

Seven Critical Success Factors of Total Quality Management (TQM) Practices in Halal Food Industry: A Review

¹Nor Suhada Mohd Amin, ¹Norhayati Zakuan, ¹Mohd Shoki Md Ariff,
²Muhamad Zameri Mat Saman, ¹Abbas Mardani and ²Mohd Hazwan Hassim
¹Faculty of Management,
²Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM),
81310 Skudai, Johor Bharu, Johor, Malaysia

Abstract: Halal food sector is one of the important components of the national economic generator due to increasing of Muslim population every year. Meanwhile, Total Quality Management (TQM) practices are the crucial quality technique should be applied in the industries included halal food industry to compete with others. The importance of TQM practices in the achievement of organizational performance has been highlighted in numerous studies. However, little study had tried to investigate the relationship between TQM practices and organizational performance particularly in halal food industries. The purpose of this study is to examine the relationship of TQM practices and organizational performance in the halal food industry. The research methodology is by documentations analysis based on previous literature and the outcome of this writing would be a conceptual model. This model will be used to study the relationship between TQM practices and organizational performance in halal food industry.

Key words: Total Quality Management (TQM), halal food industry, organizational performance, conceptual framework, Muslim population

INTRODUCTION

The concept of Total Quality Management (TQM) has been developed as the result of intense global competition. Organizations with international trade and global competition have paid considerable attention to TQM philosophies, procedures, tools and techniques. Krittanathip *et al.* (2013) stated that Total Quality Management (TQM) in individual private sector is a very important tool to continuously improve the long-term competitiveness and to have a sustainable business (Krittanathip *et al.*, 2013). The importance of Total Quality Management (TQM) practices in the achievement of organizational performance has been highlighted in numerous studies and various sectors such as high-technology industries (Hung *et al.*, 2011), manufacturing and service firm (Agus and Hassan, 2011; Kim *et al.*, 2012) pharmaceutical industries (Huai, 2012; Wang *et al.*, 2012), academic institutions (Dora *et al.*, 2013a, b; Ali and Talib, 2013; Todorut, 2013), biotechnology industries (Taskov and Mitreva, 2015), food industries (Din and Daud, 2014; Srimala and Wannapiroon, 2013; Valmohammadi and Roshanzamir, 2015) and so on.

Although, there are also studies in food industries but they are less focusing on the halal food industries. In addition, halal food industry is crucial sectors that capable in generating economic growth. According to Topalovic (2015), halal food is no longer merely an industry that complies with religious requirements only but it is becoming an economic force in itself both domestically and globally. Besides that, the halal food industry is predicted to become a multi trillion dollar industry in the near future due to an increase in demand. High acceptance of halal food by Muslims and non-Muslim has created enormous demand for halal food products (Geraedts *et al.*, 2001).

In order for the halal food industries to acquire brilliant opportunities in the market it is imperative that the Total Quality Management (TQM) is the best quality techniques should be applied (Chen and Chen, 2009). Thus, halal food manufacturers are encouraged to concern and implement the Total Quality Management (TQM) practice for the marketability besides focusing on the Islamic processing techniques for halal certification.

Previous studies have been performed to identify the factors of TQM practices implementation in

organizations. Nevertheless there are little study had attempted to study TQM particularly in halal food industries. Since, there are less observational study in halal food industry on quality management therefore this research is expected to distinguish the TQM elements based on previous study and develop a conceptual framework of total quality management factors and its relationship with organizational performance.

Literature review: According to jurnal in Ambali and Bakar (2014), TQM may be defined as a continuous quest for excellence by creating the right skills and attitudes in people to make prevention of defects possible and satisfy customers or users totally at all times. This same with Irani *et al.* (2004), Agus and Hassan (2001), Wang *et al.* (2012) and Daud *et al.* (2009) where stated that TQM is a desired culture that focuses on continuous process improvement within organizations to provide superior customer value and meet customer needs.

Meanwhile, Lakhe and Mohanty (1994) had defined Total Quality Management (TQM) is a synergetic management system which coordinates different activities of an organization and direct them towards quality improvements and customer satisfaction. The term Total Quality Management (TQM) conveys a total, company-wide effort that includes all employees, suppliers and customers and that seeks continuously to improve the quality of products and processes to meet the needs and expectations of customers (Irani *et al.*, 2004).

Besides that, Konecny and Thun (2011) and Levner *et al.* (1998) defined TQM as a management philosophy that helps manage their organization to improve the effectiveness and performance to achieve world class status for the past two decades. Techniques and tools are very important for the success of an organization because they provide high levels of Total Quality Management (TQM) and better performances (Puffer and McCarthy, 1996).

