

## **TOTAL QUALITY MANAGEMENT AND COMPITITIVE ADVANTAGE**

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### **ABSTRACT**

*This study was set out to examine the impact of TQM on competitive advantage. The findings show that both process management and employee involvement were found to be good predictors of competitive advantage. The total quality management (TQM) system has been widely conceptualized as a strategy that provide companies with a competitive advantage (MartínezLorente, Dewhurst, and Gallego-Rodríguez, 2000). Conclusion and implications TQM is a general philosophy of management that attempts to enhance competitive advantage of organizations, and is a way of managing organizations to improve its overall effectiveness and performance towards achieving world-class status.*

### **INTRODUCTION**

Increasing globalization, international competition and constantly changing customer demands have had a significant impact on the business environment over the last few decades. Jordanian organisations have therefore tried to adapt to this change and the introduction of different quality management approaches has been one of the ways in which they have responded. Increasingly, TQM has been seen as a significant factor influencing an organisation's level of competitive advantage through differentiation and cost leadership (Almansour, 2012).

The concepts of TQM has captured the attention of scholars from all walks of life especially in commerce and industry, politics and academics. The humongous number of articles being published in this area is a huge testimony to the high level of interest in quality issues (Gharakhani et al. 2013). During the past decade, quality improvement has not only become the toast to management but most important organizational strategies for achieving competitive advantage. Improving the quality with which an organization can deliver its products and services is critical for competing in an expanding global market. TQM begins with the primary assumption that employees in organizations must cooperate with each other in order to achieve quality for the needs of the customer. One can achieve quality by controlling manufacturing/service processes to prevent defects. TQM, however, does not only consist of quality tools and techniques.

Quality management practices are applied in many business organizations because it contributes to the success and organizational performance. However, inappropriate implementation of strategies and resources can lead to failures in improving the quality of products and services because of a number of factors. The failures can be result of improper top management and leadership commitment, lack of employee involvement and underestimation of customer capacity in improving the quality.

How a business achieves and sustains a competitive advantage has long been the central focus of strategic marketing research. The dominant paradigm in the field has been the competitive forces approach that posits that the intensity of competition determines the profit potential for individual companies (Porter, 1980). According to this framework, a company seeks a position in an attractive market that can be defended against both existing and potential competitors. Although the identification and development of the requisite capabilities is important, the marketer's primary focus is on achieving a defensible low-cost or differentiation position, and on keeping rivals off balance through strategic investments, pricing strategies, and competitive signaling.

### **Statement of Problem**

Incontrovertibly, in recent times, TQM has become a hot button topic in management with considerable number of articles and books. With this piling number of authors and books available,

it will not be out of order to uphold that, common knowledge about the term have almost out-ran fact. For one, total quality management remains a hazy, ambiguous concept. This may be due largely to the fact that the term TQM means different things to different people. The variation of understanding on how the concepts can be applied to tone up the spirit of competitiveness in organisations have remained a mirage. Some managers who only limited the term to their distorted line of reasoning to mean quality management were disappointed because TQM offers more than that.

