

TQM and Customer Satisfaction towards Business Excellence

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Abstract: In the 1980s, Total Quality Management (TQM) became popular as the key to survive in this competitive world. It was introduced and known as a main factor to become a pioneer and a leading edge in any business. The whole idea of total quality management is about change. It implies that since change is one of the unavoidable issues of our lives, why not lead this change. We can be the leaders of this change and let it happen whenever and wherever we need it, and not at the wrong place and at the wrong time. Since the customer satisfaction plays almost the most essential role in the market and business excellence, one of the major objectives of TQM is customer satisfaction. This study tries to introduce the most attended issues about TQM and customer satisfaction and the relation between them in the literature. This paper then seeks to identify the effects and methods of gaining the customer satisfaction towards business excellence through the application of TQM.

Keyword: Total Quality Management, Business Excellence, Customer Satisfaction, Market Competition, Customer Focus.

1 Introduction

Today, like most of the aspects of life, economy has been globalized as well. Therefore, competition between any businesses is becoming more intense every day. The key to survive in this competitive world of business is to find the best ways to be wanted. Business competition is actually on three major levels: Price, Delivery and Quality. Although maintaining the lowest price is one necessary element in the business competition, in the long term, companies that choose the low cost approach, may find themselves facing the bitter fact of losing premium business to competitors, while retaining the low margin (Tang and Roy, 1995). Therefore, offering the best quality is one of the unsurpassed and essential ways for companies to survive. One of the main questions in the organizations is that what method to apply. In order to organize the work with quality management (Elg et al., 2011). In the next century, the ones that can prosper are the ones who deliver quality (Ross, 1994). During the past years, one of the most significant strategies for organizations has become *quality improvement* to achieve competitive advantages (Pearson et al., 1995). In order to compete in an expanding and ever growing global market, a critical element is to improve the quality of service and product. Therefore, Total Quality management (TQM) emerged for the management of service and product quality (Ayers, 1993; Juran, 1993; Schonberger, 1992). In a study by Lo and Chai (2012) the popular issues that researchers have investigated are found to be the implementation of TQM, customer satisfaction and service quality measurement. In the 1980s, total quality management became popular and is a commitment in the entire organization commitment to satisfy customers. This can be achieved by continuous improvement of every business process, which is involved in delivering the products or services (Churchill and Peter, 1995).

To achieve the best quality, there needs to be minor or major changes in a company. Some of the researchers have proposed a selection strategy in order to achieve shared values to facilitate implementation of TQM (Ingelsson et al., 2012). One of the generalized philosophies for change, which was developed in Japan, is Total Quality Management (TQM). It is a general planning system that helps companies regain the critical competitive edge by systematically and effectively implementing the changes (Plenert, G. (1996). TQM can be defined as a continuing process, with which whatever necessary steps are decided and taken by the top management in an organization in order to enable everyone to perform all the duties in the path of establishing and achieving standards that meet or even exceed the expectations and needs of their both internal and external customers (Miller, 1996). There is an entire philosophy behind TQM about how a business should be run. So it is not just a

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tool. There are so many attitudes and ideas that the TQM philosophy is filled with. The basic idea in TQM is that change is the only certain thing in life. Therefore, we can become the leaders of these changes that will happen to us anyway, not just wait for them to happen a time that may not be the best time for us. The whole philosophy is about being excited about change and embracing it. A business or a company may have the best products or ideas, but what is the use if they cannot get them into the market. TQM is not function dependent, nor is it industry dependent. It can be applied in almost every aspect of life such as one's family or job. TQM uses other tools such as DOE, TOC, SPC, CIM, and JIT to implement changes effectively (Plenert, 1996; Spitzer, 1993).

