

THE IMPACT OF TOTAL QUALITY MANAGEMENT COMPONENTS ON SMALL AND MEDIUM ENTERPRISES' FINANCIAL PERFORMANCE IN JORDAN

Dr. Yaser Mansour Almansour,
Al Balqa Applied University,
Amman – Jordan.

ABSTRACT

Total Quality Management (TQM) is increasingly lambasted by management gurus and the business media for a lackluster impact on the bottom line. The question of whether the adoption of TQM improves financial performance has been discussed for several years. However, most research has examined large organizations, and it has been recognized that TQM studies on small and medium enterprises (SMEs) is limited (Parkin and Parkin 1996; Walley 2000). This paper presents a study of the impact of TQM components on small and medium enterprises' financial performance in Jordan while also providing a review of global TQM research.

Keywords: TQM, SMEs, Global TQM, Jordan

INTRODUCTION:

Since the 1980's, when the Total Quality Management (TQM) concept was first defined, (Deming, 1986, Crosby, 1979, Juran, 1986), practitioners and researchers tried to give more definitions to defend this business philosophy, the first organic ground based system that emphasizes a systems approach to quality. TQM is a set of techniques, principles, processes, and best practices that over time have been proven effective (Rao et al., 1996).

TQM utilizes techniques that improve as well as get better product quality and processes and thereby help a firm improve competitive performance (Grant et al., 1994). Proponents of TQM argue that the philosophy can be applied to any organization (Powell 1995).

The effectiveness of TQM as a system for organizational improvement has been widely reviewed in the literature. TQM is an important management tool, which can offer business with stability, growth, and prosperity (Issac et al., 2004). In order to achieve the requirement of quality, firms have to put the effort on the implementation of TQM. Therefore, firms will introduce quality management practice to integrate internal information communications with TQM philosophy effectively. In addition, the application of TQM mechanisms is also important to develop the relationship between organizations and their suppliers. Moreover, the application of TQM can also increase the satisfaction of the customer by providing preeminent products or services.

Evidence concerning the impact of TQM on business performance is based on a wide range of indicators that differ across studies and are in some cases are contradictory, especially regarding financial performance, which is measured in terms of ROA (return on assets), or ROI (return on investment).

There are many studies have investigated the link between TQM and organization performance, however, that studies have concentrate on large organizations, and that could give a light on recognizing that TQM studies on small and medium enterprises (SMEs) is limited (Parkin and Parkin 1996; Walley 2000). Therefore, this study focuses on the impact of TQM components on SMEs financial performance in Jordan.

LITERATURE REVIEW:

Christos B. Fotopoulos&EvangelosL. Psomas(2009) and Kumar, Dixit Garg and T.K Grag (2009) studied the impact of TQM practices on quality management consequences and explained the relationship between TQM components including leadership, strategic quality planning, employee management and involvement, supplier management, customer focus, process management, and other continuous improvements, and their effect on quality management in the form profits, sales, and position.

Some research has found a positive effect of TQM (Easton and Jarrell, 1998; Hendricks and Singhal, 2001a,b); whereas other research reports a negative incidence of TQM on all of the measures (Chapman et al. 1997). Other research has found a neutral result (Adam, 1994; Powell, 1995; York and Miree, 2004). Hence, that indicates the inconsistent results of those studies, However, that could lead to a methodological problem and conceptual approaches used by researchers which may have led to conflicting results but, in response.

Moreno Luzon (1993) examined the effectiveness of TQM in a survey of 44 small manufacturing companies in Valencia, Spain. Effectiveness was measured on the basis of managers' satisfaction with the achievement of specific objectives and their estimation of the change in several performance variables over a one year period believed to be a consequence of the quality program. Overall, the managers indicated a high level of achievement of their TQM objectives, and some managers perceived that their TQM programs had resulted in highly positive effects. In particular, the most frequently cited effects were the development of a quality culture (with 77% of firms experiencing this effect) and improved training (72.7%). Increased profits and increased sales were less frequently cited, with 63.6% and 50% of firms experiencing these effects, respectively.