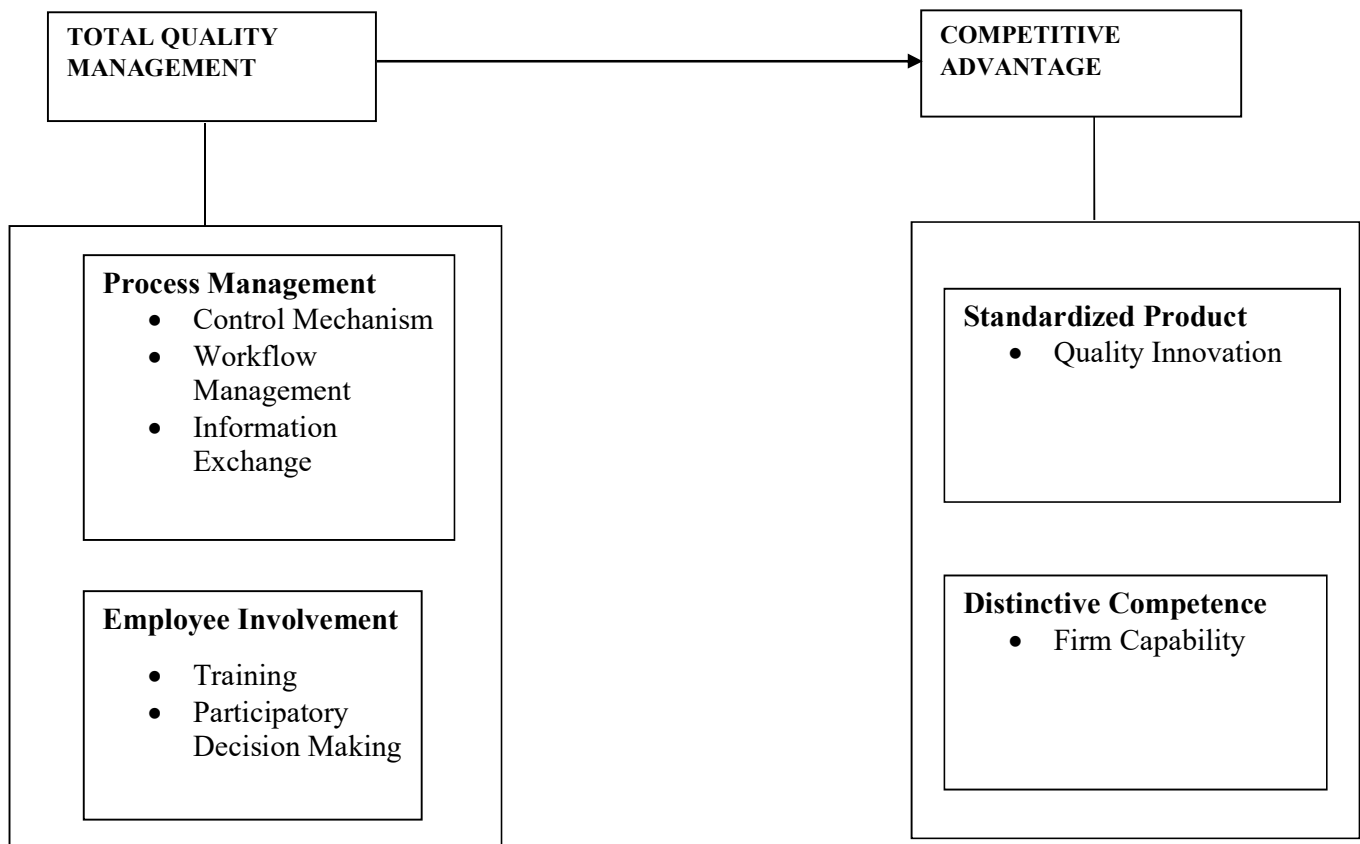
Again, there there have been disagreements over what elements of TQM are most influential (Al-Ettayem and Zu'bi, 2015), and there is evidence that not all organisations implementing TQM practices have really benefitted from its implementation (Álvarez-García and Rueda-Armengot, 2016).

Even though the concept has been the most frequently used in management, it has also remained the most abused, misunderstood and inappropriately misplaced to mean some order management techniques.

The researcher therefore wishes to exonerate his thinking from this traditional reasoning. This work therefore aims to investigate the relevance TQM as a competitive advantage to organisations.

**Conceptual Framework**  
**INDEPENDENT VARIABLES**

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**Figure: 1.1** Conceptual Framework of Total Quality Management as a Competitive Advantage  
**Source:** Conceptualised from the Researcher's Desk

### **The Concept of Total Quality Management**

Quality "gurus" such as Deming and Juran have proposed their own frameworks. Quality teams provide companies with the structured environment necessary for successfully implementing and continuously applying the TQM process. Quality training is conducted and the continuous improvement process executed through a well-planned team structure. The ultimate goal of the team approach is to get everyone, including contractors, designers, vendors, subcontractors, and owners involved with the TQM process.

In order to make a business viable it has to be built upon a certain set of values which will promote the business, assure customers that it's the right choice and attract new customers while retaining the existing ones. Quality has turned out to become one of the most important aspects of a business or a product as it could be associated with many factors such as reliability, delivery, usability, and an acceptable price (Arikkök, 2016).. Quality can have different meanings for different customers as it could also reflect many different facts in one term. A reputation for quality is an invaluable asset for a company and it takes time to build it however it can be ruined pretty easily (Arikkök, 2016).