There are many objectives for TQM. One of the major goals of total quality management is to improve customer satisfaction (Jablonski, 1992; Tennor and DeToro 1992). In addition, there are some studies in this area, in which the customer satisfaction is introduced as the final outcome of Total Quality Management (Choi and Eboch, 1998; Forza and Filippini, 1998) and some studies such as Das et al. (2000) indicate a positive correlation between these two factors. Since in every business and for every company, there are customers (even a limited number or a specific type of customers) and they are the major profit providers who pay for the products or services offered by the company or business, it is absolutely essential to keep them satisfied. Hence, maintaining a high level of customer satisfaction needs to be one of the goals of every company and can be achieved through total quality management (Jones and Crowe, 1996). In addition customer value anticipation, which leads to customer satisfaction, is reachable by TQM and its tools. It is a strong leader of customer satisfaction and consequently customer loyalty Flint et al.(2011).

2 Review and Discussion

This section will try to introduce some literature about total quality management and how it can affect the companies and their relationships with the customers and in some cases, discussions may be presented.

For decades, researchers have studied the total quality management implementation and the process of the establishment of satisfactory relationships. Flint et al. (2011), Hüttinger et al. (2012), and Lam et al. (2004) showed that although increasing attention is paid to customer satisfaction, loyalty, value by managers, and researchers, their interrelationship is still under a question mark. They extended the previous researches and developed a framework. This framework linked the constructs of the interrelated customer needs in a business, to business service setting. Based on the model of cognition affect behavior, Lam et al. (2004) assumed that the relationship between customer loyalty and customer value is mediated by customer satisfaction. In addition, they hypothesized that there is a considerable mutual effect between customer loyalty and customer satisfaction. To test their assumptions they used the information obtained from a courier service provider in a business to business context. The results of their study confirm most of their assumptions and in particular supports the significant role of customer satisfaction. In this paper they have mentioned that the customer loyalty and customer satisfaction are related, which seems perfectly reasonable. In real life experiences, if customers are satisfied by a service or a product, they will become loyal in most of the cases. Sometimes loyal customers may undergo some dissatisfactory experiences, but due to their loyalty, they will give another chance to the product or service providers, unless the dissatisfaction is very deep. This is one of the total quality management main objectives to prevent any dissatisfaction from occurring in the path of a company to become a pioneer and a leading edge.

Nagaprasad and Yogesha (2009) introduce the essential elements of total quality management and suggest how they can be applied in order to be a competitive company. In earlier years like 1960s, since the company and the management failed to motivate the staff, their efforts to control what was happening was doomed to fail. In the past, companies were trying to use different tools in order to get to a better quality. However, these tools were only applicable in only one area of the business such as better manufacturing or supplier quality. Therefore, this led the firms to total quality management. This study introduces total quality management as one of the most unclear business tools that was ever invented. It also suggests that the meaning of TQM is the empowerment of the employees and satisfying the customer *at their first time purchase or visit*. Therefore, TQM is just another way to introduce a good management. Five principles have been introduced on which total quality management is based on, which are concentrating on the customer, doing the job right, communication and education, measuring and recording, and doing things together. Although it may be a shock for those companies that are production oriented, but focusing on the customer means that the customer has to be at the center of every decision and every action before its made or taken, which in turn requires to check and pursue customers' needs regularly. It has to be remembered that in this context, customer means both the internal and the external ones. Doing the job right, means that everything needs to be performed in a way that it won't be needing any rework, either in the management level or on the shop floor level. Nagaprasad, H., & Yogesha (2009) also suggest that since quality is an attitude, therefore in order to achieve a high quality level in the whole company, there should be quality in every level of performance and it can be reached only by education in every level of operation. For the intention of good education, there should be good communication. We need to communicate and educate the staff, because an unskilled workforce is likely to make mistake and any mistake can be a delay

for reaching a better quality. This study also proposes that one other principle of total quality management is measuring the work with which the decisions can be made on the facts and not only on the opinions. One other principle is the teamwork, which means doing thing together and in groups as much as possible. This allows everyone to be involved in the work. Therefore, problems can be solved faster, more balanced, and more efficient, given that a wider range of opinions and skills are involved. Nagaprasad, H., & Yogesha (2009) imply that since there is no sense in TQM implementation, if there is fear of any kind in the company, the fear of unemployment or anything else has to be lessened as much as possible and one way to do so is to use teamwork. This study then introduces some case studies to implement total quality management and indicates the results of the implementations.

