

# Total Quality Management and its Implementation in the Context of Pakistan

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## SUMMARY

*This research paper focuses on the practices of TQM which are being implemented in Pakistan and finds out the relationship between the quality implementation and the performance of the organizations. There is a significant impact of TQM on performance of organizational operations especially in larger firms that have specialized processes of manufacturing. In Pakistan, TQM is implemented by 3 types of methods: Assurance of Quality, Consistent Improvement and Control of Quality. The results indicate that Total Quality Management has two effects on the performance of organizations: First, the practices of TQM may affect the performance of the organization; or it may halt the firms to achieve the goals which has a negative impact on their performance. One limitation of this research is that it is limited to Pakistan only. So the future researchers can base their studies on different context.*

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## INTRODUCTION

There have been enormous changes and quality improvement in the corporate environment and it has become one of the most significant strategies that an organization can implement for the purpose of achieving sustainable competitive edge. Moreover, due to the enhancement of the worldwide labor market, firms should enhance the quality of their products and services so that they can survive the global competition. For the purpose of improving the performance of organizations, and in order to enhance customer satisfaction, many practices of Total Quality Management are being implemented. The basis for TQM (Total Quality Management) is that the whole staff of an organization must coordinate with each other in order to produce products and services of high quality for the purpose of meeting the demands of the customers. One of the strategies of TQM that is considered to be effective in minimizing the errors is the Control Process in the manufacturing sector.

There are different types of quality techniques and instruments in Total Quality Management, other than several beliefs and values that are shared by the staff within an organization (Taheri & Gharakhani, 2013). Total Quality Management is defined as a strategy which serves the purpose of generating and transferring more superior and efficient services by gaining

coordination between the members of an organization (Khadhraoui et al., 2016).

However there are various scholars who directly controlled the practices of Total Quality Management but those practices are still said to be vague (Dean & Bowen, 1994). This can be justified by the fact that TQM has various definitions, each having a specific perspective about the term. Several researches were performed for the purpose of differentiating the correlation between the TQM practices and the performance of the firms. The scope of the research consists of different types of areas such as operational, marketing, financial and quality performance. These researches conclude that there is positive impact of Total Quality Management on the performance of the organizations if implemented effectively, such that if a firm effectively implements the TQM, it will result in the decrease in its operational costs, increase in the productivity (Lam, 1995), and the performance of its employees and the organization itself (Prajogo et al., 2004).

There is a significant impact of TQM on performance of organizational operations especially in larger firms that have specialized processes of manufacturing (Samson & Terziovski, 1999). Various types of TQM are considered as important performance indicators such as customer focus, leadership and individual management. This research paper focuses on

practices of Total Quality Management and its impact on the performance of the organizations.

## PROBLEM STATEMENT

For many employees, managers and organizations, the concept of Total Quality Management is still perceived as a new idea and its tools and standards are still unknown. The current literature on Total Quality Management is still not adequate to establish a deeper insight into the definition of TQM (Thiagarajan & Zairi, 1997).

There are multiple strategies such as globalization which directly increase the quality interest for developing countries, so the attention is focused on Total Quality Management in order to achieve financial gains in these countries. Furthermore, customers have been demanding goods and services of good quality features in different countries. All of these causes create a new interest of quality at multiple firms around the world.

However there are multiple researches about Total Quality Management and its link with the performance of the firms (Baidoun & Zairi, 2003), but this paper is primarily focused on specific techniques and practices of TQM and its effect on the performance of the firms.

## RESEARCH OBJECTIVES AND AIMS:

The objectives and aims of this research are the following:

1. To study the techniques and practices of TQM
2. To find out the effect of implementation of TQM on the performance of the firms
3. To establish procedures for the efficient implementation of practices of TQM in firms

## REVIEW OF LITERATURE

### *Total Quality Management:*

The concept of Total Quality Management has been familiar since 1930 in Japan, especially after World War II. Later, many organizations of the manufacturing industries focused on increasing the quality and using techniques whose sole purpose was quality control in these organizations (Demirbag et al., 2006; Talib & Rahman, 2010). Subsequently, both the UK and USA acknowledged the concept of QM (Quality Management), especially in these countries' manufacturing sector. Afterwards, Quality Management has been widely recognized in many international standards for example ISO 9000 and these standards have widely accepted the concept of Quality Management (Moynihan & Sachdeva, 2013).