Total quality management (TQM) is a systematic quality improvement approach for firm-wide management for the purpose of improving performance in terms of quality, productivity, customer satisfaction, and profitability. Since TQM practices have been embraced by many firms around the world for decades, they have earned the attention of many researchers from diverse areas.

TQM can be defined as a holistic management philosophy that strives for continuous improvement in all functions of an organization, and it can be achieved only if the total quality concept is utilized from the acquisition of resources to customer service after the sale (Gharakhani et al. 2013). TQM practices have been documented extensively in measurement studies as well as in the studies that have investigated the relation of TQM practices to various dependent variables. TQM is an effort that involves every organization in the industry in the effort to improve performance. It permeates every aspect of a company and makes quality a strategic objective. TQM is achieved through an integrated effort among personnel at all levels to increase customer satisfaction by continuously improving performance. TQM focuses on process improvement, customer and supplier involvement, teamwork, and training and education in an effort to achieve customer satisfaction, cost effectiveness, and defect-free work. TQM provides the culture and climate essential for innovation and for technology advancement (Gharakhani et al. 2013).

York and Miree (2004) affirmed TQM as groups of methods and management tools that focus on providing significant value to customers by identifying customer needs and respond to changes in the market, as well as focusing on improving the effectiveness of the processes that lead to produce goods or services. Mele and Colurcio (2005) defined it as an order way of management that rely on processes and continuous improvement of the performance of the company by all human resources in order to satisfy the implicit and explicit expectations of the customers and other stakeholders.

### **Process Management**

A business process is a collection of all the activities, including the roles, resources, and rules necessary to produce and deliver a product or a service to an external or internal customer (Davenport, 1993; Spanyi, 2006). Most work in organizations is carried out in processes; and though processes do not show on the organization map, companies increasingly recognize how vital well-functioning processes are for business performance. Process Management according to Smith and Finger (2003) does not only encompasses the discovery, design and deployment of business processes, but also the executive, administrative and supervisory control over them to ensure that they remain compliant with business objectives for the delight of customers. Process management involves four dimensions: process awareness, process ownership, process measurement, and process improvement.

**Control Mechanism**

Control mechanism is the process by which an organization proactively or reactively ensures that its sub units, at all level of organization, act in a coordinated and co-operative manner. Control mechanisms play an important role in any business organization, without which the roles of managers get constrained. Control is required for achieving the goals in a predefined manner because it provides the instruments which influence the performance and decision-making process of an organization. Control is in fact concerned with the regulations applied to the activities within an organization to attain expected results in establishing policies, plans, and practices. Control mechanisms can be set according to functions, product attributes, geographical attributes, and the overall strategic and financial objectives

The objective of control mechanisms in human resource units is to ensure that decisions are made effectively to achieve the firms objectives.

**Workflow Management**

Workflow management is concerned with providing automated support for business processes. Typically, a workflow involves both people and software applications. Workflow management systems are a class of software that supports business processes by taking on their information logistics, i.e., they ensure that the right information reaches the right person at the right time (van der Aalst and van Hee 2002). The information logistics of business processes can be captured by a workflow or process modeling language. Different workflow management systems may be implemented supporting the use of different languages. Work is assigned to participants based on explicit resource allocation directives, which may link into an organizational model, and the timing is driven by an explicit representation of the temporal order of the various activities of the business process. An important objective in Workflow Management is to automatically route artefacts (documents, messages, e-mails) through a network to actors having predefined roles. The routing is done according to a set of predefined rules, and is often controlled by the state of the artefact (e.g., the price). Business rules are particularly important for routing of artefacts Workflow management deals with supporting business processes in organizations and it involves managing the flows of work through an organization (Van Der Aalst, 1998). Workflows are a collection of coordinated tasks designed to carry out a well-defined complex process (Mukherjee, 2004). A workflow management system is a generic information system that supports modelling, execution, management and monitoring of workflow. Many different workflow management systems have been developed that focus on different application domains and provide different functionality (Van der Aalst et al. 2003). Workflow management lacks a standardized theory that provides a theoretical background for workflows like the relational algebra provide for databases (Van Der Aalst, 1998). Despite efforts of standardization bodies, there is no consensus on the representation or conceptual model of workflow processes. In this diverse and complicated landscape, it is a challenge to evaluate and compare the functionality of various workflow management systems and to survey the functional requirements of workflow management systems. A number of approaches attempt to address this situation. Jablonski and Bussler (1996) asserts that there are a lot of essential perspectives and aspects of comprehensive workflow management functionality. They provide a structure in the complex environment of workflows. In (Van der Aalst et al. 2003) it is systematically analyzed available functionality in existing workflow management systems, and they are categorized in a number of workflow patterns. For the evaluation of the software tools, deploying workflow technologies, an integrated view is applied combining both qualitative and quantitative indicators to assess them for their support in workflow management systems.