MATERIALS AND METHODS

Total Quality Management (TQM) constructs: According to Zakuan *et al.* (2007), Konecny and Thun (2011), the distinct generic construct would be generate by several steps. Firstly, defined a list of others constructs proposed in a large set of articles. Then, each construct was analyzed whether it was different or similar to the constructs previously analyzed. This process resulted with the seven following constructs: leadership, process management, customer focus, continuous improvement, strategic planning, supplier focus, training and education. Table 1 presents a list of similar practices proposed by other researcher.

Leadership: Most of previous studies had listed the leadership factor as one important element that must be have in the TQM practises. Since leadership is viewed as the significant “driver” of TQM which analyzes senior executives and individual participation in setting judicious management and constructing and keeping up an authority framework that will encourage high organisational performance, individual improvement and organisational learning (Yamada *et al.*, 2013). Therefore, in halal food industries should have Muslim leadership that could be lead strategies and projects, promote quality improvement goals besides focus on how organizations can best meet the needs of external and internal customers (Ambali and Bakar, 2014).

Process management: Process management encloses the systems and techniques for building up quality in the numerous shop floor exercises included in manufacturing. Also, this component is given lot of consideration by administration utilizing various tools and techniques (Srima and Wannapiroon, 2013). The main thought behind this principle of TQM is that associations are sets of interlinked procedures and that change of these procedures is the establishment of execution change (Yamada *et al.*, 2013).

Customer focus: According to Yamada *et al.* (2013), customer focus is the underpinning principle in the TQM of customer complaint resolution and the extent to which customer related information is disseminated through the philosophy. The organization can measure the extent organisation. Srima and Wannapiroon (2013) emphasizes that customer focus is measured by the organization’s commitment to satisfy their customer’s need. It will integrate the level of customer satisfaction to the company’s corporate planning the understanding of customer’s needs and expectations, customer’s feedback, customer satisfaction monitoring system and the level of interaction between company and customers.

Continuous improvement: Continuous efforts to improve the organisations its products and its services (Huai, 2012). Successful work towards halal must be built with the management’s continuous involvement as a basis in the creation of a strategic vision and clear halal quality values (Valmohammadi and Roshanzamir, 2015). An organisation that is committed to TQM has a culture based on commitment to customer satisfaction through continuous improvement (Agus and Hassan, 2011).

Strategic planning: Corporate planning is important to examine how the company develop, communicates, implement and improves its strategy and policy to achieve

Table 1: TQM constructs based on other researchers proposed

Constructs	Related constructs by the researchers
Leadership	Management commitment (Ambali and Bakar, 2014), leadership (Yamada <i>et al.</i> , 2013; Ali and Talib, 2013)
Process management	Process management (Yamada <i>et al.</i> , 2013; Huai, 2012; Samson and Terziovski, 1999; Daud <i>et al.</i> , 2009; Taskov and Mitreva, 2015; Srma and Wannapiroon, 2013; Valmohammadi and Roshanzamir, 2015), process approach (Prajogo and Sohal, 2006), business management (Krittianathip <i>et al.</i> , 2013)
Customer focus	Cusomer focus (Samson and Terziovski, 1999; Hung <i>et al.</i> , 2011; Daud <i>et al.</i> , 2009; Srma and Wannapiroon, 2013; Wang <i>et al.</i> , 2012), customer satisfaction (Huai, 2012), customer relation (Dora <i>et al.</i> , 2013; Kim <i>et al.</i> , 2012; Roshanzamir, 2015) customer-related performance (Chen and Chen, 2009), customer orientation (Dora <i>et al.</i> , 2013; Todorut, 2013; Mohammed <i>et al.</i> , 2013)
Continuous improvement	Continuous improvement (Huai, 2012; Agus and Hassan, 2011; Hung <i>et al.</i> , 2011; Daud <i>et al.</i> , 2009; Srma and Wannapiroon, 2013; Wang <i>et al.</i> , 2012), continuous improvement and innovation, process improvement (Chen and Chen, 2009)
Strategic planning	Strategic planning (Yamada <i>et al.</i> , 2013; Samson and Terziovski, 1999; Wang <i>et al.</i> , 2012; Ali and Talib, 2013) strategy management (Taskov and Mitreva, 2015), strategy policy (Krittianathip <i>et al.</i> , 2013), organizational structure (Valmohammadi and Roshanzamir, 2015)
Supplier focus	Supplier relationship (Dora <i>et al.</i> , 2013), supplier capability (Duran <i>et al.</i> , 2014; Valmohammadi and Roshanzamir, 2015), supplier relations (Chen and Chen, 2009), supplier partnerships (Suwandej, 2015), supplier quality management (Kim <i>et al.</i> , 2012), supplier focus (Srma and Wannapiroon, 2013), supplier commitment (Valmohammadi and Roshanzamir, 2015)
Training and education	Training and education (Ambali and Bakar, 2014; Valmohammadi and Roshanzamir, 2015), employee training (Dora <i>et al.</i> , 2013), learning (Agus and Hassan, 2011; Daud <i>et al.</i> , 2009), training (Kim <i>et al.</i> , 2012; Hoque, 2003), continuous learning (Ali and Talib, 2013)

company performance excellence and strong competition position (Srma and Wannapiroon, 2013). The central purpose and mission in the organisation can be defining from this element. The emphasis is on customer-driven quality and operational performance excellence as key strategic business issues that need to be an integral part of overall business planning (Yamada *et al.*, 2013).