As mentioned above, one of the implications of this study is focusing on the customer. This means that the customer has to be at the center of every decision and every action before it is made or taken. It has to be remembered that in this context, customer means both the internal and the external ones. Because even if the external customer may have a higher priority, but if the internal customers are not satisfied, the entire service or product can become unsatisfactory to the external customer. Nagaprasad and Yogesha (2009) also suggest that since quality is an attitude, therefore, in order to achieve a high quality level in the whole company, there should be quality in every level of performance and it can be reached only by education in every level of operation. This is consistent with the previous conclusion about the satisfaction of both the internal and external customers. With a high quality level in every stage of the company, the internal customers will be pleased and as a result, the whole product or service will become perfectly acceptable to the external customers.

Choi and Eboch (1998) show that the TQM implementation in the plants results more in the customer satisfaction than the plant itself. This study proposes that it is not a good idea to implement TQM in a corporation or a plant only for show and for satisfying the customers. The implementation of TQM or other initiatives to TQM such as QS 9000 or ISO 9000 are imposed on corporations by strong pressure of industry. The authors imply that it is probable that the implementation of TQM can pursue a methodological procedure based on internal motivations rather than institutional causes. The pressure to implement the TQM may come from mass media, professional organizations, and industrial customers. They believe that a dynamic process precedes the implementation of TQM. In addition, this dynamic process leads the effects of the outcome of this implementation on the plant performance.

Plenert (1996) implies that TQM can be a fad. But it can become a fad if the implementers of TQM do not try to be patient for the results and expect sudden and early changes. It also represents that TQM can be just a process or just a philosophy, if we do not consider the strategic effects or if it's concrete and specific method to implement the improvements is neglected. At the end, this study states that TQM is a strategy, a philosophy, and an operationalized process toward becoming world class and leading edge, if we consider both the operational and philosophical aspects and focus on the implementation and see beyond the fad.

Lenka et al. (2010) try to examine if the hard and soft aspects of TQM practices can be the determinants of the customer satisfaction and the quality of service. A valued customer from 315 commercial banks that were scheduled and a branch manager were used to collect the required data for this study. By the application of structural equation modeling, the authors have examined a conceptual model that represented the relationship. The results indicate that the affective commitment and the job satisfaction of the employees are increased by service climate, workplace spirituality and transformational leadership, which are considered as soft aspects of TQM. Since job satisfaction influences the human aspects, hence, the customer satisfaction is increased. In addition, the service quality is enhanced by the management information system, which represents a hard aspect of TQM and therefore, it can be concluded that the hard aspects of TQM can also increase the customer satisfaction. As a result of this study, it can be decided that the achievement of customer satisfaction and a high level of service quality can be delivered by the organizations through hard and soft aspects of TQM.

The research by Mohr-Jackson (1998) is another study, which its purpose is to develop a framework of total quality orientation and the factors that affect the customer satisfaction. This study reveals that there are interrelations between aspects of quality and these aspects differ between *quality advancers* (organizations that are known for their exceptional quality) and *quality starters* (organizations in which the efforts for quality improvements have just started) and how these facts suffers from a lack of understanding. This study adapts a discovery oriented approach which is similar to the method that prior marketing researchers used and is actually a qualitative method. In order to improve the customer satisfaction, some methods are identified by the executives. Among these methods, some of the most common ones are: (1) developing relationship with customers, (2) offering a greater service, (3) keeping close with the customers, (4) respond to the changes in the customer expectations, (5) support networks development, (6) commitment to the customers, (7) implementation of an efficient complaint handling process. In this study four conditions are introduce with which a total quality orientation can be fostered or discouraged, because they can be largely controlled by the employees and managers. Three conditions are process management, strategic planning, and human resources. Finally, Mohr-Jackson (1998) suggests that a total quality orientation

can be considered as a sustainable competitive advantage and the integrative framework and propositions provided in this paper can offer a basis for the systematic development of one of the total quality orientation theories.

