Identifying Critical Success Factors for TQM and Employee Performance in Malaysian Automotive Industry: A Literature Review

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Abstract. TQM is a management philosophy embracing all activities through which the needs and expectations of the customer and the community and the goals of the companies are satisfied in the most efficient and cost effective way by maximizing the potential of all workers in a continuing drive for total quality improvement. TQM is very important to the company especially in automotive industry in order for them to survive in the competitive global market. The main objective of this study is to review a relationship between TQM and employee performance. Authors review updated literature on TQM study with two main targets: (a) evolution of TQM considering as a set of practice, (b) and its impacts to employee performance. Therefore, two research questions are proposed in order to review TQM constructs and employee performance measure: (a) Is the set of critical success factors associated with TQM valid as a whole? (b) What is the critical success factors should be considered to measure employee performance in automotive industry?

Keywords – Total Quality Management Automotive Industry, Employee performance, and Malaysia and Structural Model

1. Introduction

Nowadays in new high technology, the competition has become a major factor in the organization to succeed. Many companies have tried to increase competition not only meet customer needs even more than that. This can only be achieved by the organization through improved employee performance, reduced costs, improved customer satisfaction, improved product performance and sustained efforts towards the organization's goals. In order for companies to survive and grow in the future, it is essential that they deliver high quality goods and services. Total quality management is one of the ways of managing organization to achieve excellence.
Total quality management is one of the ways of managing organization to achieve excellence. Total means everything in organization and quality means in degree of excellence. When refer to management it means by organizing, controlling, planning, directing to achieve certain goal. In management practices total quality management play important role to providing competitive advantage in organization. “In order to enhance the competitive position and improve business performance, companies worldwide, large and small, manufacturing and services, have applied the principles of total quality” (Aarabi et al., 2012).

In Malaysian automotive industry there are a lot of quality practices to make sure that they meet the standard quality in producing their products. Many organization faced the same problem when they want to produce the product which are they do not follow the standard of quality that customer want. Because to ensure that company can compete in market is high. Other than that, many organizations do not have an employee that very expertise to control the quality their production

The purpose of this paper is to review a relationship between TQM and employee performance. It is an attempt to contribute to the extant literature by incorporating TQM practices on employee performance relationship within the context of an emerging automotive industry.

2. Literature Review

TQM can be defined in many ways; difference source can result in difference definition. The definition that selected from several journals is “TQM has been defined as a set of organizational strategies, practices, and tools for organizational performance improvement” (Kaynak, 2003) and TQM advocates argue that it cannot be successful without employee involvement (Deming, 1982). The proposed TQM practices in this study adopted mainly from previous work by Zakuan et al., (2010) which has been conducted in Malaysian automotive industry.

2.1. Critical Success Factors for TQM

Based on literature review and preliminary study, the authors have identified six important elements of TQM practices namely: customer focus, leadership, training, teamwork, communication, and top management. Different researchers have adopted different TQM constructs for testing its effect on company performance. These practices are top management leadership, training and education, employee relations, quality assurances, supplier quality, product design, process management, strategic planning, customer focus, information technology and analysis, people management.

Most of the TQM success factors dealing with organization and their people have been reviewed in previous studies such as teamwork, reward and recognition, customer focus, organizational trust, extensive training, high level of communication, management commitment at all levels, employee involvement, empowerment and organizational culture (Narasimhan and Nair2005). Table 1 show that the factor of TQM from the past researcher.
Table 1: The factors of TQM

| Factor of TQM          | Authors                                                                 | Total |
|------------------------|-------------------------------------------------------------------------|-------|
| Top management commitment | Sila and Ebrahimpour, 2002, Saraph et al. 1989, Flynn et al. 1994, Ahire et al. 1996, Rao et al. 1999 | 5     |
| Leadership             | Lewis et al. 2009, Evans and Jack, 2004, Sila and Ebrahimpour 2002, Cemal 2012, Sadikoglu 2010, Rahman et al. & Lewis et al. 2009, Grandzol and Gershon 1998, Quazi and Padibjo 1998, Conca et al. 2004 | 9     |
| Teamwork               | Guimaraes et al. 2007, Lewis et al. 2009, Sila and Ebrahimpour 2002, Rahman et al. & Lewis et al. 2009, Black and Porter 1996 | 5     |
| Training               | Guimaraes et al. 2007, Lewis et al. 2009, Sila and Ebrahimpour 2002, Cemal zehir 2012, Esin sadikoglu 2010, Rahman et al. & Lewis et al. 2009, Saraph et al. 1989, Ahire et al. 1996, Rao et al. 1999 | 9     |
| Customer focus and satisfaction | Guimaraes et al. 2007, Lewis et al. 2009, Evans et al. 2004 and Dean et al. 2004, Sila and Ebrahimpour 2002, Cemal zehir 2012, Esin sadikoglu 2010, Rahman et al. & Lewis et al. 2009, Saraph et al. 1989, Black and Porter 1996, Ahire et al. 1996, Grandzol and Gershon 1998, Quazi and Padibjo 1998, Conca et al. 2004 | 12    |
| Communication          | Guimaraes et al. 2007, Lewis et al. 2009, Evans et al. & Dean et al. 2004, Rahman et al. & Lewis et al. 2009, Black and Porter 1996 | 5     |
| Process management     | Evans et al. & Dean et al. 2004, Esin sadikoglu 2010, Saraph et al. 1989, Flynn et al. 1994, Quazi and Padibjo 1998, Rao et al. 1999, Conca et al. 2004 | 7     |
| Product design         | Cemal zehir 2012, Rahman et al. & Lewis et al. 2009, Saraph et al. 1989, Flynn et al. 1994, Ahire et al. 1996, Rao et al. 1999 | 6     |
| Employee involvement   | Guimaraes et al. 2007, Evans et al. & Dean et al. 2004, Esin sadikoglu 2010, Ahire et al. 1996, Rao et al. 1999 | 5     |
| Continues improvement  | Evans et al. & Dean et al. 2004, Sila and Ebrahimpour 2002, Esin sadikoglu 2010, Conca et al. 2004 | 4     |