Supplier focus: This constructs were examine on how the company selects and manage it suppliers to ensure they attain the expected quality specification demanded by the firm (Srma and Wannapiroon, 2013). Meanwhile, supplier's halal quality management is critical because halal organizations and their suppliers are interdependent and a mutually beneficial relationship would enhance the ability of both to generate product of halal quality and value (Valmohammadi and Roshanzamir, 2015).

Training and education: The training and education should focus on understanding quality requirements, knowing the methodology required to attain them. It should also stress doing things right the first time, every time with no allowable error (Ambali and Bakar, 2014). The significance of trainings as motivators for staff in future development of the organization (Hoque, 2003). Halal training is for the improvement of employee's specific skills whereas education is to provide knowledge, information, understanding and skills that are critical to halal quality implementation (Valmohammadi and Roshanzamir, 2015). One of the major problems faced by developing countries is lack of expertise and inadequate training facilities (Ambali and Bakar, 2014).

RESULTS AND DISCUSSION

Based on comprehensive review of previous study a conceptual model has been proposed as shown

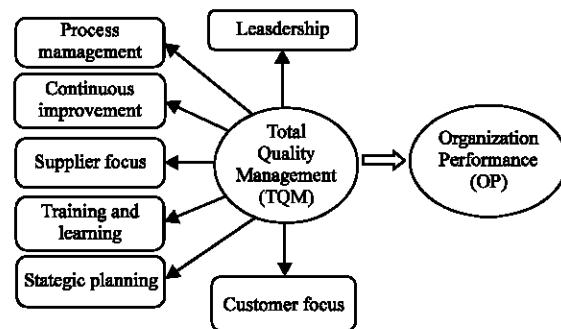


Fig. 1: The Total Quality Management (TQM) conceptual framework

in Fig. 1. The model will be used to determine the relationship between the factors of Total Quality Management (TQM) and their effects on Organizational Performance (OP).

CONCLUSION

The study reveals seven factors of Total Quality Management (TQM) that are proposed should be implemented in the halal food industries. These findings indicate that the factors are mostly similar to the TQM factors adopted by various industries in literature review. Besides that the conceptual framework proposed should be approved exactly through a survey or some other observational technique for example, contextual investigation approach (Agus and Hassan, 2011).

So that, the experimental study will be directed by utilizing this proposed applied model as a part of the following study. Therefore, the crucial commitment of this study is to distinguish the components of TQM methodologies.

ACKNOWLEDGEMENT

Researchers express gratitude to the Malaysian Ministry of Education (MOE) and Management Faculty, Universiti Teknologi Malaysia (UTM) under FRGS vot: R.J130000.7829.4F864.