Su et al. (2010) have represented an approach about the Total Customer Relationship Management (TCRM), which has a close resemblance to TQM. In this study, the authors have introduced a framework, which offers five components, in which the related issues of CRM are lodged into. The objective of this study is to help the business excellence of the practices of CRM to be pursued as well as more effectively validating the activities of CRM. In addition this study tries to make CRM the mission of the organizations, which covers all the activities, processes, resources and members.

Agus and Hassan (2011) investigate the role of TQM in production, consider this concept as a potential source, examine this source to be a sustainable competitive advantage, and represent its effects on production performance and the performance related to customers. TQM provides a vision for everyone in an organization to focus on quality improvements on products, production and basically, on everything that finally leads to better quality, in order to meet that increasing demand for high quality products in the market. Although the market and customer needs, request the pursuit of quality improvements, it is also driven by a simple fact, the fact of need to survive. Top management leadership and changes in planning and strategic direction is required in order to move toward TQM culture (Powell, 2006). TQM, with no doubt will improve the production processes, which subsequently will lead to enhanced customer related performance in preparation of ever changing needs of customers (Gaither and Frazier, 2002). The results of this study indicate that TQM will ultimately lead into positive achievements. There have always been evidences and beliefs by the researchers about the existence of some key linkages between production, customer related performance and TQM, and the results validate and support those evidences and beliefs.

Tanninen et al. (2010) have performed an empirical study to examine the TQM effects in an organizational context. In this study, the authors test that how the depth of Total Quality Management, which includes the scores of self-assessing of the unit of business can affect the unit performance. In addition, they have examined the results of TQM experience, which includes the application time or the age, on the performance of the unit. The measurement of the affects have been carried out by the levels of productivity, profitability and customer satisfaction. The results indicate that the TQM has a positive effect on the customer satisfaction. In addition, the results signify that the units that have started to implement the TQM practices have more satisfied customers than the ones that have just started to apply the practices of TQM.

Gatewood and Riordan (1997) proposed a process model of quality management. This model includes total quality principles, customer satisfaction, employees' attitudes and organizational practices. These four constructs are central to TQM. In this study, regression analysis was used to test the model and it was found that specific organizational practices and employees' perceptions of quality management principles can be linked together and they would finally lead to customer satisfaction. The results of this study provide empirical support for a model of the relationships among the four above mentioned categories of constructs (total quality principles, customer satisfaction, employees' attitudes and organizational practices).

Nilsson et al. (2001) consider two different types of organizations, which are service organizations and product organizations. Then they investigate how business results and customer satisfaction is influenced by the key internal quality practices of these two organizations (customer orientation, process orientation, and employee management). For this purpose, this study uses a survey and the analysis show that in product organizations, business results and customer satisfaction are influenced by internal quality practices, through a customer orientation. On the other hand, in service organizations, customers are *directly* impacted by both process and customer orientation. In addition, employee management directly influences the business results. This study provides organization managers with some empirical generalizations about the differences between service and product organizations along with a framework to understand how quality procedures are affected by each other. The provided framework can be helpful in two different levels, which are company level and industry level. At the company level, it can be applied to evaluate how different improvements of the quality are connected to business performance and customer satisfaction. At the industry level, it helps to realize the connections between performance and practices. This can help to understand how the quality strategy of an organization should evolve over time.