Walley (2000) provided insights to the effect of TQM in SMEs in the UK farming sector. Respondents were asked to rate the impact of TQM on a range of criteria. Based on the responses of 25 farmers who had implemented TQM (15.2% of the sample), Walley (2000) concluded that although some farmers had indicated that TQM had resulted in slight decreases in criteria such as 'cost efficiency' and "profitability", on average TQM appeared to have a small positive effect on overall performance. Criteria where TQM had a major impact were "quality awareness" and "employee morale".

Rahman (2001) studied the relationship between TQM practices and three business outcomes in SMEs in Western Australia. He developed a questionnaire which asked respondents to rate themselves on the degree to which they practiced 36 TQM mechanisms. The questions pertained to the similar six quality criteria that have been examined in Anderson and Sohal's (1999) study. Business outcomes were defined in terms of revenue, profit, and the number of customers. A self rating scale was used to measure business outcomes. The questionnaire was sent to 250 SMEs, and 49 usable responses were received. Rahman (2001) documented that "leadership", "processes, products and services", "people", and "customer focus" were significantly correlated

with revenue, profit, and the number of customers.

EsinSadikoglu, CemalZehir (2010) and Alessandro Brun (2010) investigated the relationship between TQM practices with innovation and employee performance. The theoretical model developed for the study explains how different TQM practices i.e. leadership, training, employee management, information and analysis, supplier management, process management, customer focus, and continuous improvements effects on employee performance which leads to innovation performance and this in later stages effects the firm overall performance. Some researchers have found a positive effect of TQM (Easton and Jarrell, 1998; Hendricks and Singhal, 2001a,b); whereas other researchers found a negative incidence of TQM on all of the measures (Chapman et al. 1997). Other researchers also have found a neutral result (Adam, 1994; Powell, 1995; York and Miree, 2004). Hence, that indicates the inconsistent results of those studies, However, that could lead to a methodological problem and conceptual approaches used by researchers which may have led to conflicting results but, in response.

INDEPENDENT VARIABLES:

TQM measurement:

The TQM program components used in the study include the following:

1. **Commitment to Quality:** It is important in implementing a TQM program to get the commitment to the program of top management and the company's stakeholders.
2. **Employee Involvement:** The quality management efforts of the organization should be fully supported by the members of the organization, especially the rank and file employees and middle management. Top management should be involved in planning, designing, implementing and monitoring the program.
3. **Customer Focus:** The ultimate objective of TQM is to satisfy and delight the customers. It is important, therefore, to implement strategies to determine customer needs and requirements, to monitor their level of customer satisfaction, and to respond to their concerns.
4. **Fact-based Management:** Employees need to be educated on the use of quantitative and statistical techniques to monitor and improve the quality of products and processes.
5. **Process Monitoring and Control:** The effectiveness of the firm's process strategies and quality management program should be regularly monitored to ensure that targeted quality performance outcomes are met.
6. **Incentive and Recognition System:** Since quality management programs will promote teamwork and process-based approaches, appropriate incentives and recognition systems need to be designed to continuously motivate employees to support the program.
7. **Continuous Improvement:** The quest for quality should be continuing. Employees need to be encouraged to adopt productivity improvement programs.

TABLE 1 SHOWS THE ITEMS OF TQM STRATEGIES ASSOCIATED WITH THESE SEVEN TQM FACTORS:

TABLE 1 VALIDATED TQM PROGRAM COMPONENTS:

FACTOR	ITEMS
Commitment to Quality	1. Primary consideration of quality in product design 2. Getting feedback from technical experts 3. Inclusion of customer feedback 4. Multi-functional review of product / service design 5. Ensuring benchmarking activities result to improvement
Employee Involvement	1. Organization of regular meetings 2. Encouragement of employees 3. Clarity and formality in goals 4. Top management involvement in planning & implementing quality management programs 5. Presence of multi-functional teams 6. Presence of quality circles
Customer Focus	1. Program to implement customer service 2. Top management involvement in planning quality 3. Integration of training lessons to work processes 4. Inclusion of customer feedback 5. Techniques to determine customer satisfaction