**Employee involvement**

Employee involvement is a part of a business organizations strategy of total involvement of all departments and spheres. Along with supplier management and customer engagement, employee involvement also contributes to the organizational growth, as well as to maintaining favorable

relations among employees, customers, and suppliers. Employees are the most important asset for any firm as they provide support in productivity and performance enhancement. In order to become competitive, firms must train their employees to improve their abilities and skills which increases their. Total employee involvement lies in both top management and the way managers copes with its employees. The main concept of total quality management should bind both top management and subordinates to a single objective in order to create "a united force totally involved in achieving organizational goals and objectives" (Mukherjee, 2006). An advanced form of employee engagement is employees' empowerment.

In this respect, employee engagement is possible in case of total employee empowerment that permits employees to take measures and react to customer needs and expectation. Quality of products and services is also the main concern of employees (Mukherjee, 2006). In this respect, employees should strive to align their objectives with higher organizational goals; they should also have an authority to increase their contribution by maximizing the available opportunities and taking proper measures to meet the organizational purpose performance.

### **Training**

Viewing training from the lens of Azara, Syed and Muhammad (2013), it is the process of improving the existing skills, knowledge, exposure, and abilities in an individual. According to Saleem and Mehwish (2011) training is an organized rise from the know-how skills and sensations needed for staff members to execute efficiently in the offered process, as well as, to operate in underling situation. Laing (2009) defines training as an indicator to enhance superior skills, knowledge, capabilities and outlook of the employees that results in effective performance of the workers. Ofobruku and Nwakoby (2015) prescribed training as the process of developing employees' skills and obtaining knowledge on new concepts, rules or attitudes in order to increase effectiveness on a particular job. For Dialoke (2015) training connotes, teaching or developing in oneself or others, skills and knowledge that relate to specific useful competencies.

Wajdi, Khalil and Maria (2014) perceived training as a planned process to modify attitude, knowledge, skill or behavior through learning experience to achieve effective performance in an activity or range of activities. Other scholars that have perceived training as a planned process are Beardwell and Holden (2001). They opined that training is a planned process that is used to change attitudes, knowledge, skills and behavior through the learning experience in order to achieve effective performance in a specific activity or range of activities (Beardwell and Holden, 2001). For DeNisi and Griffin (2008), training is a planned attempt by an organization to facilitate employee learning of job-related knowledge, skills, and behaviour.

### **Participatory Decision Making**

Fullan (1982) asserts that decision-making is the process of identifying and choosing alternative courses of action in a manner appropriate to the demand of the situation. Ogunsunji (1990) shares the same view adding that "decision making is selection among several alternatives, making a course of action".

Participatory decision making leads to problem solving and decision making. The problem solving is that those involve in shared decision making incorporate their judgment to determine appropriate treatment options and that decision making involves individuals solving a certain problem to determine which treatment options best satisfy everybody therein.

Participation can improve the quality and legitimacy of decision making processes and can build the capacity of participants to engage in the policy process (Dietz and Stern 2008), lead to more just decisions (Baiocchi 2003, Meadowcroft 2004, Fung 2006), possibly redistribute resources (Baiocchi 2003), brings about greater acceptance of decisions, transparency in government, increased democracy, as well as environmentally and economically sustainable management and social learning (Mostert 2003).

**The concepts of Competitive Advantage**

The key to gaining competitive advantage is to add value to offerings more successfully than the competition, in other words to create and maintain superior customer value (Devlin, 2001). Grant (1991) believes that competitive advantage is chiefly due to richness in resources and capabilities (Colgate, 1998; Barney, 1986, 1991; Dierickx and Cool, 1989; Wernerfelt, 1984).

Competitive advantage is the increased rate of attractiveness a firm offers compared to competitors from customer’s viewpoint (Akram, 2007). Saaty and Vargas believes competitive advantage lies in the properties of each firm enabling it to offer better services than the competitors (i.e better value) to customers. Competitive advantage is regarded within the framework of value creation as anything that increases income over cost.