Ugboro and Obeng (2000) used a survey study in the organizations, in which total quality management has been applied. The objective of this survey was to determine if there are any relationship between job satisfaction, employees' empowerment (i.e., delegation of the authority to make decisions), top management leadership, and customer satisfaction and the results indicate a positive correlation among these factors. Fulford and Enz (1995) found that the perception of empowerment affects the loyalty of employees, their concern for others, and their job satisfaction and the results of this study support these findings. In addition, as many researchers have previously shown, job satisfaction of employees, along with other job related factors could improve customer satisfaction (Bhagat, 1982; Caldwell, 1984; Latham and Steele, 1983; Lawler et al., 1992; Thomas and Velthouse, 1990).

Rahman and Bullock (2005) suggest that soft TQM elements and organizational performance are significantly related and the findings imply the same results presented by Dow et al. (1999) and Powell (2006). In this study, they indicate that out of six elements of soft TQM, five of them (cooperative supplier relation, shared vision, use of teams, workforce commitment, and customer focus) are positively related to organizational performance. In addition, out of the four elements of hard TQM, three of them (continuous improvement enablers, technology utilization, and use of Just In Time principles) have major interaction with all six elements of soft TQM. Hence, effective distribution and deployment of hard TQM elements need proper soft TQM elements to be in place. Dow et al. (1999), Powell (2006), and Samson and Terziovski (1999) did not find any significant relationship between organizational performance and elements of hard TQM, which is in contradict with the results of this study. Rahman and Bullock (2005) also show that continuous improvement enablers, which have influence on delivery, productivity, and customer satisfaction, are affected by the soft TQM elements. They indicate that certain elements of hard TQM have a great impact on performance and for them to be effective, they need to be supported by soft TQM elements.

Jun & Cai (2010) have carried out an empirical study to identify key dimensions of service quality. The identification of these dimensions is carried out in the way that are perceived by the internal customers of the purchasing department. These dimensions, as indicated in this study, are six dimensions: tangibles, requisition process, competence or reliability, communication, team based continuous improvement, and customer intimacy. The results of this study indicate that in order to achieve customer satisfaction and high internal customer service quality, the most significant dimension is the customer intimacy. In addition, it is decided by the results that second and third most influential dimensions of service quality are the team based continuous improvement and requisition process. However, these dimensions do not have any significant association with the internal customer satisfaction. On other result in that the second significant dimension for the internal customer satisfaction is the communication, but it is not associated with the internal customer service quality. Moreover, the last result is that internal customer satisfaction and the internal customer service are significantly associated.

Prajogo and Sohal (2001) discuss about the relationship between innovation performance and the implementation of TQM. To resolve the controversy that appears in the literature concerning this relationship, a theoretical discussion about this study developed a research framework, which is preceded by a theoretical discussion about TQM and that it is a multi-dimension concept. The basic purpose of this framework is to indicate that the adopted strategy by the company as well as the internal and external environment will influence the implementation and performance of TQM practices.

Corredo and Goñi (2011) consider Total Quality management (TQM) as an internally consistent system of practices and explore the connection between the company performance and TQM. By using the universal approach, this study investigates the connection between the two variables and tests if the companies that are implementing TQM are the most competitive ones. In order to achieve results, Corredo and Goñi (2011) consider a sample of companies, which have received TQM prizes and a control sample to compare the outcomes. They found out that before the implementation of total quality management, companies in which this system was applied were not necessarily better than those that were not using the system.

Oghojafor et al. (2011) use a questionnaire survey method to collect primary data in order to determine the relationship between Total Quality Management and service delivery in plants for generator assembly. This study is conducted in two companies, which are involved with this industry. The collected data were analyzed by descriptive statistical tools and the results revealed that total quality management improved service delivery and supported the companies' development.

Prajogo and Sohal (2006) seek to find out where total quality management stands in between organization performance and organization strategy as well as how it mediates the relationship between them. This study suggests that in terms of innovation and quality, there is a harmony between organization performance, TQM practices, and differentiation strategy. In order to achieve the objectives, they use a survey from company managers. By using the structural equation modeling (SEM) technique, the analysis was conducted and it examined two models that represented partial and full mediation. The results indicated that there is a positive and significant relationship between TQM and differentiation strategy. In addition, the outcomes implied that the relationship between three performance measures (process innovation, product innovation, product quality) and differentiation strategy are only partially mediated by TQM. This study suggests that in order to achieve a better realization of a high level of performance, there should be complementary resources for TQM practices, particularly innovation.