For the practices of Quality Management, several techniques and methods were devised in which TQM is perceived to be a method of enhancing the efficiency and quality of goods and services of various industries. One such globally accepted approach of Quality Management is Total Quality Management (TQM) in which this method tends to establish a complete cooperation among all the functions of an organization in order to meet demands of their customers effectively and to achieve the goal of the firms.

Total Quality Management (TQM) involves all the members of an organization in order to meet the expectations of the customers with the help of problem solving methods to the quality of goods and services provided by a firm. The philosophy of Total Quality Management focuses on a widespread cooperation between the functions and staff members of an organization to better quality preservation, progress and enhancement of goods and services to satisfy the customers (Bon & Mustafa, 2013).

This philosophy of management directly pays attention to enhancing quality of business and management satisfaction by increasing the involvement of employees in the process of decision making by using quality enhancement teams and strategies of quality circle (Yusuf et al., 2007).

Multiple concepts have been provided by past literature on Total Quality Management whereas all of these concepts have similar elements. For instance, all concepts of TQM consider the customer as the basic element of the strategy of the management. Additionally, managerial commitment is considered to be one of the most significant components that ensure the achievement of practices of TQM. Other important situations in the firms for achieving the success of TQM are firm alterations and culture. Thus, Total Quality Management (TQM) is the strategy of the management whose purpose is to improve the performance and efficiency of the organizations by improving the quality of goods and services of an organization (Ooi et al., 2008).

In the past two years, the interest in the practices of TQM (Total Quality Management) was widely increased and it is perceived to be an important field of study for many researchers (Yusof & Aspinwall, 1999; Ooi et al., 2008). (Gharakhani et al., 2013) found that Total Quality Management has widely acknowledged as a management strategy in various industrial sectors which efficiently aims to improve the performance of the firms. Furthermore, Total Quality Management is known to be a comprehensive cooperation among various individuals, models, processes and procedures of communication to meet all demands of the customers (Van Ho, 2011).

A model of Total Quality Management as proposed by (Talib & Rahman, 2010) is widely known as the model of 'TQM Components'. They explained the main principles that may improve the performance of firms (Figure 1). Practices of Total Quality

Management include ‘customer focus, employees’ motivation and involvement, top management commitment, management of suppliers, quality performance and information, benchmarking, and constant improvement. The outcomes include improved quality and productivity, customer loyalty

and a high level of customer satisfaction as well as the delivery of products on time. Usually, all models of TQM showed that each action of management is composed of ‘planning’, ‘implementation’, and ‘evaluation’ processes.

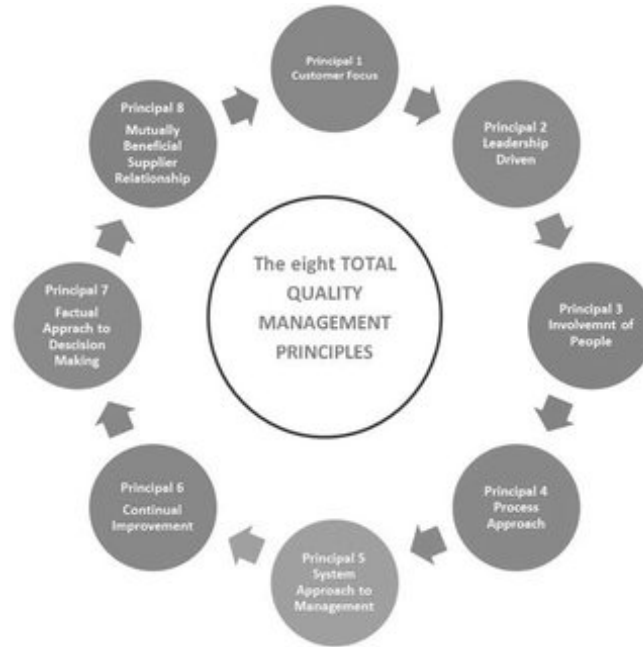


Figure 1. Principles of TQM

*Performance of Firms:*

One of the most important elements to gain efficient managerial processes of the firms is the measurement of performance. The performance of one firm can be directly linked to its capability to gain their financial and strategic objectives (Xiaodong & Xinmo, 2006). The performance of firms was widely ignored in the previous researches, however few researches were done in which performance of the firm was linked to the financial performance (Katou & Budbwar, 2008). The performance of the firms as discussed by (Arunachalam et al., 2016) is measured through both market and financial performance which consists the progress of market share, measures of ROI (Return on Investment), and sales profit.

