices and ideas about the work and personnel. This requires a change in the set of beliefs, attitudes and perceptions about the quality by everyone.

TQM implementation is impossible without top management commitment. Since top management directs all organizational efforts, and with TQM support makes it happen, so it is an imperative obligation (Jolodar, 1980).

Problem Statement

Globalization of markets, increasing competition in global markets and the rise of trying to survive in this market led to the emergence of new approaches in management and process improvement, as well as management principles and fundamentals. In recent years, in the light of the growth of large projects much attention has been given to the management issues. Systemic management affects project success, so the lack of

knowledge would increase costs leading to losses. These negative effects can be reduced by applying TQM which in turn leads to quality products and services, staff satisfaction, and staff loyalty. Especially, in petrochemical projects, regarding the size of project and its higher costs, TQM can be considered as an effective step to stop financial and human resources loss and time waste. In 90s managers of industries realized that in order to stay in market not only necessitates internal process developments and flexibility but it is important to regard human resources as an advantage. Today a company with loyal staff and human resources has surpassed all other competitors. Satisfied human resources are more loyal to the organization and company, so they will try their best to attain organizational goals. This is obtained by appropriate management (Chen et al., 2009).

TQM is based on management approach involving all staff, customers and suppliers to continuously improve the quality of customer satisfaction. Implementation of TQM requires a tangible change in organizational culture. It is anticipated that the need to somehow be able to earn the expected results with minimal effort. Without top management commitment, TQM implementation will be impossible. Top management directs all organizational efforts, and with supporting TQM makes its implementation possible, so top management commitment is necessary. TQM is a risk and failure on it could put an organization in more hazardous situation than of now (Salami et al., 2000).

Petroleum refining and petrochemical industries are of the most important industries in many countries, including Ira. While a large part of imports and exports in Malaysia is assigned to raw materials and products of the refiner, the studying the principles of total quality management with a focus on staffing is of utmost importance.

Research Background

In 1997, Westfall has conducted a study concluding that implementation of TQM principles in a hospital would increase the legitimacy of the hospital in the U.S. Jane (2001) argues that wide acceptance of TQM implementation and reducing wasted time consequences will lead to sharing of values, processes and standards in industries(Jan et al,2006).

In 2005 the national quality Baldrick program research results showed that the implementation of a comprehensive quality management with an emphasis on human resources is one of the major factors that make the successful implementation of the comprehensive quality management possible. This would help staff to reach their potential on attaining higher goals of the company. The fundamental factors include staff training, team work, and staff freedom of choice, performance evaluation, and remuneration of employees.

In a study that was carried out in 2004 by Cobourg a positive relationship between staff freedom of choice and their satisfaction was confirmed (Bayazita et al,2001)

Results of another study titled” strategic management of projects costs with quality management implementation” conducted by Y.Taghipooriyan and J. Taghipooriyan shows that effective cost management constitutes vital activities assuring us that the highest quality products are being produced by the lowest possible costs. When looking from a holistic prospective to long-term planning strategy, the company effective cost management is responsive for the performance accountability of institute. In this vision, cost management measures success in the condition where production volume, device offerings and profit growth match together. In meticulous reviews of company’s daily performance, the company is in the condition where the relationship between the value and the cost of each activity and customer satisfaction resulting from each of the trading company, and also increase the daily experience of each of the staff obtained (Aghdasi, 2001).

Research Objectives

This study examines the relationship between top management commitment and total quality management principles with an emphasis on human resources, staff satisfaction and staff loyalty in Malaysian DRB-HICOM Industries.

- 1- Examine the extent of the impact of top management commitment to total quality management.
- 2- Examine the extent of the impact of total quality management principles in staff satisfaction.
- 3- Examine the extent of the impact of staff satisfaction on staff loyalty.

Research Hypothesis

- 1- Top management commitment is positively related to Malaysian DRB-HICOM Industries staff degree of freedom of choice.
- 2- Top management commitment is positively related to Malaysian DRB-HICOM Industries staff degree of training.
- 3- Top management commitment is positively related to Malaysian DRB-HICOM Industries staff team work.
- 4- Top management commitment is positively related to Malaysian DRB-HICOM Industries staff performance evaluation system.
- 5- Top management commitment is positively related to Malaysian DRB-HICOM Industries staff remuneration.
- 6- Staff degree of freedom of choice in Malaysian DRB-HICOM Industries is positively related to staff satisfaction.
- 7- Staff trainings in Malaysian DRB-HICOM Industries with an emphasis on total quality management is positively related to staff satisfaction
- 8- Team works in Malaysian DRB-HICOM Industries with an emphasis on total quality management is positively related to staff satisfaction
- 9- Staff performance evaluation system in Malaysian DRB-HICOM Industries with an emphasis on total quality management is positively related to staff satisfaction.
- 10- Staff remuneration in Malaysian DRB-HICOM Industries with an emphasis on total quality management is positively related to staff satisfaction.
- 11- Staff satisfaction in Malaysian DRB-HICOM Industries is positively related to staff loyalty.
- 12- Staff training in Malaysian DRB-HICOM Industries on total quality management is positively related to staff freedom of choice.
- 13- Staff training in Malaysian DRB-HICOM Industries on total quality management is positively related to team works.