Chong and Rundus (2004) try to study the intensity of market competition and some of total quality management practices such as customer focus and product design on organizational performance. In order to do so, this study applies a questionnaire survey and analyzes the responses by applying a multiple regression technique. The results indicate a high relationship between organizational performance, customer focus in total quality management practices, and market competition. It shows that as much as the degree of market competition goes higher, the relationship between organizational performance, TQM practices of product design, and TQM practices of customer focus becomes more positive. This study also supports the contingency theory founded on the general proposition. They claim that the performance of an organization is rooted in the

way that two or more factors – such as adoption of TQM practices and organization's environment – interact with each other. In this case, the organization's environment is considered as the market competition. This study provides empirical support for those, who over the years, stress that in order to enhance customer satisfaction, the role of TQM practices such as product design and customer focus are undeniable and essential (Crosby, 1996; Deming, 1986; Feigenbaum, 1991; Ishikawa, 1985; Juran, 1992). Chong and Rundus (2004) also argue that since product design and customer focus, as the other TQM practices, are associated with increased market competition and are considered as two of the most important determinants of quality performance, companies facing with an intense market competition should include them in their quality improvement plans. Because in competitive markets, companies need to produce high quality products to gain competitive quality standards and meet or even exceed customer expectations.

Lam et al (2011) performed an empirical study to investigate the tridimensional connections between market performance, learning orientation and TQM in service companies. In these companies, the assumption is that TQM is a start for the enhancement of market performance and learning orientation. In addition, one other objective of this paper is to investigate whether an effective learning orientation can lead to an improved market performance. They used 146 service companies to collect their required data. In order to study the relationship between market performance, learning orientation and Total Quality Management, the authors applied the structural equation modeling analysis. The results of the survey indicated a significant and positive relationship between the application of TQM practices and market performance as well as learning orientation. The outcomes also implied that the connection between market performance and learning orientation is not significant. In total, business excellence can be achieved through TQM in the market place.

In another study by Duh et al. (2012), in order to investigate the effects of performance and determinants of TQM practices, the authors have proposed an integrated model approach. By the application of structural equation modeling to the collected data from 209 companies, the results indicate that the TQM implementation is positively associated with the degree of competition and the size of the company. In addition, they imply that the diversity of the products is associated with the TQM implementation in a negative way. One other outcome of this study is that the implementation of TQM can positively affect the non financial performance and since the non financial performance and the financial performance are positively related to each, thus the implementation of TQM will affect the financial performance as well. Therefore, by improving the financial performance as well as non financial performance, TQM will lead to business excellence in the organizations.

3 Conclusion

The results of the studies imply that as much as the degree of market competition goes higher, the relationship between organizational performance, TQM practices of product design, and TQM practices of customer focus becomes more positive. For the purpose of customer satisfaction enhancement and business excellence, the role of TQM practices such as product design and customer focus are undeniable and essential. Customer satisfaction, which one of its foundations is a good customer related performance is one of the high valued objectives of the TQM implementation. Specific organizational practices and employees' perceptions of quality management principles can be linked together and they would finally lead to customer satisfaction. Customer satisfaction, in turn can cause the business excellence for the organizations. In order to improve the customer satisfaction, some methods have been identified and among these methods, some of the most common ones are: (1) developing relationship with customers, (2) offering a greater service, (3) keeping close with the customers, (4) respond to the changes in the customer expectations, (5) support networks development, (6) commitment to the customers, (7) implementation of an efficient complaint handling process. In addition, as many researchers have previously shown, job satisfaction of employees, along with other job related factors could improve customer satisfaction and business excellence.

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