Competitive advantage stems from a firm’s ability to leverage its internal strengths to respond to external environmental opportunities while avoiding external threats and internal weaknesses.

As Collis and Montgomery (1995) explained, “Competitive advantage, whatever its source, ultimately can be attributed to the ownership of a valuable resource that enables the company to perform activities better or more cheaply than its competitors”. Moreover, to be sustainable, a competitive advantage should be difficult to imitate or substitute (Barney, 1991). For example, King (2007) argued that firms sustain competitive advantage when their competencies possess strong causal ambiguity because competitors are less likely to identify or understand such competencies well enough to imitate them. For example, competitors have found it difficult to imitate Starbucks’ unique store atmosphere and branding competencies and, as a result, Starbucks has sustained its competitive advantage (Michelli, 2006)

Competitive advantage has also been viewed as the presentable values of a firm for customers so that these values outweigh the price paid by the customer. The above definitions of competitive advantage shows that a direct relationship exists between customer’s expected values, values offered by the company and those offered by the competitors determine the dimensions and conditions of competitive advantage (Akram, 2007). If the values presented by the company are closer to customers’ expected values compared to the values offered by competitors, it can be said that the firm has competitive advantage over its competitors in one or more indices.

Hills and Jones contends that competitive advantage lies in the distinctiveness of features and dimensions of the company, which enables it to offer better services to customers.

The Competitive Advantage Scheme

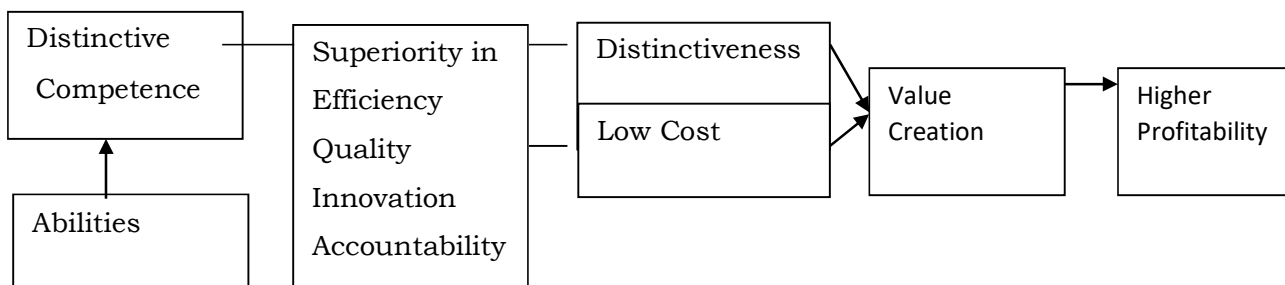


Fig 1. The work of competitive advantage. Four factors help the company to establish and retain competitive advantage, name superior efficiency, quality, innovation and accountability to customer. Each of these factors are the result of a distinctive competence of a firm indeed, they are to some extent generally distinctive competencies allowing a firm to make its product distinctive, offer higher value to customer, reduce its cost structure etc.

- 1. Efficiency:** The simplest way to measure efficiency is by the amount of inputs used for producing outputs. Efficiency is the ration of output to input. Higher efficiency helps a company achieve competitive advantage (via low cost structure).

2. **Quality:** Quality means what the customer really wants. In the other words, a product is of high quality when it conforms to the standard of the customer.
3. **Innovation:** Can be defined as new or innovative methods used by the firm or the new products it generate. It also involves the creation of new products and processes.
4. **Accountability:** Accountability to the customer means identifying and meeting customers' demand in a manner better than competitive, increasing the value of customers' regard for the firm's products, resulting in the creation of competitive advantage.

## **Measures of Competitive Advantage**

### **Product Standardization**

Product standardization is a process and strategy of manufacturing and selling products or services consistently. It involves making sure that a product upholds certain standards for item quality, service delivery or appearance in every market. A standardized product uses the same materials no matter where in the world it's sold, from the raw supplies used to create it to the branding, naming and packaging. A standardized service may be delivered through the same medium or with similar characteristics each time. Product adaptation is the opposite of product standardization, since it involves adapting products for each market (Indeed Editorial Team, 2021).