Research Analytical Model

The model is divided into four main parts, top management commitment, total quality management principles with emphasis on human resources with five basic variables, staff satisfaction and staff loyalty.

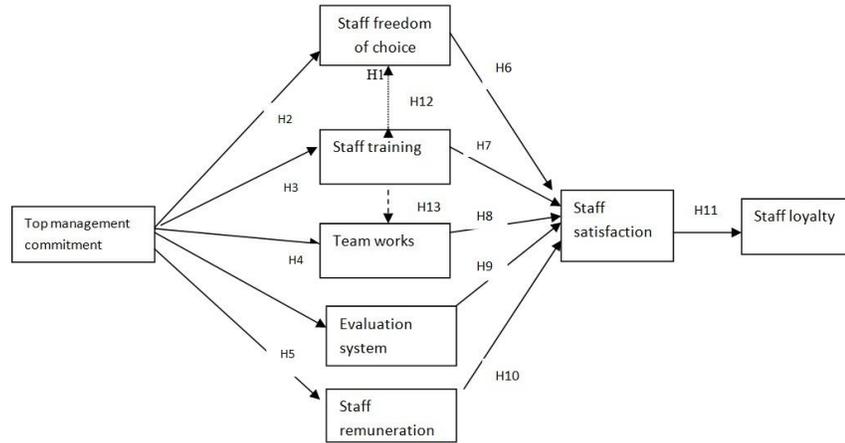


Figure1. Model TQM and staff satisfaction and staff loyalty (John, 2001)

Materials and Methods

This study examines the relationship between independent and dependant variables. Thus it is of causal kind applicable for all producing companies. The aim of the study is the applicability of the results. Research method is of Field Research and research tool is a questionnaire. LISREL statistical method has been used to assess relationships between variables.

Statistical Population

The statistical population consists of all of Malaysian DRB-HICOM Industries staff at all ranks, which are include Proton Companies individuals. Since distribution of questionnaires among this large population is demanding and costly, the sampling procedures were used.

Sample and Sampling

310 subjects were selected using statistical sampling methods out of a population is 3019 individuals of Malaysian DRB-HICOM Industries staff.

$$\begin{aligned}
 5Q &\geq n \geq 15Q \\
 5^* 31 &\geq n \geq 15^* 31 \\
 465 &\geq 310 \geq 155
 \end{aligned}$$

Sampling Method

In studies using LISREL statistical method, the sample size is calculated from the above relationship .In this study, the number of samples must be elected between 155 to 465 individuals, that their average number of 310 individuals was selected. After the distribution of questionnaire s, the number of 279completed questionnaires was given back to the researcher. Random sampling method has been chosen among a variety of sampling methods including, random sampling method, regular sampling method, clustering sampling method, group sampling method, and etc. Therefore, the questionnaire is distributed randomly in the Malaysian DRB-HICOM Industries and collected.

Methods and Data Collection Tools

This study is a survey, so it requires tools to collect data. In this study data was collected using a questionnaire. After a literature review, a questionnaire was used to collect data. Questions are based on a five-point Likert rating system (strongly agree, agree, no opinion, disagree, and completely disagree) that organization workers should fill them based on facts and personal opinions.

The questionnaire consisted of 31 questions, 20 questions to measure variables related to the principles of total quality management, 8 questions to measure staff satisfaction and loyalty and 3 questions to. Questions 1 to 3 measure top management commitment. Questions 4 to 7 measure the staff freedom of choice. Questions 8 to 11 measure the amount of staff training. Questions 12 to 14 measure the amount of team works. Questions 15 to 18 measure system performance evaluation. Questions 19 to 23 measure staff remuneration. Questions 24 to 27 to measure staff satisfaction. Questions 28 to 31 measure of staff loyalty and five-point Likert rating system is used in response to the questionnaire

Data Analysis Method

The data and information collected can be qualitative or quantitative. In this study, qualitative data have been collected by questionnaire. In the research for the evaluation of the relationship between model components the structural equations modeling is used. In the meantime, researcher has used structural equations modeling analyze factors. LISREL software has been used for the analysis of the hypothesis, a structural model describing causal relationships between variables.