	6. Provision of financial support by top management
Fact-based Management	1. Utilization of quantitative techniques in process 2. Utilization of quantitative techniques in production design 3. Training on problem-solving techniques 4. Training on quality control
Process Monitoring and Control	1. Adoption of repair and preventive maintenance 2. Employee compliance to regulations 3. Periodic quality audits 4. Review of departmental targets 5. Quality as primary consideration in supplier Selection
Incentive and Recognition System	1. Application for ISO 9000 certification 2. Company application for recognition 3. Incentives to employees 4. Involvement in quality management association
Continuous Improvement Orientation	1. System on item segregation 2. Signboards and labels 3. Records management system 4. Cleanliness 5. Programs on waste elimination

Source: Talavera, G. V. (2004), "TQM Constructs Development and Validation: The Philippine Experience," *GadjaMada International Journal of Business*, 6(3), pp. 355 - 381.

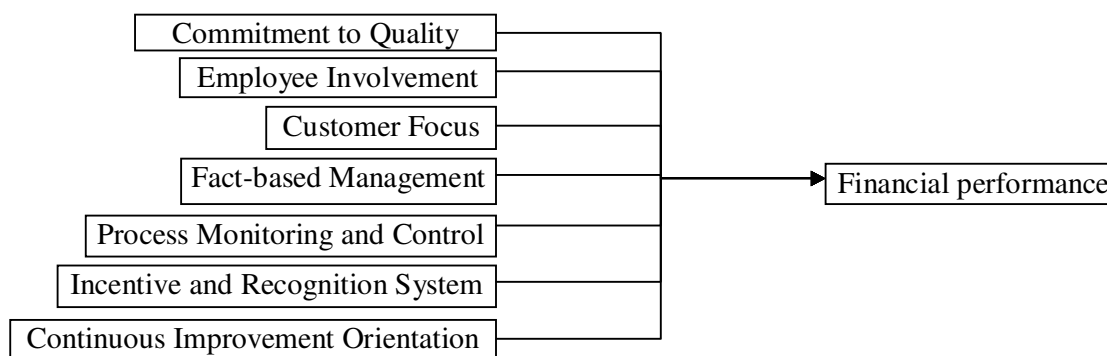
DEPENDANT VARIABLE:

Financial performance measurement:

FACTOR	ITEMS
Financial performance	Return on investment Earnings growth Sales growth Market share Return on assets Cash flow

The review of the literature on the status of TQM components and organizations' performance return has been analyzed in order to see the TQM components and its effect on organizations' performance. The analyses are carried out by applying several factors which provide a sufficient understanding of the context within which the issue studied and analyzed. The discussion provides an important framework for this study in term of the variables that are going to be used in term of measuring TQM. Therefore, the variables that will be used to measure market sentiment are undertaken by Talavera, G. V. (2004). Figure 1 illustrates the conceptual framework of this study.

FIGURE 1: CONCEPTUAL FRAMEWORK



CONCLUSION:

Total Quality Management (TQM) is an approach that seeks to improve quality and performance which will meet or exceed customer expectations. This can be achieved by integrating all quality-related functions and processes throughout the company. TQM utilizes techniques that improve as well as get better product quality and processes and thereby help a firm improve competitive performance. The quality management systems force company departments to work as a team. Different areas of the company become reliant upon one another to produce a quality product that meets and exceeds the customers' expectations. A quality system incorporates measures that affect sales, finance, operations, customer service and marketing. This study focuses on the impact of TQM components on SMEs financial performance in Jordan. An extension of this study for future research can be developed in term of finding other factors of measuring TQM. Interested parties can develop model of TQM's impact on publicly traded firms. Rather than focusing on small and medium enterprises