#### **1 Quality Innovation**

In the competitive business environment, firms have to introduce varieties of products with different specification as per customers expectation by considering the competitor's products and specification. In this situation, innovation plays a vital role in providing unique products and services. The modern competitive business environment drives the innovativeness of the firms (Rubera and Kirca, 2012).

#### **2 Distinctive Competence**

Distinctive competence is a set of unique capabilities that certain companies possess allowing them to make inroads into desired markets and to gain advantage over the competition. Generally, it is an activity that an organisation performs better than its competition. To define a company's distinctive competence, marketers must complete an assessment of both internal and external corporate environments (Yamoah, 2013).

#### **3 Firms Capability**

The concept of firms capabilities is ambiguous. A basic assumption of capability view is that organizations have various ways of performing different things and thus dealing with the problems of organization that show strong elements of continuity (Dosi, Faillo and Marengo, 2003).

Organization capabilities employs three different capabilities which include motivation to take particular action, ability to take the action and in all understanding the competitive environment among all the organization (Luo et al., 2012). From the review of literature on capabilities, research has been done in three functional areas of the firm which include operations, customer service and product development. Operational capability is the ability of the firm to provide the customers with the products on which we can rely and thus provide them services delivered at competitive prices. Customer service capability is the ability of the organization to understand the demands which are occurring in different markets. Product development capability is the capability to provide good quality products by focusing on innovation (Singh, Gill and Singh, 2018).

## **Total Quality Management as a Competitive Advantage**

Total quality management is considered as a source of competitive advantage (Powel, 1995; Hackman and Wageman, 1995; Douglas and Judge, 2001), it allows organizations to complete an increased level of its competitiveness and satisfy its customers, it is also a known sign of quality associated with cost and minimize waste time and effort. When implementing total quality management, the operational performance will improve. The Total Quality Management aims at obtaining competitive advantages, studies indicated that the application of total quality management enhances the competitiveness and improve customer satisfaction (Han, Chen & Ebrahimbou, 2007).

According to Tanninen, Puumalainen and Sandström (2010), TQM practices can influence organisational performance and competitive advantage through two key processes. The first is via internal performance with an increase in efficiency, reduced waste and a higher return on assets. The second is via higher levels of customer satisfaction which in turn impacts positively on brand value and customer loyalty. Similarly, according to Summers (2006) TQM practices can: lead to improvements in the quality of products; make better use of resources and reduce costs; and minimise errors and reduced delays which subsequently facilitate an organisation to enhance competitive advantage boosting market share. Kumar et al. (2009) share this view and also that TQM practices can significantly improve employee morale, increase efficiency, reduce customer complaints, and ultimately increase profitability. According to Jiménez-Jiménez et al. (2015), TQM practices also have an impact on competitive advantage by facilitating organisational learning and promoting innovation; a view supported by Jung and Chung (2016) in their study of TQM and innovation in Korea and Kafetzopoulos (2015) in his study conducted in Greece.

Li (2000) observes that employees training, their participation in decision making and information sharing are tools that enable the organization to use their resources effectively which in turn enhance the competitiveness. Training and development increases employee's loyalty and empower them to take active part in change process for continuous improvement that ultimately enhances competitive advantage (Lorente, et al., 1999; Mertins et al., 1997).

Competitive advantage spread widely around the world, especially in western countries. Today, there are only a few companies (especially in industry) can afford to ignore this concept (Dean and Bowen, 1994). The success of total quality management will improve the level of participation of workers, improve communication, increase productivity, improve quality, improve customer satisfaction, reduce costs resulting from poor quality and improve competitive advantage (Antony, Leung, Knowles, and Gosh, 2002; Al-Qudah, 2012).

## **FINDINGS**

The total quality management (TQM) system has been widely conceptualized as a strategy that provide companies with a competitive advantage (MartínezLorente, Dewhurst, and Gallego-Rodríguez, 2000). This study was set out to examine the impact of TQM on competitive advantage. The findings show that both process management and employee involvement were found to be good predictors of competitive advantage.

## **CONCLUSION**

Conclusion and implications TQM is a general philosophy of management that attempts to enhance competitive advantage of organizations, and is a way of managing organizations to improve its overall effectiveness and performance towards achieving world-class status (Zhang, 2000; Chapman and Al-Khawaldeh, 2002).

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