REFERENCES

- Agus, A. and Z.F. Hassan, 2011. Enhancing production performance and customer performance through Total Quality Management (TQM): Strategies for competitive advantage. *Proc. Soc. Behav. Sci.*, 24: 1650-1662.
- Ali, K.A.M. and H.H.A. Talib, 2013. Total quality management approach for Malaysian food industry: Conceptual framework. *J. Adv. Manage. Sci.*, 1: 405-409.
- Ambali, A.R. and A.N. Bakar, 2014. People's awareness on halal foods and products: Potential issues for policy-makers. *Procedia Soc. Behav. Sci.*, 121: 3-25.
- Chen, J.K. and I.S. Chen, 2009. TQM measurement model for the biotechnology industry in Taiwan. *Expert Syst. Appl.*, 36: 8789-8798.
- Daud, S., R. Din, S. Bakar, M. Kadir and N. Sapuan, 2009. Implementation of MS1500: 2009; A gap analysis. *Commun. IBIMA.*, 2011: 1-11.
- Din, R.C. and S. Daud, 2014. Critical success factors of MS1500: 2009 implementation. *Procedia Social Behav. Sci.*, 121: 96-103.
- Dora, M., M. Kumar, D. van Goubergen, A. Molnar and X. Gellynck, 2013a. Operational performance and critical success factors of lean manufacturing in European food processing SMEs. *Trends Food Sci. Technol.*, 31: 156-164.
- Dora, M., M. Kumar, D.V. Goubergen, A. Molnar and X. Gellynck, 2013b. Food quality management system: Reviewing assessment strategies and a feasibility study for European food small and medium-sized enterprises. *Food Control*, 31: 607-616.
- Duran, C., A. Cetindere and O. Sahan, 2014. An analysis on the relationship between total quality management practices and knowledge management: The case of Eskisehir. *Procedia Social Behav. Sci.*, 109: 65-77.
- Geraedts, H.P.A., R. Montenarie and P.P.V. Rijk, 2001. The benefits of total quality management. *Computerized Med. Imaging Graphics*, 25: 217-220.
- Hoque, Z., 2003. Total quality management and the balanced scorecard approach: A critical analysis of their potential relationships and directions for research. *Crit. Perspect. Accounting*, 14: 553-566.
- Huai, J., 2012. Apply TQM to E-government outsourcing management. *Phys. Procedia*, 24: 1159-1165.
- Hung, R.Y.Y., B.Y.H. Lien, B. Yang, C.M. Wu and Y.M. Kuo, 2011. Impact of TQM and organizational learning on innovation performance in the high-tech industry. *Intl. Bus. Rev.*, 20: 213-225.
- Irani, Z., A. Beskese and P.E.D. Love, 2004. Total quality management and corporate culture: Constructs of organisational excellence. *Technovation*, 24: 643-650.
- Kim, D.Y., V. Kumar and U. Kumar, 2012. Relationship between quality management practices and innovation. *J. Oper. Manage.*, 30: 295-315.
- Konecny, P.A. and J.H. Thun, 2011. Do it separately or simultaneously: An empirical analysis of a conjoint implementation of TQM and TPM on plant performance. *Int. J. Prod. Econ.*, 133: 496-507.
- Krittianathip, V., S. Rakkarn, S. Cha-um and N. Timyaingam, 2013. Implementation of self assessment evaluation for total quality management: A case study of retail sectors. *Procedia Social Behav. Sci.*, 88: 73-80.
- Lakhe, R.R. and R.P. Mohanty, 1994. Total quality management: Concepts, evolution and acceptability in developing economies. *Int. J. Qual. Reliab. Manage.*, 11: 9-33.
- Levner, E., D. Zuckerman and G. Meirovich, 1998. Total quality management of a production-maintenance system: A network approach. *Intl. J. Prod. Econ.*, 56: 407-421.
- Mohammed, A.S.A., S.R.H. Tibek and I. Endot, 2013. The principles of total quality management system in World Islamic Call Society. *Procedia Social Behav. Sci.*, 102: 325-334.
- Prajogo, D.I. and A.S. Sohal, 2006. The integration of TQM and technology/R&D management in determining quality and innovation performance. *Omega*, 34: 296-312.
- Puffer, S.M. and D.J. McCarthy, 1996. A framework for leadership in a TQM context. *J. Qual. Manage.*, 1: 109-130.
- Samson, D. and M. Terziowski, 1999. The relationship between total quality management practices and operational performance. *J. Oper. Manage.*, 17: 393-409.
- Srima, S. and P. Wannapiroon, 2013. Development of Total Quality Management Information System (TQMIS) for Model School on best practice. *Intl. J. E. Educ. E. Bus. E. Manage. E. Learn.*, 3: 148-151.
- Suwandej, N., 2015. Factors influencing total quality management. *Procedia Social Behav. Sci.*, 197: 2215-2222.

- Taskov, N. and E. Mitreva, 2015. Total dedication of the top management within the Macedonian higher education institutions. *Procedia Social Behav. Sci.*, 180: 219-226.
- Todorut, A.V., 2013. The need of total quality management in higher education. *Procedia Social Behav. Sci.*, 83: 1105-1110.
- Topalovic, S., 2015. The implementation of total quality management in order to improve production performance and enhancing the level of customer satisfaction. *Procedia Technol.*, 19: 1016-1022.
- Valmohammadi, C. and S. Roshanzamir, 2015. The guidelines of improvement: Relations among organizational culture, TQM and performance. *Int. J. Prod. Econ.*, 164: 167-178.
- Wang, C.H., K.Y. Chen and S.C. Chen, 2012. Total quality management, market orientation and hotel performance: The moderating effects of external environmental factors. *Int. J. Hospitality Manage.*, 31: 119-129.
- Yamada, T.T., C.F. Poltronieri, D. Nascimento, L. Gambi and M.C. Gerolamo, 2013. Why does the implementation of quality management practices fail? A qualitative study of barriers in Brazilian companies. *Procedia Social Behav. Sci.*, 81: 366-370.
- Zakuan, N., S. Yusof and S. Shamsudin, 2007. Implementation of quality management practices in Malaysian automotive industry: A Review. *Adv. Process. Syst. Manuf.*, 2007: 105-116.