Structural equations have been used to analyze research hypothesis according to introduced model. Defined variables in the method are independent variables in one equation, while they might be dependent in the other. Therefore, there are some overlaps in equation diagram. Hence, these equations must be simultaneously considered. These equations assume the interface between latent variables in the equation that defines the model and then, the standardized regression coefficients are calculated.

Conclusion

Results to this study are presented as follows:

a- Based on studies and analysis of the results, top management commitment is not positively related to staff degrees of freedom of choice. These results are inconsistent with what of Minjoon et al. (2006) that showed a positive relation between top management commitment and staff degrees of freedom of choice researcher believes that the reason behind this inconsistency would lay on the limited participation of staff on decision making in Malaysian DRB-HICOM Industries. This influences the staff attitudes toward manager's commitment, and they believe there is no relation between top management commitment and their freedom of choice.

b- Based on studies and analysis of the results, top management commitment is positively related to staff training levels. These results are consistent with what of Minjoon et al. (2006). This consistency is due to high amount of training offered to staff in Malaysian DRB-HICOM Industries.

c- Based on studies and analysis of the results, top management commitment is not positively related to staff team works. These results are consistent with what of Minjoon et al. (2006). This consistency is due to high score of individualism criterion, so most staff is not willing for team work. Also top management according to its experience is not willing to build up team works.

d- Based on studies and analysis of the results, top management commitment is positively related to performance evaluation system. These results are consistent with what of Minjoon et al. (2006). Malaysian DRB-HICOM Industries like other Malaysian industries is required to provide annual and periodical evaluations of staff performances, the results of these evaluations affect staff salaries and remuneration.

e- Based on studies and analysis of the results, top management commitment is positively related to staff remuneration. These results are consistent with what of Minjoon et al. (2006). It is due to the fact that in Malaysian DRB-HICOM Industries like other Malaysian industries staff is encouraged with annual and case remunerations.

f- Based on studies and analysis of the results, staff freedom of choice degree is positively related to staff satisfaction. These results are consistent with what of Minjoon et

al. (2006). This consistency is due to the fact that in Malaysian DRB-HICOM Industries with an increase in freedom of choice staff is more willing to be engaged and the more satisfied.

g- Based on studies and analysis of the results, staff trainings in Malaysian DRB-HICOM Industries with an emphasis on total quality management are positively related to staff satisfaction. These results are consistent with what of Minjoon et al. (2006). This consistency is due to the fact that in Malaysian DRB-HICOM Industries with increased trainings staff fell more confidence in themselves and rely more on the management as a source of their enhancement. So, trainings lead to their more satisfaction.

h- Based on studies and analysis of the results, team works in Malaysian DRB-HICOM Industries with an emphasis on total quality management is not positively related to staff satisfaction. These results are inconsistent with what of Minjoon et al. (2006). This inconsistency is due to the fact that in Malaysian DRB-HICOM Industries staff is more self-oriented and is not willing to engage in team activities. They want to attribute the results obtained to themselves no the team.

i- Based on studies and analysis of the results, staff performance evaluation system in Malaysian DRB-HICOM Industries with an emphasis on total quality management is not positively related to staff satisfaction. These results are consistent with what of Minjoon et al. (2006). This consistency is due to the fact that in Malaysian DRB-HICOM Industries one of the staff performance evaluation criteria is the results of staff performance evaluation system. The results are used on remunerations. According to equality theory, employees in a n organization compare themselves with other peers regarding the efforts and results obtained, when one finds themselves with higher score s/he is motivated, but in contrast seeks for justice.

j- Based on studies and analysis of the results, staff remuneration in Malaysian DRB-HICOM Industries with an emphasis on total quality management is positively related to staff satisfaction. These results are consistent with what of Minjoon et al. (2006). This consistency is due to the fact that in Malaysian DRB-HICOM Industries remuneration is a way to appreciate staff.

k- Based on studies and analysis of the results, staff satisfaction in Malaysian DRB-HICOM Industries is positively related to staff loyalty. These results are consistent with what of Minjoon et al. (2006). This consistency is due to the fact that in Malaysian DRB-HICOM Industries those who feel satisfied find themselves loyal to organization and try well for the fame of company.

l- Based on studies and analysis of the results, staff training in Malaysian DRB-HICOM Industries on total quality management is positively related to staff freedom of choice. These results are consistent with what of Minjoon et al. (2006). This consistency is due to the fact that in Malaysian DRB-HICOM Industries with more training staff feel more ready to act properly according to new tasks.

m- Based on studies and analysis of the results, staff training in Malaysian DRB-HICOM Industries on total quality management is positively related to team works. These results are consistent with what of Minjoon et al. (2006). This consistency is due to the fact that in Malaysian DRB-HICOM Industries with more training s staff in managerial levels as well as those on operational ones will be more familiar with team work, this will affect on their self- centered attitudes and cultures, leading to pluralism.

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