REFERENCES:

- [1] Adam Jr., E.E. (1994). Alternative quality improvement practices and organizational performance. *Journal of Operations Management*, Vol. 12 No.1, pp. 27-44.
- [2] Alessandro Brun (2010). Critical success factors of six sigma implementation in Italian companies. *International Journal of Production Economics*, pp 1-7.
- [3] Chapman, R.L, Murray, P.C and Mellor, R (1997). Strategic quality management and financial performance indicators, *International Journal of Quality & Reliability Management*, Vol. 14 No. 4, pp. 432-448.
- [4] Christos B Fotopoulus and Evangelos L. Posmas (2009). The impact of soft & hard TQM elements on quality management results. *International Journal of Quality and Reliability Management*, Vol 26, no 2, pp 150-163.
- [5] Crosby, P.B. (1979). *Quality is free: The Art Of Making Quality Certain*. New American Library, New York.
- [6] Deming, W.E. (1986). *Out of the Crisis*. MIT Center for Advanced Engineering. Cambridge University Press.
- [7] Easton, G. S. and S. Jarrell (1998). The Effects of Total Quality Management on Corpora Performance: An Empirical Investigation, *The Journal of Business*, 71(2), pp. 253-307.
- [8] Esin Sadikoglu, Cemal Zehir (2010). Investigating the effect of innovation and employee performance on relationship between TQM practices and firm performance: An empirical study of Turkish firms, *International Journal of Production Economics*, pp 1-14.
- [9] Grant, R. M., R. Shani, and R. Krishnan (1994). TQM's Challenge to Management Theory and Practice, *Sloan Management Review*, pp. 25-35.
- [10] Hendricks, K.B. and Singhal, V.R. (2001a). Firm characteristics, total quality management, and financial performance, *Journal of Operations Management*, Vol. 19 No. 3, pp. 269-285.
- [11] Hendricks, K.B. and Singhal, V.R. (2001b). The long-run stock price performance of firms with effective TQM programs, *Management Science*, Vol. 47 No. 3, pp. 359-368.
- [12] Issac, G. & Rajendran, C., Anantharaman, R.N (2004). A conceptual framework for total quality management in software organizations, *Total Quality Management*, 15(3), 307-344.
- [13] Juran, J. (1986). The quality trilogy, *Quality Progress*, No. 9, pp. 19-24.
- [14] Kumar, Dixit Garg and T.K. Garg. (2009). Total quality management in Indian industries: relevance, analysis and directions. *The TQM Journal*, Vol 21, no 6, pp 607-622.
- [15] Powell, T. C. (1995). Total Quality Management as Competitive Advantage: A Review and Empirical Study, *Strategic Management Journal*, 16(1), pp. 15-37.
- [16] Parkin, M. A. and R. Parkin (1996). The Impact of TQM in UK SMEs, *Industrial Management & Data Systems*, 96(4), pp. 6-10.
- [17] Rahman, S.-U. (2001). Total Quality Management Practices and Business Outcome: Evidence From Small and Medium Enterprises in Western Australia, *Total Quality Management*, 12(2), pp. 201-210.
- [18] Rao, A., L. Carr, I. Dambolena, R. Kopp, J. Martin, F. Rafii, and P. Schlesinger (1996). *Total Quality Management: A Cross-Functional Perspective*, John Wiley & Sons, Inc.
- [19] Talavera, G. V. (2004). TQM Constructs Development and Validation: The Philippine Experience, *Gadja Mada International Journal of Business*, 6(3), pp. 355 - 381.
- [20] Walley, K. (2000). TQM in Non-Manufacturing SMEs: Evidence From the UK Farming Sector, *International Small Business Journal*, 18(4), pp. 46-61.
- [21] York, K.M. and Miree, C.E. (2004). Causation or covariation: an empirical re-examination of the link between TQM and financial performance, *Journal of Operations Management*, Vol. 22, pp. 291-311.