One point that cannot be avoided in this research is that the performance of the firms can be calculated with the help of the performance of firm operations which refers to the total performance of a firm that consists of the customer satisfaction, economic performance and product quality efficiency (Brah et al., 2000). Performance of a firm’s operations is directly controlled with improved flexibility, process productivity, performance of delivery and reducing errors and costs (Nunnally, 1978).

*Performance of Firms and Total Quality Management:*

One of the most important elements in all management approaches is Performance Measurement. The performance of the firms are measured by the quality and cost which are the two significant measuring tools that are directly impacted by the practices of Total Quality Management. According to (Brun, 2011), the performance of the employees is influenced by applying different practices of TQM such as the management of processes and customers and the training of employees which consequently affects the performance of the whole firm. As indicated by (Gharakhani et al., 2013), Total Quality management largely influences the performance of the firms especially in their economic performance.

Keeping in view the increasing demands of the customers for high quality goods and services, firms realized the significance of applying practices of Total Quality Management to the processes of the production for the purpose of reducing costs and to produce high quality products. Total Quality Management is known to be a strategy that considers consumers as the significant focus, in that it aims directly to offer them with services and goods of high quality by combining constant improvements in the processes of production (Harmon, 1994; Peterson, 1998). Other studies directly

intended to discuss the argument which was present among the perceptions of top and middle management on Total Quality Management. According to (Soltani & Wilkinson, 2020), there are four key propositions of Total Quality Management which are Top Management functions, quality affirmation, firm and individual. The significant conclusion derived from the research of (Soltani & Wilkinson, 2020) was that Total Quality Management is still perceived to be a new concept, and the generally used method to execute Total Quality Management is the approach of 'Quality Control' (Soltani & Wilkinson, 2020).

The effect of the practices of Total Quality Management was also clarified by (Sit et al., 2009) on customer satisfaction level most importantly in the public sector and from the perspective of management. The emphasis was on employee and process management, strategic planning, customer focus, leadership and calculating internal and external level of customer satisfaction for the quality of services and goods. The research has discussed that there is a positive association between focus on employees, practices of TQM and consumer satisfaction. The findings of the study also indicate that there is a close connection between among management commitment and satisfaction of customers. Whereas, some practices of TQM such as management of processes and strategic planning has a low impact on the satisfaction of consumers.

According to (Lord, B. R. & Kawrence, 2013), quality process management must start at the founding stage of the firm i.e. at the start of the project, and must end after gaining the desired standards of quality. Each member of the firm must be held accountable to some degree for the improvements in the firm. Quality can be explained as the capability of the services and goods to meet needs and desires of the customers and attain high satisfaction levels of the customers (Waldman et al., 1998). As indicated (Lakhal, 2014; Talha, 2004), the practices of Total Quality Management directly influences the performance of the firms by reducing costs, improving the performance of the firm's employees, and enhancing the satisfaction level of consumers.

Whereas (Iñaki et al., 2006) in their study found that the performance of the firms is directly affected by the Total Quality Management in a positive manner, however according to (Shin et al., 1998), in some situations, the implementation of Total Quality Management does not attain the firm's targets.

## IMPLEMENTATION OF TQM METHODS IN PAKISTAN

Various methods are used to implement TQM at firms, and we have chosen Pakistan as an instance while explaining these methods of implementation as Pakistan is one of the few countries that used practices

of Total Quality Management and implement them at large number of the firms by using various methods of implementation (Raja et al., 2011).

The five key categories of TQM implementation methods are explained below:

### *Zero Level: Zero customer focus/Zero Control:*

The main concern of these firms is the goods and services they provide, most importantly the characteristics related to their quality rather than concentrating on attaining the satisfaction of their customers. In few countries like Pakistan, there is no penalty for the firms that have a poor performance, and this mostly occurs in the dissatisfaction of the customers

### *First Level: Quality Control:*

At this stage, firms most often control various departments of measurements and laboratories for the purpose of continuous enhancement of their goods and services' quality with the help of testing and development of management systems. The most commonly used method to conduct these measurements at firms is 'statistical process control' (Singh & Smith, 2004). The methods of Quality Control are widely used in the manufacturing sector of Pakistan for the purpose of implementing strategies and practices of Total Quality Management as discussed by (Moosa & Sajid, 2010).