Based on the previous studies through reviewing and synthesis of TQM literature, the author has identified 6 critical success factors of TQM as follows: (i) Top Management (ii) Leadership (iii) Communication (iv) Customer focus (v) Teamwork (vi) Training

(i) Top Management Commitment

According to Zakuan et al. (2008) top management commitment provides the motivating factors and all the resources for organization and controlling activities within the organization. Meanwhile, Hoang and Igel (2005) noted that top management commitment, employee involvement, and employee empowerment are practices that mainly relate to human aspects in the companies while process management, information and analysis system, and strategic planning are considered as mechanistic elements of TQM.

(ii) Leadership

Leadership is the ability to adapt the setting so everyone feels empowered to contribute creatively to solving the problems. Leaders must understand culture and recognise those elements that cannot be changed. They must be able to create an environment where they can empower others to act both
independently and interdependently. They must provide a vision that focuses on quality and meeting customer’s expectations. In other words, top management need transformational leadership skill. On the other hand, the role of middle management in initiating and institutionalising small, incremental improvements has been noted by Frohman (1997).

(iii) Communication

Dale (2003) noted that organizations are totally reliant on communication, which is defined as the exchange of ideas, messages, or information by speech, signals, or writing. Without communication, organizations would not function. If communication is diminished the entire organization suffers. When communication is thorough, accurate, and timely, the organization tends to be vibrant and effective.

(iv) Customer focus

According to Deming (1986) customer focus is the most important part of production, means producing and delivering products and services that fulfil customers’ present and future needs and expectations. It also refers to exceeding customers’ expectations in order to ensure long-term organizational success and survive.

(v) Teamwork

According to Quazi et al., (2002) teams are appropriate when there is a need for coordination of activity, when major breakthroughs in performance are required. It has been reported that teams are very useful for integration of activities, generating production efficiencies and for providing innovative approaches to production issues (Eisenhardt and Tabrizi 1995).

(vi) Training

The review of literature corroborates the importance of training as an important factor for successful TQM implementation (Palo & Padhi 2003; Quazi, Hong & Meng 2002). Training is considered a vehicle for implementing and reinforcing quality practice (Reed, Lemak and Mero 2002). Effective training and employee involvement have also been found to be important for initiating quality management practice in Indian context (Joseph et al 1999).

2.2 Performance measure for employee performance

Performance can be defined as a social construct which is often blurred in use. Employee performance can be explained as the set of behaviours that are relevant to the target of the organization or the organizational unit in which a staff works, (N.M. Zakuan et al., 2008, Ahmad, 2013). In this study, two performance measure for employee performance has been identified which are job satisfaction and workplace environment.

i. Job satisfaction

According to Kaynak (2003), had defines Job Satisfaction “as an individual’s general attitude toward” their job. In fact, Total Quality Management covers every aspect on the way of life and operation that is conducted in an organization. This is particularly true for employee involvement and job performance that is directly affected by TQM on employee involvement because of established participative activities and job performance because of the conditions created necessary for good performance.
ii. Workplace environment
Sadikoglu and Zehir, (2010) stated that the furniture dimensions and arrangement, spatial layout, noise level, temperature, the total amount and accessibility of file and work storage, and the height and density of workplace partitions have a great impact on job satisfaction and performance, for both the individual and the team.

3. The proposed conceptual structural model

A conceptual model guides the author to determine the result that will be analysing the relationship between TQM and employee performance. In other words, conceptual structural model involves identifying the network of relationship among variables as shown in Figure 1. Several studies show a relationship between TQM in each of its forms and organizational performance (Kaynak, 2003). It has been argued that implementation of TQM practices will enhance business performance.

![Figure 1: The proposed conceptual model](image)

In this model, all possible relationships between each of six TQM dimensions considered as the independent variables which is top management, training, leadership, teamwork, communication, and customer focus and employee performance considered as the dependent variables.

4. Conclusion

The main aim of this paper is to review the relationships between total quality management and their impact on employee performance in Malaysian automotive industry. Even though many studies have been performed to identify for successful implementation TQM practices, it is found that there are still lack of study to investigate the relationships between TQM implementation on employee performance, especially in Malaysian car manufacturer and their suppliers. Thus, this research attempts to contribute to the development of total quality management and its effect to employee performance knowledge particularly in Malaysia.

To carry out this research, six TQM critical success factors and two employee performance measures have been investigated extensively as presented in the literature. Based on this review, a conceptual structural model that links six TQM critical success factors and employee performance measures which are employee satisfaction and workplace environment has been proposed.
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