### *Second Level: Quality Assurance:*

Firms that use such methods consider that product is an outcome of various processes and the quality of such products cannot be attained without separately regulating each of these processes. 'Quality Assurance' is widely operated in various firms by implementation of some methods that focus on quality for example ISO 900-2000 and ISO 9000; whereas some management tools are used for quality assurance which include Pareto Charts, Affinity Diagrams etc (Brun, 2011). According to (Awan et al., 2008), a large number of firms in Pakistan initially used ISO-9000 to attain efficient processes of 'quality control' and afterwards to ascertain quality in the firm. And the process of implementation of this method varies according to the type of business firms.

### *Third Level: Constant Improvements in Quality:*

Firms that are present at this stage consider that the quality improvement of the firms is directly associated to the commitment and efficiency of employees and presence of spirit of team work within the members of the firm. Various programs were organized in these

firms for the purpose of enhancing capabilities of quality management of functional staff members by organizing some techniques such as assigning tasks monthly or weekly. In a TQ organization, constant improvement applies to every component in the value chain, including costs, defects, response time, and product characteristics, among many others. A quality organization focuses on two types of improvement approaches. The first is a step-by-step approach for incremental improvements. The other approach is a breakthrough approach, which results in radical change and quantum improvements in the process or product. In a quality organization, both approaches are pursued concurrently. Incremental improvements, on the other hand, produce visible results almost immediately and are more common, whereas breakthrough improvements are less common and generally take much longer to be visible (Khan, 2003). Various methods were used in the manufacturing sector of Australia for attaining constant improvements in quality for example techniques such as ‘Zero-Defect Mentality’, ‘Quality Circle’, and ‘Just-In-Time (JIT) (Sadikoglu & Zehir, 2010). But there are only a few firms in Pakistan that are included in this category (Khan, 2003).

*Forth Level: Quality Award Paradigms/Models:*

The firms at this stage are said to be market dominant and global champion firms in terms of the goods and services they provide. These firms tend to provide other firms in the market a standard for the efficient performance in terms of quality, and firms that follow this category define quality as the way of attaining total satisfaction of their customers. (Kaluarachchi, 2010) performed research on the impact of paradigms of quality award on service sector firms and they explained that these firms used various tools like ‘process reengineering’ and computer software packaging for improving the performance of firms with regard to the characteristics of their quality. Firms that implement methods of TQM by models of ‘quality award’ are not present in Pakistan (Khan, 2003).

**EMPIRICAL DATA**

The empirical data on the implementation of TQM practices in the context of Pakistan was studied by (Khan, 2003). By number, there were a total of six successful attempts to implement Total Quality Management methods by the organizations in Pakistan, with each one of these belonging to different industrial sectors. Table 1 provides the data on the number of companies (based on their industrial sector) which attempted to implement TQM methods successfully.

*Table 1.  
Number of Companies who successfully implemented TQM methods (based on their industry)*

<b>Industry</b>	<b>No. of Firms</b>
Automotive	1
Textile	1
FMCG	1
Pharmaceutical	1
Engineering goods	2

**CONCLUSION**

This research directly focuses on explaining the association among the Total Quality Management (TQM) and performance of firms. Various previous studies have shown the link between TQM and the performance of firms, most importantly the performance of the firms in financial terms. These studies clarified that when one firm implements TQM in an efficient manner, then its performance would be highly improved from various outlooks (Ittner & Larcker, 1998; Hendricks & Singhal, 1999). In reviewing the past literature which explained the effect of Total Quality Management on performance of the firms, (Iñaki et al., 2006) found that there is a direct positive link between performance of the firms and TQM. Whereas, according to (Shin et al., 1998), the practices of TQM may somehow prevent the firms to attain their targets. However, the important results that were drawn from this study are that ‘quality performance of services and goods and satisfaction of customers can be improved by the implementation of various initiatives of quality at the firms. The TQM strategy that focuses on improving the level of satisfaction of consumers can directly enhance the performance of the firms and that commitment of leadership is perceived to be significant aspect in terms of successfully implementing the practices of TQM at the firms. While this study directly pays attention on differentiating the link between firms’ performance and TQM, but various aspects that directly impacted performance of the firms were ignored in the past researches such as firm culture, size and innovation level. Hence, researches in the future can discuss the effect of TQM on performance of the firms in a broad scope by finding out the impact of these aspects on performance of the firms. Another focus of research could be in regard to implementation of practices of TQM in industrial sector in order to provide a better insight into implementation of Total Quality Management.

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